

**OREGON  
ENVIRONMENTAL QUALITY  
COMMISSION MEETING  
MATERIALS 12/02/1994**



**State of Oregon  
Department of  
Environmental  
Quality**

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REVISED AGENDA  
ENVIRONMENTAL QUALITY COMMISSION MEETING  
December 2, 1994  
DEQ Conference Room 3a  
811 S. W. 6th Avenue  
Portland, Oregon

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**Friday, December 2, 1994: Regular Meeting beginning at 8:30 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. †Rule Adoption: Acid Rain/Stratospheric Ozone Protection/Radionuclide NESHAP
- D. †Rule Adoption: Criteria for Financial Assurance for Closure and Post-Closure Care
- E. ~~†Rule Adoption: Hardboard Particulate Emissions Rule Revision~~
- F. †Rule Adoption: Proposed Temporary Rule Adopting the Federal Universal Treatment Standards and Toxicity Characteristic Waste Treatment Standards

- G. ‡Temporary Rule Adoption: Temporary Suspension of Operator Certification Rule Fee Increase
- H. Action Item: Standards and Criteria for Hiring New Director
- I. ‡Information Item: Legislative Report on Rigid Plastic Containers
- J. ‡Information Item: Update on Implementation of HB 2214  
(Development of a Plan to maintain Attainment with Federal Air Quality Standards in the Portland Area)
- K. Commission Reports (Oral)
- L. 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 does not usually take public comment on informational items.*

*The Commission has set aside January 19-20, 1995, 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.*

*November 23, 1994*

Approved	<input checked="" type="checkbox"/>
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*Minutes are not final until approved by the EQC*

## ENVIRONMENTAL QUALITY COMMISSION

### Minutes of the Special Meeting May 16, 1994

The Environmental Quality Commission met for a special meeting on Monday, May 16, 9 a.m., 1994, in Conference Room 3A, Oregon Department of Environmental Quality (DEQ), 811 S. W. Sixth Avenue in Portland, Oregon. The following Commission members were present:

William Wessinger, Chair  
Emery Castle, Vice Chair  
Henry Lorenzen, Commissioner  
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.

The purpose of this special meeting was to consider the water quality standards in regard to total dissolved gas (TDG) concentrations in the Columbia River. Director Hansen provided a brief summary of this issue. He said the agenda represented an effort to use panels of experts for providing explicit explanations. Director Hansen said there were three questions that needed to be considered: 1) should the temporary rule that the Commission adopted a week ago which will expire at midnight be extended; if so, does the rule need modification; 2) is the Commission in favor of moving smolts downriver by spilling over the dams or by barging or by some other method; and 3) is the monitoring program sufficient to indicate whether and when problems arise and to allow lowered spillage so that adverse effects can be minimized?

Michael Huston, Assistant Attorney General, provided a copy of the state statute that applied to this situation (ORS 468b.048), Standards of quality and purity, factors to be considered; meeting standards. He noted that an opinion was received from the State Supreme Court in the Salt Caves case in which the Court concluded that the Commission had a great deal of latitude in terms of adopting water quality standards.

Commissioner Lorenzen asked whether the Commission was to consider the benefits of transport and focus solely upon the water quality issue. Mr. Huston replied that the Commission is not primarily responsible for determining beneficial uses or balancing tradeoffs. Commissioner Castle asked if more than one beneficial use were affected, should all beneficial uses be considered. Neil Mullane, Water Quality Division, indicated yes. He said that if one parameter is changed, that change can influence other beneficial uses.

The Commission heard a number of panel discussions. Those discussions are provided below in order of presentation.

### **REQUEST FOR SPILL**

Don Raft, National Marine Fisheries Service (NMFS), said the NMFS was requesting implementation of the spill proposal developed by the technical staffs of the U. S. Fish and Wildlife Service (USFW) and NMFS. This request was also in coordination with the state fisheries agencies and tribes in response to declining numbers of Snake River salmon listed under the Endangered Species Act.

Mr. Raft said the initial request for implementation of this spill proposal was outlined in a May 9 letter from J. Gary Smith of the NMFS to Randy Hardy of the Bonneville Power Administration (BPA) and Major General Ernest Harrell of the U. S. Army Corps of Engineers (Corps) following a May 7 conference call. Mr. Raft said the initial 12-hour spill request is intended to result in 80 percent fish guidance efficiency; that is, 80 percent of the daily average passage of juvenile spring-summer chinook salmon migrates will pass hydroelectric dams by non-turbine routes. Specifically, he asked that the following spill levels be implemented.

- At Lower Granite Dam, 78 percent of instantaneous flow, from 1800 to 0600 hours;
- At Little Goose Dam, 48 percent of instantaneous flow, from 1800 to 0600 hours;
- At Lower Monumental Dam, 54 percent of instantaneous flow, from 1800 to 0600 hours;
- At Ice Harbor Dam, 25 kcfs, 24 hours per day;
- At McNary Dam, 48 percent of instantaneous flow, from 1800 to 0600 hours;
- At John Day Dam, 33 percent of instantaneous flow, from 1900 through 0700 hours;
- At The Dalles Dam, 40 percent of instantaneous flow, 24 hours per day;

- At Bonneville Dam, through May 31, 68 percent of instantaneous flow, from one half hour before sunset to one hour before sunrise and 75 kcfs one hour before sunrise to one half hour before sunset; from June 1 through June 20, 68 percent of instantaneous flow from one hour before sunset to one hour before sunrise and 75 kcfs one hour before sunrise to one hour after sunset.

Mr. Raft outlined the spill modification regime and monitoring program. He said that after two weeks of operation under the revised spill regime, the NMFS will convene monitoring experts to review the monitoring design and protocol and to recommend any changes to the program.

Commissioner Whipple asked for a brief review about the role given to additional spills in the original plan. The NMFS responded that in the draft recommendations from the recovery team, spill was mentioned as an additional strategy to be explored but not in regard to using spill to increase downstream passage survival. It was indicated that a new draft would soon be available.

Commissioner Lorenzen asked if this particular spill program was designed to assist the fish returning up river. The NMFS responded no, the program and different spill levels at the individual dams would have to be carefully monitored in terms of adult passage conditions; excessive spill could also affect upstream passage conditions for the returning adults. Commissioner Whipple asked about the smolt run for this year and how it compared historically. The NMFS said that historically, it is relatively higher at least compared to recent years.

Russell George, reservoir control center for the Pacific Division for the Corps, gave a brief summary of the events leading up to this meeting. He provided examples of several different data sheets.

Commissioner Whipple asked how tailwater stations were determined. Mr. George said that most were near the bank and in the area on the spill side of the project versus the powerhouse side because that is the area where the dissolved gases are. Chair Wessinger asked what would be found in a seven-mile distance of the river in regard to dissolved gas. Mr. George responded that there is gradual deterioration of the gas levels downstream depending upon the type of river conditions.

## **INTERAGENCY PANEL**

Ron Boyce, Oregon Department of Fish and Wildlife (ODFW), provided comments on the proposed spill program. He said the ODFW strongly supports the spill program requested by the NMFS which is designed to maximize survival of juvenile chinook and steelhead while minimizing impact to aquatic species. He said the purpose of the program is to increase passage of juveniles over spillways which has been shown by numerous studies to provide the safest route to passing juvenile fish through mainstem hydroelectric projects.

Mr. Boyce added that the spill program is also designed to improve survival by reducing the number of fish being transported. He said the ODFW believes a spill program will provide immediate and significant improvements in survival of juvenile chinook and steelhead.

He said the ODFW supports the biological monitoring programs for TDG symptoms submitted to the NMFS by the Fish Passage Center (FPC). The ODFW recommended the Commission adopt a 180-day variance in the state's dissolved gas criteria to allow the spill program to proceed throughout the duration of the spring and summer migrations.

Commissioner Lorenzen asked if the ODFW believed there was data and studies indicating that transportation leads to a lower fish supply than spill. Mr. Boyce replied that it is inconclusive that transportation provides benefits, however, there are indications that it may reduce survival rates of fish returning to spawning grounds. Commissioner Lorenzen further asked if it is conclusive that spill increases survival rates. Mr. Boyce answered yes, that numerous studies had been conducted throughout the Columbia and Snake rivers systems. He indicated that the ODFW has data, studies have been conducted on the Columbia River by the NMFS and other agencies and that studies have been made on the mid-Columbia by the mid-Columbia public utility districts.

Dr. Filardo, the FPC, said that the data on fish abundance are based on the collection counts taken at the dams. She said the numbers are dependent on the hatchery releases in any one year. In general, she said, about 50 percent of the fish are collected at the project. Dr. Filardo described the process, that at each system a screen is used to divert fish into a collection system. She provided a historical perspective of flow spill and dissolved gas in the Columbia River system and talked about the current smolt monitoring program that is being implemented by the FPC.

Dr. Filardo said that the spill being asked for is not something that has not occurred in this system historically and that dissolved gas levels seen this year are not outside of the boundaries seen in the past years. She indicated that under the smolt monitoring program since the beginning of the season, three times per week, fish are sampled for gas bubble symptoms, that information is recorded and the information is sent to the FPC. Dr. Filardo explained migration and numbers of fish involved. She explained that the FPC is an arm of the Columbia Basin Fish and Wildlife Authority which represents the state and federal fishery agencies and Indian tribes in fish passage and migrational matters. She said that June 20 is the date used to signify the end of the spring fish migration.

Earl Dawley, the NMFS, said that because of the extra spill being asked for, the monitoring program has been increased. He said that the monitoring program received by the Commission had just been developed. The smolt monitoring conducted at Little Goose, Lower Monumental, McNary, John Day and Bonneville dams has been increased to become a daily assessment and has also been increased to examine internal and microscopic assessment if bubbles are apparent on the fish.

Mr. Dawley said there is a research program being conducted to specifically evaluate the effects of GBD on fish in the reaches downstream of Priest Rapids Dam, downstream of Ice Harbor Dam and downstream of Bonneville Dam and within those reaches at time periods when the gas saturations are above 120 percent of total dissolved gas. A NMFS lead decision making process which involves representatives from the NMFS, USFW, BPA, Corps and Bureau of Reclamation will be having bi-weekly meetings to decide implementation of further spill. The operations group will be looking at the available real-time information that is coming from the monitoring programs.

Jim Athearn of the Corps said the Corps is implementing emergency spill operations at the request of the NMFS and USFW with strong support from the governors of Washington and Oregon and the state fisheries agency and tribal fish managers. After notification that the state water quality standards were revised for TDG for a seven-day period, he said the Corps remains concerned about the potential adverse effects on the aquatic system particularly for Snake River salmon listed for protection under the Endangered Species Act and their critical habitat.

He said the Corps has received preliminary reports that symptoms of GBD have began appearing in smolts sampled at Lower Monumental Dam and Little Goose. Mr. Athearn commented that decisions made in regard to water quality standards should be done only after existing scientific data has been thoroughly analyzed and



should be conservative when dealing with listed stocks and critical habitat rather than being experimental. He said that the scientists involved in dissolved gas research for the Columbia and Snake rivers since the 1960s and 1970s should be consulted on their assessment for the potential for significant increases in spill to improve survival under the unique circumstances of 1994.

Mr. Athearn went on to say that 1994 is a low-flow year with high spill. He said the Corps was being asked to manage flows that will affect the amount of water available next year if similar weather patterns persist. If current projections for yet lower adult returns next year occur, the Corps can expect even more requests for drastic action.

Chair Wessinger asked about the difference in turbine operations and fish survival. Mr. Athearn replied that there is a 95 percent survival of the fish passing a particular project through either a collection system for transportation or through the spillway or through ice and trash sluiceway.

Director Hansen asked if the Corps was asking with the other federal agencies and ODFW the Commission to modify the standard allowing for additional spill or was he indicating that he was either taking no position or opposing such an action. Mr. Athearn replied that the Corps was not taking a position on the TDG spill percentage.

Dr. Wes Ebel told the Commission a problem he has with this request is that the NMFS is trying to achieve 80 percent fish passage efficiency and not exceeding 120 percent saturation. He said he did not see how they could do that at the proposed spill levels. Dr. Ebel said that another factor that has not been discussed was the lethal effects from exposure to total gas supersaturation. Additionally, he said he was concerned about the adult monitoring program.

Dr. Ebel said that there have been numerous studies, peer review scientific reports on the results of collection and transportation from various locations from Ice Harbor to Lower Granite dams from 1968 to the present. He said there has been over 20 years of studies and over 20 different tests conducted; there has never been a single controlled release that came back at a lower rate than the transported release. Dr. Ebel added that all of the data on steelhead has shown a significant and substantial benefit from transport during all these tests.

Chair Wessinger asked Dr. Ebel for his recommendation. Dr. Ebel said he did not see the need for the spill program. He said the NMFS should continue doing what they are doing and work to improve the collection and transportation system and spill in areas where they are not collecting fish in tributary streams.

Dr. Gerald Bouck told the Commission that he was retired and did not represent anyone. He said that over the past 35 years he has investigated GBD and gas supersaturation. Dr. Bouck said he strongly believes that Oregon should not grant a waiver or otherwise allow relaxation of its water quality standards. He said the Commission should consider the examples of Norway or British Columbia and look to them for legal precedence.

Commissioner McMahan commented that relaxing the standard is not the same as allowing a variance in temperature because this case involves the Endangered Species Act and is a legal precedence rather than something like heat which would be economic.

Director Hansen asked how the Commission and Department should address the issue of allowing supersaturated conditions because of involuntary spills. Dr. Ebel replied that the Corps and BPA have not been allowed to operate the river the way they want to control the nitrogen. Dr. Ebel indicated that there are very few times that the existing standard would be exceeded. Dr. Bouck added that if the dams were operated as designed, spill would not be necessary; if spill is needed to move the fish through and a demonstrated need exists, there should be some way to accomplish that without creating a gas supersaturation problem.

Robert Heinith, Columbia River Inter Tribal Fish Commission (CRITFC), said the tribes are not just another interest but are sovereign governments and have management jurisdiction over the salmon and other resources in the basin. He said the tribes first brought this issue to the Department's attention in September 1993 when the tribes were facing problems and some contradictions existed within the dissolved gas standard from prior operations over the river. Mr. Heinith said the crisis over the salmon is basin wide and has meant for the tribes a severe impact. The tribes have been forced to fish the Willamette River for their ceremonial subsistence fish.

Mr. Heinith said the tribes' philosophy is to allow fish to migrate in the river and not to be handled; he said spill achieves this philosophy and scientific goal. He said that the three agencies and tribes have chosen a conservative approach, implementing the spill program based on real-time and historic migration patterns with spills being

confined to night-time hours. This plan substantially limits economical impacts to the spill because power demand is much less at night and that river flows are lower at night. He said member tribes support and concur with the ODFW request of 180-day variance with the state dissolved gas standard to allow for the best possible fresh water juvenile survival and protection of beneficial use of this resource which is in critical status.

Thane Tienson told the Commission that he grew up in the commercial fishing industry and that he represented the commercial fishing industry. He said that people opposed to spilling have an interest in not seeing a potential increase in power rates and are afraid this experiment will work which will lead to yet higher rates and, therefore, higher costs and less profits. He said the agencies and tribes have requested for years that spill be implemented, and they have been refused because the people who dominate and ultimately decide how the river is run do not want to change the status quo. Mr. Tienson said the only reason this issue was being discussed today was because a federal judge said the status quo in altering this system cannot occur any more. He said that if the transporting program was subjected to the same scrutiny and monitoring being required in the spill program, transportation would not survive that scrutiny. Mr. Tienson said the best returns for adult fish have coincided generally with the highest flows and highest spills over the last several decades. He concluded by saying that fish do better migrating in-river since they have done it successfully for thousands of years.

Bill Bakke, Oregon Trout, highlighted findings from the study conducted by Earl Dawley and Wes Ebel entitled, "Studies on Effects of Supersaturation of Dissolved Gases on Fish, Final Report." He also told the Commission that while Oregon Trout supports the use of spill as a means to improve juvenile salmon and steelhead survival at hydro dams on the Columbia and Snake rivers, excessive levels of nitrogen saturation could impair survival. He said that adult salmon and steelhead do not recover from GBD and that a standard for nitrogen supersaturation must be responsive to the survival of juvenile and adult salmonids.

Mr. Bakke stated that Oregon Trout recommended that the standard of 110 percent saturation for nitrogen be reinstated since that is the threshold where increased mortality for salmonids begins. He said that a threshold should be set at the point where there is some safety margin rather than at a point where there is measurable mortality. Every effort should be made to keep nitrogen below 120 percent of saturation; by using 110 percent as the threshold, actions should be taken to mediate increases above that point. Mr. Bakke concluded by saying that an intensive monitoring program must be in place to make sure that excessive nitrogen and GBD are controlled.

Commissioner Castle complimented Mr. Bakke on his testimony for being precise with respect to his organization's position.

Dan Roth, Northwest Environmental Defense Center (NEDC), said the Center supports the spill proposal and urged the Commission to grant the variance for 180 days. He said that under the Clean Water Act there is a move to biologically-based standards and that this could be an area to have a biologically-based nitrogen standard. Mr. Roth suggested that the Commission has to also decide about weighing public interest values. He said the Commission should weigh three points. First, that the Corps and BPA have been refusing requests for about 20 years from the agencies and tribes to spill. Second, the Corps has historically refused to spend money to protect fish and have refused to screen the dams. Third, he said, it is time to implement adaptive management. Mr. Roth indicated that the Northwest Power Planning Council has created adaptive management which essentially says action must be taken in the face of scientific uncertainty.

## **MONITORING PLAN**

Mr. Dawley briefly provided an update of the monitoring program proposed by the NMFS. He said that the program was not yet complete but would be implemented to the full extent as quickly as the NMFS can solve some permit modification issues and how to conduct some of the monitoring. He said that for the most part the monitoring plan is in place, and the data so far received indicates little sign of GBD within the salmon population of those migrating downstream; no data has been received on those migrating upstream.

Commissioner Whipple asked about observations and asked what constituted a observation. Mr. Dawley said that they looked for external emphysema, gas bubbles under the skin and fins; he said that other signs include gas bubbles within the body

cavity and circulatory system. Mr. Dawley said that, in general, the impacts of a high gas saturation level in the river are less than what would be seen in laboratory data because the depth distribution of fish is greater than that mandated in laboratory tests.

Commissioner McMahan asked if the data received gives the NMFS a comfort level that the fish are swimming deeper in the river. Mr. Dawley said that there have been several studies of depth distribution that suggest the average fish is not right at the surface but several feet down below the surface which provides them some compensation from the surface major level of gas saturation.

Director Hansen said that is important to note that decisions are made depending on how fast the monitoring data gives feedback. He said that physical assessment may be able to indicate symptoms but at a very gross level. Director Hansen asked how quickly data will be available as autopsies are performed on the fish so that spill regimes can be adjusted. Mr. Dawley indicated that the monitoring plan was just being completed and that the NMFS expected to have the data available by the following morning from the day-before activity.

Chair Wessinger asked Director Hansen how the Department would monitor the NMFS program. Director Hansen indicated the Department would expect to be a part of the program or at least receive immediate feed back. He said that Department staff will need to determine how to collect the data and have it available in a timely manner.

## **PUBLIC TESTIMONY**

Al Wright, Pacific Northwest Utilities Conference Committee (PNUCC), talked about his experience in working on the Columbia River and nitrogen supersaturation during the 1960s and 1970s. Mr. Wright spoke about the spill priority, which was a nitrogen abatement program where spills were shifted around in the river to maximize the nitrogen abatement potential that existed. He indicated that in the 1980s a memorandum of agreement (MOA) regarding spill was created. The MOA was a negotiated settlement between balancing the spill and unscreened projects and power generation to optimizing fish protection but always making sure the spill was under the spill priority program and attempting to stay within the 110 percent standard. He urged the Commission not to allow the current standard to be violated.

Dave Sabala, Douglas Electric Cooperative, said he was testifying on behalf of himself and the Pacific Northwest Generating Cooperative. Mr. Sabala said that backing up their shared desire to see threatened and endangered salmon run saved was \$350 million of ratepayer money. That money is funded through the BPA to support salmon enhancement efforts on the Columbia/Snake river systems for 1994. He said that with that level of commitment, BPA's customers have a right to expect efforts that have quantifying benefits to Northwest salmon runs. He said that the agencies should fund those enhancement actions that provide the greatest benefits achievable for the limited dollars available. Mr. Sabala said that the biological benefits of the NMFS spill program are uncertain at best. He said that while the NMFS and state fisheries agencies may view this spill program as a grand experiment, the downside is very real for down migrating salmon and for those paying the price to save them. Mr. Sabala talked about the costs involved with the spill program and costs that will be passed on to power customers. He said it appears to him that the NMFS proposal is a costly way of killing fish and kills the effectiveness of the \$350 million which is to be used to help those fish that will not be around to receive any benefits. He asked the Commission not to approve a waiver to the standard.

John Colt, Seattle, Washington, discussed monitoring for GBD. He said fish impaired or dying from gas supersaturation will be eaten by squaw fish or seagulls. He said that one of the problems with intermediate spill was that gas supersaturation is almost a mass phenomena. If water is spilled for a number of hours at a series of dams, very high gas levels will be created. He said that turning off the spill will not affect the dissolved gas already in the water.

Rob Lothrop, CRITFC, said he has been working on mainstem passage issues for approximately 13 years with the CRITFC. He said the CRITFC supports a temporary modification. He asked that the temporary rule be extended until September 30 which is within the 180 days allowed by law and would allow for a summer spill program to be implemented in 1994. He encouraged the Commission to defer to the ODFW who has been an active participant in the mainstem biological issues. Mr. Lothrop talked about the conflicting testimony in regard to fish distribution and gas concentrations in the water. He spoke briefly on the costs of the spill program. Mr. Lothrop concluded by saying that the proposed monitoring program is a state-of-the-art monitoring program and urged the Department to communicate with the FPC.

Jonathan Poisner, Sierra Club, Columbia Group, said the Sierra Club strongly supports the emergency action by the NMFS to use spill at the dams to help juvenile salmon on their migration past the dams to the ocean. He said that efforts to save wild salmon must begin by helping a greater number of migrating juvenile smolts to

reach the ocean and that spill is a necessary first step in this process. He said two points need to be kept in mind while evaluating the dangers of spill: 1) these dangers can be controlled; 2) whatever danger spill represents, it must be compared to the known hazard of not using spill. Mr. Poisner said that the Club realizes that spill will cost money but they believe that the costs pale in comparison to the economic and social benefits that will come over the long term from restoring wild salmon runs.

Diane Valantine, Oregon Natural Resources Council, said the Council supported the spill program. She said that the request is a major incremental improvement and that more major drawdowns are needed to achieve restoration.

#### **COMMISSION DISCUSSION AND ACTION**

Neil Mullane, Greg McMurray and Mike Downs from the Department's Water Quality Division spoke briefly about the staff recommendation. Mr. Mullane said that staff is not comfortable with any permanent change to the 110 percent level without a great deal more information and study.

Commissioner Whipple asked about the staff's reassurance in regard to the 120 percent level. Mr. Mullane and Director Hansen responded that a distinction needs to be made in regard to a temporary versus permanent rule. Chair Wessinger asked about the NMFS 5 percent mortality trigger to reduce the spill. Mr. Mullane said staff believed that percentage was high because waiting until an actual 5 percent impact on the fish being collected might be very high.

Commissioner Castle suggested the Commission go on record in support of the 110 percent standard but in the event that agencies responsible for fisheries management wish to exceed the standard then in no case would nitrogen exceed the 120 percent of saturation, effective until June 20.

Director Hansen read the modified draft rule as revised by Commissioner Castle. After discussion and further revision, Commissioner Castle moved approval of the proposed temporary rule modification; Commissioner McMahan seconded the motion. The proposed rule read as follows:

**340-41-155** Effective on filing and until June 20, 1994, ~~for 7 consecutive days thereafter~~ ending at midnight on that ~~the 7th~~ day. This rule supersedes paragraphs 340-41-205(2)(n), 340-41-445(2)(n), 340-41-485(2)(n), 340-41-525(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) concentration relative to atmospheric pressure at the point of sample collection may exceed the current standard of 110 percent only if the Department concurs with the National Marine Fisheries Service that such exceedances are necessary for the enhanced management of the salmon resource. In no event, however, may 120 percent be exceeded. ~~shall not exceed 130 percent saturation as determined by the Department.~~ The appropriate Federal agencies shall at all times operate the river system in a manner to minimize TDG whenever the TDG levels exceed 110 percent. The purpose of this temporary rule is to provide for emergency assistance to outmigrating salmon smolts in the mainstem of the Columbia River via increased spill 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 concentrations and for the incidence of gas bubble disease (GBD) sufficient to determine whether the resultant TDG concentrations cause a significant increase in GBD as determined by the Department. ~~related mortality in salmon populations.~~ If such ~~a significant~~ an increase ~~in mortality~~ is documented, as determined by the Director, the Director shall make such alteration in the maximum allowable TDG level, until a satisfactory level is achieved.

The motion was approved three to two with Chair Wessinger, Commissioners Castle and McMahan voting yes, Commissioners Whipple and Lorenzen voting no.

Commissioner McMahan moved approval of the Statement of Need and Justification of Temporary Rule. Commissioner Castle made several modifications to the Statement of Findings. Commissioner McMahan accepted the modifications made by Commissioner Castle, and Commissioner Castle seconded the motion. The Statement of Findings read as follows:



**Statement of Findings of Serious Prejudice  
and  
Attorney General Approval of Temporary Rule Justification**

Agency: Environmental Quality Commission

Temporary Rule: OAR 340-41-155 Relating to Total Dissolved Gas  
in the Columbia River

1. The Environmental Quality Commission finds that its failure to promptly take this rulemaking action will result in serious prejudice to the public interest and to all individuals and groups that have a commercial, recreational or social interest in the enhancement of anadromous fish in the Columbia River.
2. This finding of serious prejudice is based upon the agency's conclusion that the following specific consequences would flow from failure to immediately take this rulemaking action:

Very recent data has revealed that the population of adult salmon in the Columbia River basin are dangerously low.

The responsible state and federal fish management agencies, especially the National Marine Fisheries Service, have determined that migration efforts should be diversified by spilling additional water from certain mainstream dams on the Columbia River. In addition, a federal district court recently ruled that the prior migration plan was inadequate and did not comply with federal law.

Additional spills would likely violate the state's instream water quality standard for total dissolved gases in the Columbia River. The rule would temporarily raise the total dissolved gases standard, thereby permitting the spills, subject to several conditions. The conditions include a requirement for careful monitoring of possible impacts of the spills and preserve the authority of the Department of Environmental Quality to return to a lower total dissolved gases standard if there is significant increase in fish mortality.

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3. The agency concludes that following the permanent rulemaking process, rather than taking this temporary rulemaking action, will result in the consequences stated above because the current outmigration of juvenile smolt will be complete before a permanent rule could be adopted.

4. This temporary rulemaking action will avoid or mitigate these consequences by allowing for additional, immediate spills at certain dams without violating state water quality standards.

The motion was approved three to two with Chair Wessinger, Commissioners Castle and McMahan voting yes, Commissioners Whipple and Lorenzen voting no.

There was no further business, and the meeting was adjourned at 4:10 p.m.

Approved  
Approved with Corrections

see page 9.

*Minutes are not final until approved by the EQC*

## ENVIRONMENTAL QUALITY COMMISSION

Minutes of the Two Hundred and Fortieth Meeting  
October 20 and 21, 1994

### Work Session

The Environmental Quality Commission work session was convened at 1 p.m. on Thursday, October 20, 1994, Conference Room 3A, Oregon Department of Environmental Quality (DEQ), 811 S. W. Sixth Avenue, Portland, Oregon. The following Commission members were present:

Emery Castle, Vice Chair  
Henry Lorenzen, Commissioner  
Linda McMahan, Commissioner  
Carol Whipple, Commissioner  
(William Wessinger was absent.)

Also present were Lydia Taylor, Interim Director, DEQ, and other DEQ staff.

#### 1. **Informational item: report on coastal nonpoint source program.**

The Department of Environmental Quality (DEQ) and Department of Land Conservation and Development (DLCD) are required by federal law to develop a coordinated state program to protect and enhance coastal waters. The program, called the Coastal Nonpoint Pollution Control Program (CNPCP), is intended to address the growing threat to coastal waters from population growth and development. The report summarizes the Department's work in developing programs and measures to meet federal requirements and to address pollution problems from urban development, including on-site disposal systems, erosion and runoff control, riparian protection and roads, highways and bridges.

Vice Chair Castle and other Commissioners indicated they liked the options of working with local governments and other agencies and stressed that coordination was critically important.

Commissioner Whipple commented that the CNPCP may be an issue that requires the utmost attention. She indicated concern over the requirement for periodic inspection of septic systems. She expressed concerns about the definition of the management area for the program. She also commented that it is important for the public to hear the same information as was presented to the Commission.

Vice Chair Castle commented that a local entity of some sort would be in a better position to deal with some of the requirements of the CNPCP. He reflected that perhaps some existing programs would work better if implemented through a local entity. He indicated that there would be more willingness on the part of the public to cooperate with a local entity.

**2. Informational item: rigid plastic container law workshop.**

Presentations were made by Department staff with an overview of Senate Bill 66 and discussion the definition of "rigid plastic container." A panel group comprised of Gail Achterman, chair of the implementation task force, Chris Taylor, representing the Oregon State Public Interest Research Group (OSPIRG), who had been involved both in designing the legislation and in the Department Rigid Plastic Container Task Forces, Jerry Powell, chair of the recycling rate task force, Patty Enneking, representing the American Plastics Council and task force member, and Paul Cosgrove, representing, in general, national companies and the Soap and Detergent Association also made a presentation to the Commission.

The panel gave its perspectives on issues and the Department process. Ms. Enneking described a number of concerns to the plastics industry, such as the inclusion of lids and trays in the definition of "container" and pyrolysis. Mr. Cosgrove mentioned several areas not specifically covered under statute where he believed the Commission had discretion (e.g., exempting products covered under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA); allowing corporate averaging to comply with the law; allowing newly introduced products to use the "reduced container" exemption).

The Commission identified five areas in which they wanted more information for the Friday meeting: 1) federal preemption of state law (e.g., FIFRA); 2) the requirement for a five-year comparison in order to calculate whether a container has met a 10 percent reduction; 3) pyrolysis; 4) point-of-sale packagers; and 5) the definition of "rigid plastic container."

### Regular Meeting

The Environmental Quality Commission regular meeting was convened at 8:30 a.m. on Friday, October 21, 1994, in Conference Room 3A, Oregon Department of Environmental Quality (DEQ), 811 S. W. Sixth Avenue in Portland, Oregon. The following commission members were present:

William Wessinger, Chair  
Emery Castle, Vice Chair (**Note:** Commissioner Castle acted as Chair for this meeting.)  
Henry Lorenzen, Commissioner  
Linda McMahan, Commissioner  
Carol Whipple, Commissioner

Also present were Michael Huston, Assistant Attorney General, Oregon Department of Justice, Lydia Taylor, Interim 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.

Acting Chair Castle called the meeting to order.

#### A. Approval of minutes.

Commissioner Lorenzen moved approval of the following minutes:

- July 21, 1994, special meeting
- August 26, 1994, regular meeting
- September 22, 1994, special meeting
- October 13, 1994, special conference call meeting

Chair Wessinger seconded the motion, and the motion was unanimously approved.

#### B. Approval of tax credits.

The Department recommended issuance of the following tax credit applications:

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Application Number	Applicant	Description
TC 2900	A. E. Staley Manufacturing Company	A Water Pollution control facility for industrial waste treatment and disposal consisting of irrigation sprinklers, flowmeters, pumps and associated piping, monitoring equipment, a tractor, hay baler, rake, and a 59 acre irrigation field.
TC 3866	Anodizing, Inc.	A water pollution control caustic etch recovery (CER) facility consisting of a crystallizer/clarifier, an alumina separation tank, a centrifuge, a filtration tank and auxiliary pumps and controls.
TC 4091	Polk County Farmers' Co-op	A water pollution control closed loop truck and equipment washing facility consisting of a concrete wash pad, a collection system, a Delta 1000 water treatment system and a protective housing shed.
TC 4092	Polk County Farmers' Co-op	A water pollution control closed loop washing facility consisting of an All American Oil water separation system, a wash slab and a protective housing shed.
TC 4203	Cascade Farm Machinery Company, Inc.	A water pollution control closed loop industrial wastewater recycling facility consisting of a Water Mage Delta unit, a sump, pits and associated electrical and plumbing equipment.
TC 4210	Talent Gas-4-Less	A water quality Underground Storage Tank (UST) facility consisting of three doublewall fiberglass tanks and piping, spill containment basins, a tank gauge system with overflow alarm, automatic shutoff valves, line leak detectors, sumps and Stage I and II vapor recovery piping.

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Application Number	Applicant	Description
TC 4245	Lamb Weston, Inc.	A water pollution control irrigation expansion facility to prevent groundwater pollution consisting of four center pivots, a Pringle pivot and associated valves, vaults and electrical equipment.
TC 4255	Willamette Industries, Inc.	A water pollution control facility consisting of sumps, an ITT Flyght wastewater pump, a level control system and piping.
TC 4261	Consolidated Metco, Inc.	A water pollution wastewater control facility consisting of an ultrafilter KOCH Membrane unit and associated plumbing and electrical equipment.
TC 4269	Franklin Hoekstre	An air quality field burning facility consisting of a Freeman Big Baler (Model 1592), a Hyster Challenger Lift Truck H180H, a New Holland Rake Model 216, trailers, a tractor, a single axle converter dolly and a fork assembly.
TC 4271	Golden Valley Farms	An air quality field burning facility consisting of a Roadrunner with hay clamp, a Case IH 8580 Baler, a 1085 Bale Wagon, a J.D.4050 tractor, 2 hay rakes, and 2 bale racks

Tax credit application review reports with facility costs over \$250,000:

Application Number	Applicant	Description
TC 3778	Taylor Lumber & Treating, Inc.	A hazardous waste facility consisting of a coated drip pad with liner, a waste collection tray and a leak detection system.

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Application Number	Applicant	Description
TC 4232	Jeld-Wen, Inc.	An air pollution control facility consisting of two Carter-Day baghouse filters and ductwork.

The Department recommended the Commission approve certification for the tax credit applications as listed above.

In regard to TC 2900, A.E. Staley Manufacturing Company, Commissioner Lorenzen raised an issue about the eligibility of land claimed as part of this tax credit request. The Commission determined that the Staley tax credit should be discussed at the December 2 Commission meeting.

Commissioner Whipple moved approval of the above-listed tax credit applications excluding TC 2900; Commissioner McMahan seconded the motion. The motion was unanimously approved. TC 2900 will be considered at the December 2 Commission meeting.

**C. Rule adoption: disclosure of the relationship between proposed rules and federal requirements.**

This proposed rule would establish a policy statement and set of questions which disclose information on the relationship between proposed rules and any related federal requirements. Department staff would make the information available to the public for review throughout the rulemaking process for any future rules proposed for adoption or amendment. The rule would neither mandate nor preclude any particular decision by the Commission when a rule package is presented for ultimate adoption. The Department recommended adoption of the rules. Olivia Clark and Marianne Fitzgerald of the Director's Office presented this item.

Commissioner Wessinger moved approval of the rules to establish a policy statement and questions which disclose information on the relationship between proposed rules and any federal rule requirements; Commissioner Whipple seconded the motion. The motion was unanimously approved.



**D. Rule adoption: federal operating permit program rule amendments.**

This proposed rule would clarify and correct the language in the federal operating permit program rules contained in Chapter 340, Divisions 28 and 32. The proposed rulemaking also would incorporate changes to the minor new source review rule (OAR 240-28-2270) and update the rules in Division 32 for early reductions and accidental release chemicals. The Department recommended the Commission adopt the rule amendments in order to gain U. S. Environmental Protection Agency (EPA) approval of the federal operating permit program. Greg Green, Administrator of the Air Quality Division, and Jill Inahara of the Air Quality Division, presented this item.

Commissioner Lorenzen moved approval of the rule amendments;  
Commissioner McMahan seconded the motion. The motion was unanimously approved.

**Note:** Agenda Item D-1 was considered after Agenda Item H.

**E. Rule adoption: gasoline vapor recovery permits and fees and oxygenated fuel fees.**

These proposed rules would require State I and Stage II vapor recovery permits and fees and gasoline tanker permit fees. The proposal would also repeal the existing oxygenated fuel permit fee on gasoline retailers and reduce the same fee on terminals and distributors. The Department recommended the Commission adopt the rules regarding vapor recovery permits and fees and oxygenated fuel fees as presented in Attachment A of the staff report. Mr. Green, John Kowalczyk, Kevin McCrann and Kevin Downing of the Air Quality Division presented this item.

Chair Wessinger moved approval of the rule; Commissioner Whipple seconded the motion. The motion was unanimously approved.

**F. Rule adoption: proposed amendments to water pollution control revolving fund program rules.**

This proposed rule amendment would address three problems: 1) the demand for State Revolving Fund (SRF) loans exceeds existing funds by five-to-one; 2) complaints that project scoring for prioritizing is inequitable; and, 3) complaints that the rules are fragmented and difficult to read. An advisory committee assisted in developing the rule revisions. Those revisions included:

- amending how projects are selected and reformatting the selection criteria for

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- easier reading and understanding;
- incorporating 1993 legislation thereby allowing the sales of bond to leverage the Fund;
- establishing some caps to ensure more broad coverage by the Fund;
- modifying interest rate calculations; and,
- housekeeping changes.

The Department recommended the Commission adopt the proposed rules as presented in Attachment A of the staff report. Martin Loring and Margaret Vandehey of the Department's Water Quality Division, and Roger Jordan, advisory committee chair, presented this item.

Commissioner Wessinger moved approval of the proposed rule; Commissioner McMahan seconded the motion. The motion was unanimously approved.

Apart from this rule amendment, a brief discussion occurred about the direction staff should take concerning the statutory definition of "public agency" in regard to the State Revolving Fund only. The Commission agreed that Native Americans should be included in the definition.

**NOTE:** Agenda Item G was considered after Agenda Item D-1; Agenda Item H was considered after Agenda Item I.

**I. Action item: standards, criteria, policy directives and hiring procedures to be used in hiring director of the Department of Environmental Quality.**

A new director was last hired by the Commission in January 1984. The minimum standards for the position, evaluation criteria, policy relating to recruitment strategies and hiring process for the position of director have not been submitted for public comment for the past decade. These standards and practices must be submitted for public comment prior to recruiting and hiring a director if the Commission wants to meet in executive sessions.

The Department drafted proposed standards, criteria, policy directive and hiring procedures for the Commission to consider for public comment. Following public comment and adoption, the Department can implement recruitment and screen candidates for the Commission. The Department recommended the following:

- that the Commission direct the Department to furnish for public review and comment the standards, criteria, policy directive and hiring procedures;

- that the Commission select a meeting date to consider public comment on the above items; and,
- that after considering public comments, adopt the standards, criteria, policy directive and hiring procedures and direct the Department to implement the adopted hiring procedures.

Chair Wessinger asked about using a consulting firm for recruiting. Ms. Taylor indicated that it may take up to three months to hire the new director.

Commissioner Castle asked to have "or equivalent experience" added to the minimum standards.

The Commission decided to adopt the standards at their regular December 2, 1994, meeting rather than hold a special meeting in November. The Department was directed to proceed with public hearings and comments.

**H. Rule adoption: implementation of Oregon's rigid plastic container law.**

The proposed rules included the following topics:

- a definition of rigid plastic container;
- clarification of statutory exemptions;
- standards for product and container manufacturer compliance, record keeping and reporting;
- procedures for protecting trade secrets; and,
- provisions for enforcing violations.

The Department recommended the Commission adopt the proposed rules as presented in Attachment A of the staff report.

X Assistant Attorney General Michael Huston began by pointing out that the rigid plastic container law is not a "delegated" statute; that is, it is very specific concerning definitions, exemptions, mandates and options for compliance. He said the Legislature adopted the policy, leaving a somewhat limited role for the Commission in adopting implementing rules. He said he believed it was significant that the statute did not contain an exemption for FIFRA-regulated products. Mr. Huston said he did not agree with comments that suggested where the legislation was silent, the Commission could proceed as it wished. He noted that the Attorney General's Office had given advice on several issues, but that the Commission could choose a different path.

Discussion of this item concerned the five issues identified by the Commissioners at the Thursday work session. Those items are listed below:

1. Federal preemption of state law (especially under FIFRA). Larry Edelman, Assistant Attorney General, said he would have had to find the preemption case to be 95 to 100 percent clear to state that State law was preempted.
2. Pyrolysis. Mr. Edelman indicated that given the hierarchy in existing solid waste law, energy recovery was clearly separate from recycling and lower on the hierarchy. He said his interpretation of the statute supports the language proposed by the staff report, which says that any "energy" products of plastics pyrolysis do not count as recycling for purposes of the rigid plastic container recycling rate.
3. Point-of-sale packagers. Mr. Edelman said that the statute does not provide exemptions for any group (including small point-of-sale packagers); however, he said the Commission has substantial discretion to reduce requirements which is in the proposed rule.
4. Reduced package. Mr. Edelman said he found that the statute allows "no wiggle room" in making a comparison with a product and container existing five years previously in determining whether a package has been reduced 10 percent to qualify for the "reduced container" exemption.
5. Definition of rigid plastic container. Pat Vernon, Waste Management and Cleanup Division, discussed "lids" and "trays" and Department rationale for including those items under regulation. Ms. Achterman noted that this was an area that the task forces found particularly difficult.

Senator Dick Springer, Bruce Walker from the City of Portland, and members of the Oregon State Public Interest Research Group (OSPIRG) spoke to the Commission. Most noted that Oregonians want to be able to recycle more plastics.

Commissioner Lorenzen expressed interest in the policy implications and technology of pyrolysis. The Commission indicated that they would like to review the Department's report to the Legislature (which includes pyrolysis) and indicated that they will then determine what more, if anything, they would like included regarding pyrolysis.

Commissioner Whipple said she was interested in the five-year comparison (for reduced containers) and was concerned that excluding products that had not been on the market for five years might not result in appropriate public policy (i.e., source reduction, innovation).

Commissioner McMahan moved approval of the proposed rules with two technical amendments (one a "comment" specifying that tubes and blister packs are not included, and the other correcting references to the "rigid plastic container recycling rate," specifying that it should be the "recycling rate for compliance purposes" in certain sections of the rule). Commissioner Whipple seconded the motion, and the motion was unanimously approved.

## **PUBLIC FORUM**

No public testimony was given.

### **D-1. Informational item: report on environmental equity project.**

In response to concerns about disproportionate environmental impacts on low income and minority populations, the Governor's Office asked the Department to take the lead on an environmental equity project in cooperation with other state agencies. An advisory committee studied the issue since January and developed recommendations and a report to the Governor.

Committee Chair Victor Merced made an informational presentation of the committee's conclusions to the Commission. He was joined by committee members Richard Craig and Linda Lutz.

Mr. Merced provided background information on the Oregon Environmental Equity Project, the committee's charge and issues addressed. He also presented the committee's directives to natural resource agencies, intended to assure that equity is incorporated into the state's environmental decision-making processes. (The committee also offered recommendations for agencies to implement in order to gain this assurance.

Mr. Merced indicated that the Governor's Office would provide direction to natural resource agencies for implementing the committee's recommendations. The committee's recommendations also include that the Governor's Office establish an Environmental Equity Citizen Advisory Board to advise the state's continuing efforts to ensure environmental equity.

## RESOLUTION

Commissioner Lorenzen read the following resolution:

The Environmental Quality Commission wishes to express its great appreciation for the many outstanding accomplishments of our former Department Director, Fred Hansen. His integrity and industry have benefitted greatly not only the environmental quality of Oregon but also and equally important the quality of government in Oregon. Through his commitment to resolving contentious issues by building consensus among affected parties he has developed a tradition of good government process and good results. It is an understatement to say that his achievements have been many. He will be sorely missed. We thank him for what he has done for Oregon. I wish him the best of fortune in his new position as Deputy Director of EPA.

Chair Wessinger moved adoption of the resolution by acclamation; the resolution was unanimously approved.

### **G. Rule adoption: technical corrections to modifications of on-site sewage disposal rule.**

At the previous Commission meeting on September 22, the Department presented a staff report requesting adoption of amendments to the administrative rules establishing standards for the on-site sewage disposal program. The proposed rule package included the advisory committee recommendations and other recommendations made during the discussion which were adopted. As the documents were being prepared for filing, several defects requiring correction were found. This proposal would incorporate all the last-minute additions presented and accepted at the September 22 meeting, the defects in the original package have been corrected and the implementation date for Water Pollution Control Facility (WPCF) activities has been moved up. The Department recommended the Commission adopt the proposed rule amendments.

Alex Mauck, BEE ZZZ Lay Drain Company, told the Commission he was concerned about staffing for the technical review committee (TRC) to be formed for the on-site sewage rules. He said several manufacturers, including himself, cannot go forward until the TRC is formed, staffed and maintained. He said the TRC would be functioning by the end of November. He said that the TRC needs to be comprised of a broad base of members.

Commissioner Lorenzen moved approval of the rule amendments; Commissioner Whipple seconded the motion. The motion was unanimously approved.

**J. Commission member reports.**

There were no Commission member reports.

**K. Director's report.**

Earth Science Penalty: In the second largest civil penalty in DEQ history, the Department assessed a \$480,000 civil penalty against Earth Science Technology, Inc. for violating federal and state underground storage tank regulations. The company, located in Beaverton, was also notified that the Department proposes to revoke its service provider license.

The company provided a tank tightness testing service required of tank owners. The Department has documented 320 tanks throughout Oregon on which Earth Science performed tank tightness tests in violation of the law. The Department found that employees did not receive adequate training, did not have the necessary and appropriate equipment and did not perform the tests as required by the regulations.

Environmental Partnerships for Oregon Communities (EPOC) Update: The City of Nyssa is expected to be the first of three Oregon cities to sign a multi-agency, multi-media compliance agreement under the EPOC program. Completion of a Mutual Agreement and Order between the City of Nyssa, Oregon Health Division and Department is expected in December following public notice and comments.

The EPOC partners evaluated Nyssa's environmental requirements and are setting priorities to ensure that public health and the environment are addressed in an efficient and comprehensive manner. The Nyssa EPOC team has focused on drinking water, water treatment and underground storage tank issues, and will develop a schedule to achieve and maintain compliance in these areas.

Similar EPOC efforts are underway in the cities of Powers and Rainier.

Klamath Falls Co-Gen Proposal: The city of Klamath Falls has begun discussion with DEQ Western Region staff on a proposal to build a 240 megawatt co-gen facility.

Oxygenated Fuel Season Set to Begin: To reduce carbon monoxide pollution during the winter, oxygenated (oxy) gasoline will be sold in several Oregon cities beginning November 1. Oregon service stations will primarily sell gas to which ethanol has been added.

Oxygenated fuel will be sold at all gas stations in the Portland tri-county area, Yamhill and Jackson counties, Medford, Grants Pass and Klamath Falls. These areas do not meet federal standards for carbon monoxide pollution. The oxy fuel season runs from November 1 to February 28.

Studies in Oregon showed reductions of up to 20 percent in tailpipe emissions of carbon monoxide levels last winter because of oxy fuel. During the first year of the program many drivers complained about changed in car performance. Oxy fuels flush a car's system of deposits and residue. This often clogs the fuel filter, but once the filter is replaced, the problem is eliminated. Oxy fuels will not adversely affect the performance of properly tuned and maintained car engines.

Hearing Authorizations:

- EPA General Conformity Rules

The EPA adopted the General Conformity rule in 1993, which requires federal agencies to comply with state air quality rules in nonattainment areas. States are required to revise their State Implementation Plans (SIPs) to reflect these provisions. The EPA stated their intent to include attainment areas under the General Conformity rules at an unspecified time in the future. DEQ's proposed rules would adopt the federal provisions, plus require conformity in attainment areas. This action would ensure that prescribed burning activities of the U.S. Forest Service and Bureau of Land Management are managed to minimize smoke impacts. Neither agency has expressed concerns with the proposed rules.

- EPA/DOT Transportation Conformity Rules

As with the General Conformity rules, all states are required to revise their SIPs to reflect new requirements that federal transportation projects comply with state air quality rules. The DEQ's proposed rule would make these changes, plus require any "regionally-significant" transportation projects (regardless of funding source) to meet the same standards as federally-funded



projects. Compliance of a project with an emission budget in a SIP would also be required upon approval by the Commission rather than upon final approval by the EPA. An advisory committee is reported to be near final agreement on all issues.

- Revisions to Prevention of Significant Deterioration (PSD) and Oregon Smoke Management Plan (OSMP)

Changes would update data used to define baseline, update Class I boundaries to reflect congressional increases (required by the Clean Air Act Amendments ((CAAA) 1990), replace Total Suspended Particulate (TSP) increment in PSD with a Particulate Matter (PM)<sub>10</sub> increment (required by EPA rule), and adopt changes to the OSMP made by the Oregon Department of Forestry.

- Three Basin Rule

The advisory committee continues to make progress and is expected to reach consensus in November on one of four options:

1. limiting degradation based on assimilative capacity;
2. establishing an offsets program to maintain current water quality;
3. allowing most discharges while monitoring water quality; and,
4. prohibiting most discharges.

All options would "grandfather" existing sources at current mass load limits. No legal conflicts with state or federal law are expected with any of the four current options. Additional DEQ staff would be required to implement the first two options.

- Total Dissolved Gas (TDG) Criteria for Columbia River

A permanent solution is needed to prevent current water quality standards from impeding spill programs intended to improve salmon survival rates.

Temporary rules, used this summer, can only be used once. The proposed rule modification would allow the Director to modify TDG criteria based on results of ongoing research and to evaluate the risks of higher TDG levels relative to the benefits of increased spill rates. The proposed rule would be consistent with the rules of Washington and Idaho, which provide the Director with this flexibility. Proposed adoption would be in February 1995.

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

# Environmental Quality Commission

- Rule Adoption Item  
 Action Item  
 Information Item

Agenda Item B  
December 2, 1994 Meeting

**Title:**

Approval of Tax credit Applications

**Summary:**

New Applications - 54 tax credit applications with a total facility cost of \$ 29,613,233.00 are recommended for approval as follows:

- |  |              |
|--|--------------|
| - 11 Air Quality facilities with a total facility cost of:   | \$ 1,941,657 |
| - 6 Air Quality CFC facilities having a facility cost of:  | \$ 15,461    |
| - 2 Field Burning related facility recommended by the Department of Agriculture with a total facility cost of: | \$ 56,365    |
| - 4 Plastic Recycling facilities with a total facility cost of:  | \$ 388,799   |
| - 2 Solid Waste Recycling facilities having a facility cost of:  | \$24,004,261 |
| - 2 Water Quality facilities costing:  | \$ 685,699   |
| - 27 Water Quality (UST) facilities with a total facility cost of:   | \$ 2,520,991 |

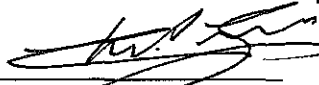
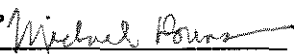
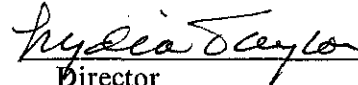
Seven (7) applications with claimed facility cost exceeding \$250,000 were reviewed by independent accounting firm contractors. The review statements are attached to the application reports. An issue pertaining to the eligibility of costs for to the replacement of a UST facility not located at the same site as the new facility (TC 4262, Truax Harris Energy Company) is discussed in the body of the staff report.

Issues pertaining to TC 2900, A.E. Staley Manufacturing Company, TC 4243, Oregon Steel Mills, Inc. and TC 4252, Willamette Industries, Inc. are discussed in the Background section of the attached report. Also, to facilitate the Commission's review, the certifiable facility cost of each facility and the percent allocable, if applicable, are presented in parentheses for each facility in the applicant column of the staff report.

**Department Recommendation:**

Approve issuance of tax credit certificates for 54 applications as presented in Attachment A of the staff report.

Approve the revision of tax credit certificate 2295 issued to Carmichael Columbia Oil, Inc. to reflect the fact that the majority of the facility is no longer in use.

 Report Author	 Division Administrator	 Director
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November 1, 1994

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

Date: December 2, 1994

**To:** Environmental Quality Commission  
**From:** Lydia Taylor, Interim Director *Lydia Taylor*  
**Subject:** Agenda Item B, December 2, 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 Number	Applicant	Description
TC 2900	A.E. Staley Manufacturing Company (\$206,568)	A water pollution facility for industrial waste treatment and disposal consisting of irrigation sprinklers, flowmeters, pumps and associated piping, monitoring equipment, a tractor, hay baler, rake and a 59 acre irrigation field.
TC 4082	Pacific Rim Trading (\$5,950)	A reclaimed plastic product facility consisting of three plastic injection molds for manufacturing plastic parts.
TC 4119	H.C.R., Inc. Dbas Hergert's Industries, Inc. (\$64,266)	A reclaimed plastic product facility consisting of a plastic injection mold for manufacturing lids and bases for compost bins.
TC 4221	Hayden Saab Services, Inc. (\$3,996 /82%)	An air pollution control CFC facility consisting of a machine that removes and cleans automobile air conditioner coolant.

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

Application Number	Applicant	Description
TC 4233	Wayne E. Burger Dba Fast Stop Gas  (\$19,803 /82%)	An underground storage tank (UST) facility consisting of two fiberglass tanks and doublewall fiberglass piping, spill containment basins, a tank gauge system, overfill alarm, automatic shutoff valves, monitoring wells, sumps and Stage II vapor recovery piping.
TC 4238	Stein Oil Co., Inc  (\$7,719)	An air pollution control facility consisting of an above ground Stage II vapor recovery balance type system.
TC 4244	Energy Systems NW  (\$1,655)	An air pollution control CFC facility consisting of a machine that removes air conditioner or commercial refrigerant coolant.
TC 4246	Les and Terry's Chevron Service, Inc.  (\$147,989 /89%)	An underground storage tank (UST) facility consisting of three doublewall fiberglass tanks and doublewall flexible piping, spill containment basins, a tank gauge system, overfill alarm, automatic shutoff valves, line leak detectors and monitoring wells.
TC 4250	Jesse's Auto Service  (\$2,295)	An air pollution control CFC facility consisting of a machine that removes and cleans automobile air conditioner coolant.
TC 4256	Radio Cab Company  (\$146,140 /94%)	An underground storage tank (UST) facility consisting of a two-compartment doublewall STI-P3 tank and doublewall fiberglass piping, spill containment basins, a tank gauge system, automatic shutoff valves, line leak detectors, monitoring wells, sumps and Stage I and II vapor recovery equipment.

Application Number	Applicant	Description
TC 4257	Stein Oil Company, Inc. (\$69,131 /99%)	An underground storage tank (UST) facility consisting of doublewall fiberglass piping, spill containment basins, line leak detectors and Stage II vapor recovery equipment.
TC 4258	Stein Oil Company, Inc. (\$117,388 /89%)	An underground storage tank (UST) facility consisting of three doublewall fiberglass tanks and piping, spill containment basins, underground preparation for a tank gauge system, automatic shutoff valves, line leak detectors, turbine leak detectors, monitoring wells, sumps and Stage I and II vapor recovery equipment.
TC 4259	John's Automotive Service (\$3,525 /80%)	An air pollution control CFC facility consisting of a machine that removes and cleans automobile air conditioner coolant.
TC 4262	Truax Harris Energy Co. (\$160,826 /88%)	An underground storage tank (UST) facility consisting of four doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, a tank gauge system, overflow alarm, turbine leak detectors, monitoring wells, sumps, an oil/water separator and Stage I and II vapor recovery equipment.
TC 4263	Fairgrounds Service, Inc. (\$78,474 /81%)	An underground storage tank(UST) facility consisting of three doublewall fiberglass coated steel tanks, doublewall flexible piping, spill containment basins, a tank gauge system, automatic shutoff valves, monitoring wells with overflow alarm, sumps and Stage I and II vapor recovery piping.

Application Number	Applicant	Description
TC 4272	West Central Service, Inc.  (\$113,149 /81%)	An underground storage tank (UST) facility consisting of four fiberglass tanks, doublewall fiberglass piping, spill containment basins, a tank gauge system with overflow alarm, automatic shutoff valves, turbine leak detectors, sumps and monitoring wells.
TC 4273	Western Stations Company  (\$100,733 /92%)	An underground storage tank (UST) facility consisting of two fiberglass clad steel tanks, doublewall flexible piping, spill containment basins, a tank gauge system, line leak detectors, sumps, and Stage I and II vapor recovery equipment.
TC 4274	Western Stations Company  (\$94,707 /99%)	An underground storage tank (UST) facility consisting of cathodic protection on three steel tanks, doublewall flexible piping, spill containment basins, a tank gauge system, overflow alarm, automatic shutoff valves, line leak detectors, sumps and Stage I and II vapor recovery equipment.
TC 4276	Truax Harris Energy Co.  (\$32,106)	An air pollution control facility consisting of an above-ground Stage II vapor recovery balance type system.
TC 4277	Truax Harris Energy Co.  (\$15,814)	An air pollution control facility consisting of an above-ground Stage II vapor recovery balance type system.
TC 4278	Truax Harris Energy Co.  (\$16,298)	An air pollution control facility consisting of an above-ground Stage II vapor recovery balance type system.

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Application Number	Applicant	Description
TC 4279	Truax Harris Energy Co. (\$17,361 /96%)	An underground storage tank (UST) facility consisting of a tank monitor system with alarm.
TC 4280	Truax Harris Energy Co. (\$17,895)	An air pollution control facility consisting of an above-ground Stage II vapor recovery balance type system.
TC 4281	Truax Harris Energy Co. (\$18,594)	An air pollution control facility consisting of an above-ground Stage II vapor recovery balance type system.
TC 4282	Truax Harris Energy Co. (\$29,538)	An air pollution control facility consisting of an above-ground Stage II vapor recovery balance type system.
TC 4283	Truax Harris Energy Co. (\$29,853 /97%)	An underground storage tank (UST) facility consisting of a tank monitoring system with alarm and Stage II vapor recovery equipment.
TC 4284	Truax Harris Energy Co. (\$36,059 /98%)	An underground storage tank (UST) facility consisting of a tank monitoring system with alarm and Stage II vapor recovery equipment.
TC 4285	Truax Harris Energy Co. (\$36,267 /98%)	An underground storage tank (UST) facility consisting of a tank monitoring system with alarm and Stage II vapor recovery equipment.
TC 4286	Truax Harris Energy Co. (\$58,017 /98%)	An underground storage tank (UST) facility consisting of a tank monitoring system with alarm and Stage II vapor recovery equipment.
TC 4292	Obie's Import Repair, Inc. (\$1,995 /65%)	An air pollution control CFC facility consisting of a machine that removes and cleans automobile air conditioner coolant.

Application Number	Applicant	Description
TC 4293	Truax Harris Energy Co. (\$22,066 /98%)	An underground storage tank (UST) facility consisting of a tank monitoring system with alarm and Stage II vapor recovery equipment.
TC 4294	Truax Harris Energy Co. (\$28,237)	An underground storage tank (UST) facility consisting of Stage II vapor recovery equipment.
TC 4295	Truax Harris Energy Co. (\$35,755)	An air pollution control facility consisting of an above-ground Stage II vapor control vacuum assist type system.
TC 4297	Ware's Auto Body, Inc. (\$1,995 /65%)	An air pollution control CFC facility consisting of a machine that removes and cleans automobile air conditioner coolant.
TC 4298	Winnoco, Inc. (\$16,990 /97%)	An underground storage tank (UST) facility consisting of a tank gauge system and line leak detectors.
TC 4301	Carmichael Columbia Oil, Inc. (\$99,220 /74%)	An underground storage tank (UST) facility consisting of three doublewall fiberglass tanks (including one dual compartment tank), piping, spill containment basins, a tank gauge system, automatic shutoff valves, line leak detectors, sumps, an oil/water separator and Stage I and II vapor recovery piping.
TC 4306	WWDD Partners (\$42,083)	A reclaimed plastic product facility consisting of a Freightliner Model FL-70 truck with van and liftgate.
TC 4309	Dale A. Eisiminger (\$6,500 /80%)	An air quality field burning facility consisting of a Case IH Model 770 offset disk.



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Application Number	Applicant	Description
TC 4310	Western Stations Company (\$133,507 /91%)	An underground storage tank (UST) facility consisting of three fiberglass clad steel tanks, doublewall flexible piping, spill containment basins, a tank gauge system with built-in line leak detection, an overfill alarm, automatic shutoff valves, and Stage I and II vapor recovery equipment.
TC 4311	Truax Harris Energy Co. (\$112,399 /87%)	An underground storage tank (UST) facility consisting of three doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, upgrades of a tank gauge system, an overfill alarm, monitoring wells, sumps and Stage I and II vapor recovery equipment.
TC 4312	Truax Harris Energy Co. (\$121,967 /88%)	An underground storage tank (UST) facility consisting of three doublewall fiberglass tanks and flexible doublewall piping, a tank gauge system, monitoring wells, sumps and Stage I and II vapor recovery equipment.
TC 4313	Truax Harris Energy Co. (\$182,997 /93%)	An underground storage tank (UST) facility consisting of three doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, upgrades for a tank gauge system, monitoring wells, sumps, turbine leak detectors, an oil/water separator and Stage I vapor equipment.
TC 4314	Dennis Thompson Db a Tigard Arco (\$57,719)	An underground storage tank (UST) facility consisting of sumps and Stage I and II vapor recovery equipment.

Application Number	Applicant	Description
TC 4315	Truax Harris Energy Co. (\$99,362 /87%)	An underground storage tank (UST) facility consisting of three doublewall fiberglass tanks and flexible doublewall piping, monitoring wells, sumps and Stage I and II vapor equipment.
TC 4316	Truax Harris Energy Co. (\$219,570 /93%)	An underground storage tank (UST) facility consisting of three doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, a tank gauge system with overflow alarm, turbine line leak detectors, monitoring wells, sumps, an oil/water separator and Stage I and II vapor recovery equipment.
TC 4317	Truax Harris Energy Co. (\$201,060 /93%)	An underground storage tank (UST) facility consisting of three doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, a tank gauge system with overflow alarm, turbine line leak detectors, monitoring wells, sumps, an oil/water separator and Stage I and II vapor recovery equipment.
TC 4318	Lyle D. Neuschwander (\$49,865 /62%)	An air quality Field Burning facility consisting of a John Deere 4850 200 HP tractor.

**Tax Credit Application Review Reports With Facility Costs Over \$250,000  
 (Accountant Review Reports Attached).**

Application Number	Applicant	Description
TC 4138	DBD Leasing (\$276,500)	A reclaimed plastic product facility consisting of a 6' 30:1 L/D Sterling/Davis-Standard Extruder and associated equipment and a GALA ES6/80 underwater pelletizing system for converting scrap plastic into uniform pellets.
TC 4175	International Paper Corporation (\$479,131)	A water pollution control industrial wastewater facility consisting of 25 linear feet of 36 inch diameter stainless steel pipe, 1500 linear feet of 36' HPDE pipe, an 8'x 21' concrete inlet structure and a carbon steel outlet weir box.
TC 4194	South Coast Lumber Company (\$255,427)	An air pollution control facility consisting of a Pneumafil #16-648-12 baghouse, two Twin Cities #660-HIB-24 fans and fire protection for the baghouse.
TC 4235	Intel Corporation (\$554,406)	An air pollution control facility consisting of two Harrington Model ECH913-5LB acid scrubbers and a Flanders Model ES4X3CGF4 arsenic dust collector.
TC 4243	Oregon Steel Mills, Inc. (\$12,017,469)	A solid waste recycling facility consisting of an electric arc furnace (EAF) baghouse dust glassification plant.
TC 4252	Willamette Industries, Inc. (\$11,986,792)	A solid waste recycling facility consisting of modifications to and the expansion of a waste paper recovery and utilization system for used corrugated cardboard.
TC 4300	Neste Resins Corporation (\$958,105)	An air pollution control facility consisting of a Durr regenerative thermal oxidizer (RTO) and ducting for control of formaldehyde, phenol and methanol emissions (classified as volatile organic compounds (VOC) and hazardous air pollutants (HAP)).

### Background

Significant issues related to several claims for tax credit relief are discussed below:

A.E. Staley Manufacturing Company, TC 2900.

Included in this claim for a water pollution facility is \$83,000 for the purchase of 59 acres of land for use as an irrigation field. The applicant claims that the land is required to allow for the irrigation of additional wastewater created as the result of upgrading their manufacturing plant and its pollution control facilities. Irrigation, via use of sprinkler irrigation equipment, enables the firm to meet its waste discharge permit requirements.

#### Discussion of the issues

Land qualifies as a facility or portion of a facility for tax credit if A) it furthers achieving compliance with Department statutes and rules or Commission orders or permit conditions and B), in this case, meets the requirements of a sole purpose facility (OAR 340-16-025). Moreover, the land claimed must be directly related to the operation of the facility or its costs may be disallowed on the basis that it makes an insignificant contribution to the principal or sole purpose of the facility. Presumably, costs for land claimed in excess of the requirement for effective operation of the facility could be disallowed on this basis.

In this case, the applicant indicates (and the Department agrees) that the land claimed is required to meet the wastewater dispersion requirement imposed by permit conditions and has as its only function the control, reduction or prevention of a substantial quantity of water pollution.

A related issue concerns the determination of costs properly allocable to pollution control. Two aspects of this determination pertain to this claim. The first is whether there is a return on investment for the facility that would result in the diminution or denial of the claim. The second is whether an alternative method, equipment and (or) costs for achieving the same pollution control objective is available (and should have been used).

The applicant estimates that revenues from hay harvested and sold annually from the claimed acreage amount to \$4,241 and that average annual operating expenses are \$41,259, producing an average net cost of \$37,018. As previously indicated, the cost of the land claimed is \$83,000. Discussions with experts of the Department of Agriculture indicate the estimated return from the sale of hay from the claimed acreage is reasonable for the Stanfield area and the Department has revalidated the claimed operating costs for the facility. The applicant has provided documentation to substantiate the cost of the land claimed. This documentation is available to the Commission upon request.

Aside from conceptual issues related to the return on investment for land, the value of the land purchased and claimed in this application would have to appreciate an average of \$37,018 per annum over the period March 1, 1990 (project completion date) to 3/1/95 to achieve the investment break even point for the claimed facility. This means that the property alone would have to appreciate from \$83,000 to more than \$268,110 over this period before there could be any return on investment for the claimed facility. The annualized return on investment required for this to occur is approximately 26.5%.

Of course, given that land has an infinite expected useful life, any positive return on investment above the investment break even point would produce a zero percent allocable result, either for the claimed land, if treated separately, or for the facility as a whole, unless an expected useful life for land were established by rule or statute.

Another issue related to cost allocability is whether a less costly alternative for achieving pollution control is available and whether the price paid for the claimed facility is such that a warranted assumption can be made that either the sole purpose of the facility is not pollution control or that a portion of the land makes an insignificant contribution to pollution control. In either case the question is was the land or a portion of it purchased for reasons not related to pollution control?

In the Department's opinion this assumption is probably not warranted. First, the per acre cost of the purchased land was approximately \$1,400. This does not appear to be exorbitant. In addition, the Water Pollution Control Permit (WPCP) requires the land application of wastewater to meet the agronomic rate or nutrient requirements of the crop(s) raised in the disposal field. The acreage purchased for this purposed has been determined to be appropriate to allow for land treatment of wastewater at permitted levels. The alternative is to utilize the municipal wastewater facility of the City of Stanfield, which at present does not have sufficient capacity to process the additional wastewater generated by the firm's manufacturing plant.

Historically, numerous tax credits having land as a component have been approved, including for example TC 28, 1969 (80 acres for irrigated waste disposal), TC 335, 1972 (64 acres for waste disposal), TC 627, 1975 (889 acres for wastewater irrigation), TC 1289, 1980, (143 acres for emergency sludge storage and disposal), and TC 3992, 1993 (@ 30 acres for wastewater irrigation). This is by no means an exhaustive list.

Due to the concern by the Commission that the program is subsidizing the purchase of an investment that can be expected to appreciate in value over time, the Department has examined alternatives to the current treatment of this asset category.

#### Alternatives:

Aside from the issue of the eligibility of land that may be claimed in a given application, the question remains whether land as a potentially appreciable asset should be evaluated in a manner similar to an income producing pollution control facility. Under 340-15-

030(2)(b) and (e) the Commission is required to consider and make appropriate findings regarding, among other factors, the estimated annual percent return on the investment in the facility and other factors which are relevant in establishing the portion of the actual cost of the facility proper applicable to the prevention, control or reduction of pollution. Two alternatives that could be considered in determining the allocability of the cost of land to the control of pollution are presented below.

- A) Given that land is a potentially appreciable asset, the return on land that is claimed as a pollution control facility could be calculated by estimating the estimated five year average annual cash flow (as is done under the current rules for income producing facilities) using either a market data or income capitalization approach and dividing that amount into the facility cost to obtain the return on investment factor. A useful life or holding period would have to be determined by the applicant (or by the Department) that would correspond to the estimated period of time that the land would continue to be used as a pollution control facility (but presumably no fewer than 10 years). The return on investment of the land, per se, or of land in addition to all other cash flow generating facilities included in the overall claim would then be compared to the reference rate of the return presented in Table 2 to derive the percent allocable factor.

Under this alternative, land could be treated separately or as an element of the larger tax credit claim. If the return on land were considered in conjunction with other facilities claimed in a application, it is possible that no rules changing process would be required. However, unless the return on the land investment were relatively large in relation to the value of the total claim, the percent allocable would not be affected. Were land to be treated separately, however, it is likely that new rules would have to be written to address the issue. Moreover, it should be noted that an estimated increase in the value of an asset differs from the concept of income as presented under the current rules. Generally, facilities that produce returns on investment are those that generate significant cash flow and/or savings from the production or reuse of an industrial resource. In the case of land no cash flow or profits are obtained until the asset is sold, unless rental income is derived from a lease.

- B) Following the rules pertaining to pollution control facilities that are integral to the operation of a business, land could be treated in a manner that is similar to a facility that is integral to the operation of a business. Under this alternative, the average appreciation rate of the claimed land, as indicated by the average increase/decrease in assessed value for the real estate (excluding improvements) for the five years prior to the completion of the facility could be compared to the average five-year return on U.S. farmland for the same period as presented in the Chase Investment Performance Digest or other authoritative reference and the percent allocable derived. However, unlike truly integral facilities, the allocability of land costs to pollution control would be treated apart from the cost

of other elements claimed in an application for pollution control relief. This approach would almost certainly require a formal revision to the rules.

The Department is available to analyze any alternative proposals.

#### Oregon Steel Mills, Inc.

Oregon Steel Mills in conjunction with its contractors designed and manufactured a state-of-the-art electric arc furnace baghouse dust glassification plant to manage metallic dust pollution produced by its steel production process. The applicant subsequently entered into a partnership with one of its contractors to form Glassification International Limited, which will market the technology gained as a result of developing the glassification facility. Revenues that may accrue to this partnership were not considered in determining the return on investment from the facility because the return from this activity is considered to be a return on human capital i.e., a return on research and development costs, and not a return on the investment in the pollution control facilities, per se. The cash flow resulting from the sale of glass product generated by the facility was included as income for the purpose of determining cost allocability, which resulted in a zero percent return on investment under the Rules. To be consistent, all research and development costs related to the design and construction of the facility were excluded from eligibility.

#### Willamette Industries, Inc.

In completing Section V, Allocation of Cost, of an application for pollution control facilities tax credit the applicant is asked to determine the expected useful life of the claimed facility. The useful life is defined as the number of years the claimed facility is capable of operating before replacement or disposal. In this case the applicant claims an expected useful life of 10 years for its waste paper recovery and utilization system. As indicated in the staff report the use of a factor of 10 years useful life in relation to the cash flow that is estimated for the facility results in 100% of the facility's cost being allocable to pollution control.

In as much as this useful life figure appeared conservative, given that certain upgrades for facilities approved for tax credit relief in 1977 and 1980 are still in use and are incorporated into the current recycling system, the Department examined the effect of using the useful life determined appropriate by the U.S Internal Revenue Service for similar facilities as presented in IRS Tax Information Publication, Volume 3, Table of Class Life and Recovery Periods, Table B2 (1993). According to the IRS, the estimated useful life for pollution control assets used in the manufacture of pulp and paper is 13 years. A recalculation of the percent of the cost allocable to pollution control for this claim using a useful life factor of 13 years results in a return on investment of 2% and a percent allocable of 64% for this facility, a reduction in the value of the certifiable credit of approximately \$ 4,300,000. This example is indicative of the sensitivity of the return

on investment calculation to a facility's estimated useful life, a factor that is determined principally by the applicant.

Willamette indicates that because the IRS useful life factor is an average of useful lives of all pollution control and like equipment for the class, it does not accurately represent the useful life of the claimed facility and that, in fact, the claimed facility is less durable and receives heavier use than the average similar facility. This premise cannot be refuted by Department staff. An argument could also be made that the facility might be classified under an alternative IRS Class Life Category. In consequence, the staff report recommendation reflects the useful facility life parameter claimed by the applicant.

It should also be noted that the amount recommended for certification in the staff report differs from the adjusted facility cost identified in the external accounting review report. This is because of a reduction of \$56,529 for the present value of previously certified equipment identified in the staff report, which presents the correct certifiable amount.

#### 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 December 2, 1994 Pollution Control Tax Credit Totals:

<u>Certificates</u>	<u>Certified Costs*</u>	<u>Certified Allocable Costs**</u>	<u>No.</u>
Air Quality	\$ 1,941,657	\$ 1,941,657	11
CFC	15,461	12,641	6
Field Burning	56,365	36,116	2
Hazardous Waste	0	0	0
Noise	0	0	0
Plastics	388,799	388,799	4
SW - Recycling	24,004,261	24,004,261	2
SW - Landfill	0	0	0
Water Quality	685,699	685,699	2
UST	<u>2,520,991</u>	<u>2,286,683</u>	<u>27</u>
<b>TOTALS</b>	<b>\$29,613,233</b>	<b>\$29,355,856</b>	<b>54</b>

o Calendar Year Totals Through October 21, 1994:

<u>Certificates</u>	<u>Certified Costs*</u>	<u>Certified Allocable Costs**</u>	<u>No.</u>
Air Quality	\$ 3,053,469	\$ 3,053,469	10
CFC	36,318	32,793	14
Field Burning	2,171,527	1,007,357	16
Noise	43,024	43,024	1
Hazardous Waste	1,014,378	1,014,378	2
Plastics	362,777	362,777	10
SW - Recycling	436,972	436,972	3
SW - Landfill	0	0	0
Water Quality	3,359,977	3,359,977	12
UST	<u>1,417,353</u>	<u>1,257,188</u>	<u>19</u>
<b>TOTALS</b>	<b>\$11,895,795</b>	<b>\$10,567,935</b>	<b>87</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 that the actual cost of tax credit certificate 2295, Carmichael Columbia Oil, Inc., be reduced from \$27,572 to \$2,000 (98% allocable) to reflect that, except for an element of the claimed facility that was placed in use at a new site, 510 Marine Drive, the remainder of the previously approved facility has been removed from service.

### Intended Followup Actions

Notify applicants of Environmental Quality Commission actions.

### Attachments

- A. Pollution Control Tax Credit Application Review Reports.

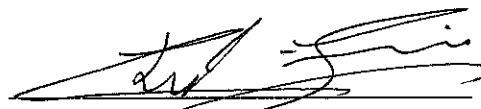
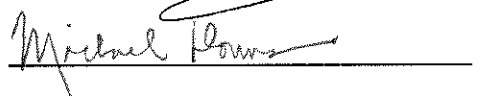
### Reference Documents (available upon request)

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: November 15, 1994

Charles Bianchi  
DECEQC  
November 15, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

A. E. Staley Manufacturing Company  
Stanfield Plant  
2200 East Eldorado Street  
Decatur, IL 62525

The applicant owns and operates a cationic potato starch manufacturing plant in Stanfield, Oregon.

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

2. Description of Facility

The claimed facility consists of irrigation sprinklers, flowmeters, pumps, associated piping system, a tractor, hay bailer, rake, monitoring equipment and an irrigation field of 59 acres.

Claimed Facility Cost: \$206,568  
(Accountant's Certification was provided).

3. Procedural Requirements

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

The facility met the statutory deadline in that construction, of the facility was substantially completed on March 1, 1990 and the application for certification was filed on February 10, 1992, within 2 years of substantial completion of the facility. A revised cost of the claimed facility together with an accountant's certification was submitted on March 2, 1992.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to control a substantial quantity of water pollution. This control is accomplished by the use of treatment works for industrial waste as defined in ORS 468B.005.

A. E. Staley Manufacturing Company has been operating a potato starch processing plant since 1977. Process wastewater from the plant is being disposed of by irrigation unto a 7.4 acre field through a sprinkler irrigation system. A Waste Discharge Permit No. 3787 was issued by the Department for the operation of the treatment and disposal system.

In January 1990, the manufacturing plant was upgraded to include a high efficiency cationic starch processing facility. This upgrade resulted in an increased amount of wastewater. To accommodate the increased volume of process wastewater A. E. Staley upgraded its wastewater treatment and disposal system. The claimed facility allowed the company to stay within the limitations of the waste discharge permit. Wastewater is being irrigated at agronomic rates. The acreage purchased for this purpose has been determined to be appropriate to allow for land treatment of wastewater.

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.

Hay is being harvested from the land irrigated with process wastewater. The crop is being sold to a farmer in the area.

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

There is no return on investment for the claimed facility. The operation and maintenance costs exceed the revenue from the sale of hay.

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

The alternative method evaluated is the treatment of wastewater at the City of Stanfield Wastewater Treatment Plant. The city's treatment plant does not have the capacity to treat the waste.

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

There are no savings from the claimed facility. The net cost of maintaining and operating the facility is \$37,018 annually.

Average annual hay sales :	\$4,241
Average annual operating expenses:	<u>(41,259)</u>

Average annual net cost: (\$37,018)

- 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 sole purpose of the facility is to control a substantial quantity of water pollution and accomplishes this purpose by the disposal of industrial waste as defined in ORS 468B.005.
- 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 \$206,568 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-2900.

Renato C. Dulay:crw  
MW\WC12\WC12925.5  
(503) 229-5374  
19 Sept 94

Application No. TC-4082

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Pacific Rim Trading  
330 South State Street  
Lake Oswego, OR 97034

The applicant operates a mail order replacement parts business for the printing industry. The applicant has some parts manufactured from reclaimed plastic using the applicant's molds.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consisting of:

Plastic injection molds for replacement parts, roller end plugs, squeege support bearings, and 430 C\P roller frame gears.

The claimed facility investment costs:           \$5,950

An invoices were provided.

3. Procedural Requirements

The investment is governed by ORS 468.925 through 468.965, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on May 12, 1993. The preliminary application was filed complete and the 30 day waiting period was waived on May 12, 1993.
- b. The request for preliminary certification was approved on May 18, 1993.
- c. The investment was made on June 15, 1995 and March 23,

1994.

- d. The request for final certification was submitted on November 2, 1994 and was filed complete on November 2, 1994.

4. Evaluation of Application

- a. The investment is eligible because the equipment is necessary to process reclaimed plastic.
- b. Allocable Cost Findings

In determining the portion of the investment costs properly allocable to reclaiming and recycling plastic material, the following factors from ORS 468.960 have been considered and analyzed as indicated:

- 1) The extent to which the claimed collection, transportation, processing or manufacturing process is used to convert reclaimed plastic into a salable or usable commodity.

This factor is applicable because the sole purpose of these molds is to manufacture a reclaimed plastic product. The recyclable plastic used by this facility is generated by persons other than the applicant.

- 2) The alternative methods, equipment and costs for achieving the same objective.

The applicant investigated other alternatives and determined that this equipment is the most efficient and productive from an economic standpoint.

- 3) Any other factors which are relevant in establishing the portion of the actual cost of the investment properly allocable to the collection, transportation or processing of reclaimed plastic or to the manufacture of a reclaimed plastic product.

No other factors were considered relevant.

The actual cost of the investment properly allocable to processing reclaimed plastic as determined by using



these factors is 100%.

5. Summation

- a. The investment was made in accordance with all regulatory deadlines.
- b. The investment is eligible for final tax credit certification in that the equipment is necessary to manufacture a reclaimed plastic product.
- c. The qualifying business complies with DEQ statutes and rules.
- d. The portion of the investment cost that is properly allocable to reclaiming and recycling plastic is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$5,950 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4082.

WRB:wrb  
wp51\tax\tc4082rr.sta  
(503) 229-5934  
October 31, 1994

Application No. TC-4119

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

H. C. R. Inc.  
Hergert's Industries, Inc.  
4052 State Hwy. 38  
Drain, OR 97435

The applicant manufactures molds for the plastic and rubber industries. The applicant is associated with Beaver State Plastics a company which manufactures plastic and rubber parts. Beaver State Plastics uses the molds manufactured by Hergert's Industries, Inc. to make a reclaimed plastic product.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consisting of:

Plastic injection mold with two sets of cores used to produce 26" and 36" lids and bases for plastic compost bins.

The claimed facility investment costs: \$64,266

An invoice and accountant's review statement were provided.

3. Procedural Requirements

The investment is governed by ORS 468.925 through 468.965, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on July 13, 1993. The preliminary application was filed complete and the 30 day waiting period was waived on July 27, 1993.
- b. The request for preliminary certification was approved on July 27, 1993.

- c. The investment was made on August 19, 1993, prior to June 30, 1995.
- d. The request for final certification was submitted on October 13, 1994 and was filed complete on October 18, 1994.

4. Evaluation of Application

- a. The investment is eligible because the equipment is necessary to process reclaimed plastic.
- b. Allocable Cost Findings

In determining the portion of the investment costs properly allocable to reclaiming and recycling plastic material, the following factors from ORS 468.960 have been considered and analyzed as indicated:

- 1) The extent to which the claimed collection, transportation, processing or manufacturing process is used to convert reclaimed plastic into a salable or usable commodity.

This factor is applicable because the sole purpose of these molds is to manufacture a reclaimed plastic product. The recyclable plastic used by this facility is generated by persons other than the applicant.

- 2) The alternative methods, equipment and costs for achieving the same objective.

The applicant investigated other alternatives and determined that this equipment is the most efficient and productive from an economic standpoint.

- 3) Any other factors which are relevant in establishing the portion of the actual cost of the investment properly allocable to the collection, transportation or processing of reclaimed plastic or to the manufacture of a reclaimed plastic product.

No other factors were considered relevant.

The actual cost of the investment properly allocable to processing reclaimed plastic as determined by using

these factors is 100%.

5. Summation

- a. The investment was made in accordance with all regulatory deadlines.
- b. The investment is eligible for final tax credit certification in that the equipment is necessary to manufacture a reclaimed plastic product.
- c. The qualifying business complies with DEQ statutes and rules.
- d. The portion of the investment cost that is properly allocable to reclaiming and recycling plastic is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$64,266 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4119.

WRB:wrb  
wp51\tax\tc4119rr.sta  
(503) 229-5934  
October 27, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Hayden Saab Services, Inc.  
390 Front St. N.E.  
Salem, OR 97301

The applicant owns and operates an automotive repair shop in Salem, Oregon.

Application was made for tax credit for an air pollution control facility which is leased by the applicant. Applicant has provided authorization from the lessor to receive tax credit certification.

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: \$3,995.95  
(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 November 1, 1993. The facility was placed into operation on November 1, 1993. The application for final certification was submitted to the Department on March 14, 1994. The application was found to be complete on October 25, 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 \$26/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:

- Electricity consumption of machine
- Additional labor to operate machine
- 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 82%.

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 82%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,996.00 with 82% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4221.

Dennis E. Cartier  
SJO Consulting Engineers

October 28, 1994



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Wayne E. Burger  
Fast Stop Gas  
P. O. Box 154  
Sublimity, OR 97385

The applicant owns and operates a retail gas station at 104 NW Starr, Sublimity, OR, Facility No. 9754.

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 a 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 fiberglass tanks and doublewall fiberglass piping, spill containment basins, tank gauge system, overfill alarm, automatic shutoff valves, monitoring wells, sumps and Stage II vapor recovery piping.

Claimed facility cost \$33,351  
(Accountant's certification was provided)

The applicant submitted TC-4233 prior to the Department's determination of how to handle tax credit applications where an UST financial assistance grant was also received. On July 22, 1994 the Commission reviewed and approved a process for the constant processing of such tax credit applications. The staff met with Mr. Wayne Burger on September 27, 1994 and reviewed the adjustments necessary to his application as a result of applying the policy. Mr. Burger concurred with staff's proposed modifications.

The Department has determined that the total project cost, including cleanup costs is \$108,587. The Department has further determined that the total cost of the tax credit eligible equipment is \$82,514 rather than \$33,351 as claimed by the applicant based on documentation on file with the Department under the UST Financial Assistance program. The Department has further determined that 24 percent of the total of \$82,514 is the actual cost to the applicant when adjustment is made for the essential services grant awarded the project under DEQ's UST financial assistance program (see Attachment A for details of calculation). Thus, the Department concludes that an adjusted claimed facility cost of \$19,803 is eligible to be claimed as a tax credit with a breakdown as follows:

	Claimed Facility Cost	Percent Adjustment	Adjusted Claimed Facility Cost
	-----	-----	-----
Fiberglass tanks and piping	\$22,648	24%	\$ 5,436
Spill containment basins	722	"	173
Tank gauge system	8,534	"	2,048
Overfill alarm	434	"	104
Monitoring wells	2,000	"	480
Automatic shutoff devices	775	"	186
Sumps	2,140	"	514
Stage II vapor recovery	1,972	"	473
Labor & Materials	43,289	"	10,389
	-----	-----	-----
Total	\$82,514	24%	\$ 19,803

### 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 June 1, 1992 and placed into operation on June 1, 1992. The application for certification was submitted to the Department on May 2, 1994 and was considered to be complete and filed on May 10, 1994, within two years of the completion date of the project. The recommendation for approval was not submitted to the Commission until the grant reduction could be calculated on September 27, 1994, after final grant fund disbursement was made to the applicant.

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 five 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 - Fiberglass tanks and piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm, sumps and automatic shutoff valves.
- 3) For leak detection - Tank gauge system and monitoring wells.
- 4) For VOC reduction - Stage II vapor recovery piping.

Contamination found at the site was reported to DEQ. Cleanup has been 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 \$19,803) 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 any alternative methods 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 Protection:</u>			
Fiberglass tanks & piping	\$ 5,436	38% (1)	\$ 2,066
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	173	100	173
Overfill alarm	104	100	104
Automatic shutoff valves	186	100	186
Sumps	514	100	514
<u>Leak Detection:</u>			
Tank gauge system	2,048	90 (2)	1,843
Monitoring wells	480	100	480
Stage II vapor recovery piping	473	100	473
Labor and materials	10,389	100	10,389
	_____	_____	_____
Total	\$ 19,803	82%	\$ 16,228

- (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 \$22,648 and the bare steel system is \$14,136, the resulting portion of the eligible tank and piping cost allocable to pollution control is 38%.
- (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 82%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$19,803 with 82% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4233.

Barbara J. Anderson  
(503) 229-5870  
September 27, 1994

ATTACHMENT A.

TAX CREDIT/GRANT ADJUSTED FACILITY COST WORKSHEET  
APPLICATION NO. TC-4233

Wayne E. Burger  
Fast Stop Gas  
104 NW Starr  
Sublimity, OR 97385  
Facility No. 9754

A. TOTAL STATE GRANT AWARDED TO APPLICANT: \$82,000

B. PROJECT EQUIPMENT AND COSTS:	TOTAL PROJECT COSTS ELIGIBLE FOR GRANT	APPLICANT'S CLAIMED FACILITY COSTS ELIGIBLE FOR TAX CREDIT	ADJUSTED CLAIMED FACILITY COSTS (reduced by % in D.3. below)
Fiberglass tanks & piping	\$22,648	\$22,648	\$5,436
Spill containment basins	722	722	173
Tank gauge system	8,534	8,534	2,048
Overfill alarm	434	434	104
Monitoring Wells	2,000	2,000	480
Automatic shutoff devices	775	775	186
Sumps	2,140	2,140	514
Stage II vapor recovery piping	1,972	1,972	473
Labor & materials	43,289	43,289	10,389
Fuel pumps and misc.	5,000	0	0
Contaminated soil & groundwater cleanup	21,073	0	0
<b>C. TOTAL PROJECT COST</b>	<b>\$108,587</b>	<b>\$82,514</b>	<b>\$19,803</b>

D. CALCULATION OF APPLICANT'S ACTUAL EQUIPMENT COST:

- Costs eligible for a tax credit as a percent of total project cost:  $\$82,514 / 108,587 = 76\%$
- Portion of State grant applicable to costs eligible for tax credit:  $\$82,000 \times .76 = \$62,320$
- Reduced equipment costs eligible for tax credit rounded to the nearest percent:  $(82,514 - 62,320) / 82,514 = 24\%$
- Applicant's actual equipment cost:  $\$82,514 \times .24 = \$19,803$

E. APPLICANT'S ADJUSTED CLAIMED FACILITY COST:

\$19,803  
=====

Barbara J. Anderson  
(503) 229-5870  
September 27, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

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

The applicant owns and operates Kelly Field Chevron, a gasoline sales and service station in Oregon City, 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, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$7,718.67

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 February 9, 1994. The facility was placed into operation on February 9, 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 \$7,719 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4238.

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

Energy Systems NW  
7421 S.E. Powell Blvd.  
Portland, OR 97206

The applicant owns and operates a commercial heating, air conditioning and refrigeration business in Portland, Oregon.

Application was made for tax credit for an air pollution control facility which is owned by the applicant. [If leased, add "Applicant has provided authorization from the lessor to receive tax credit certification."]

2. Description of Facility

Facility is a machine which removes air conditioner or commercial refrigerant coolant. The machine is self contained and includes pumps, tubing, and valves.

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

Claimed Facility Cost: \$1,654.98  
(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 July 23, 1992. The facility was placed into operation on July 23, 1992. The application for final certification was submitted to the Department on May 31, 1994, within two years of substantial completion of the facility. The application was found to be complete on October 31, 1994.

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 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 or sale.

- 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 \$4.30/pound. The applicant estimated an annual coolant recovery rate of 300 pounds.

In estimating the operating costs for use of the recovery, 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
- o Depreciation of machine

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 capture of air conditioner and refrigerant coolant is an accepted method for preventing the emission of ozone depleting chemicals to the atmosphere.

- 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 coolant in customer's 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 \$1,655.00 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4244.

Dennis E. Cartier  
SJO Consulting Engineers  
October 31, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Les & Terry's Chevron Service, Inc.  
3131 South 6th Street  
Klamath Falls, OR 97603

The applicant owns and operates a retail gas station at 3131 South 6th Street, Klamath Falls, OR, Facility No. 751.

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 doublewall fiberglass tanks and doublewall flexible piping, spill containment basins, tank gauge system, overflow alarm, automatic shutoff valves, line leak detectors, and monitoring wells.

Claimed facility cost \$147,989  
(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 January 7, 1994 and placed into operation on January 7, 1994. The application for certification was submitted to the Department on June 3, 1994 was considered to be complete and filed on October 24, 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 five 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 - Doublewall fiberglass tanks and doublewall flexible piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm and automatic shutoff valves.
- 3) For leak detection - Tank gauge system, line leak detectors and monitoring wells.

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 (\$147,989) 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$39,754	62% (1)	\$24,647
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,092	100	1,092
Overfill Alarm	219	100	219
Automatic shutoff valves	138	100	138
<u>Leak Detection:</u>			
Tank gauge system	11,180	90 (2)	10,062
Line leak detectors	1,316	100	1,316
Monitoring wells	312	100	312
Labor and materials	93,978	100	93,978
	_____	_____	_____
Total	\$147,989	89%	\$131,764

- (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 \$39,754 and the bare steel system is \$15,034, the resulting portion of the eligible tank and piping cost allocable to pollution control is 62%.
- (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 89%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$147,989 with 89% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4246.

Barbara J. Anderson  
(503) 229-5870  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Jesse's Auto Service  
22250 Willamette Dr.  
West Linn, OR 97068

The applicant owns and operates a gasoline service station and an automotive repair service in West Linn, 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: \$2,295  
(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 April 11, 1994. The facility was placed into operation on April 11, 1994. The application for final certification was submitted to the Department on June 22, 1994. The application was found to be complete on October 25, 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 \$10.50/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:

- Electricity consumption of machine
- Additional labor to operate machine
- 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 \$2,295 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4250.

Dennis E. Cartier  
SJO Consulting Engineers

October 25, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Radio Cab Company  
1613 NW Kearny  
Portland, OR 97209

The applicant owns and operates a fueling station for company vehicles at 1613 NW Kearny, Portland, OR, Facility No. 5173.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are one two-compartment doublewall STI-P3 tank and doublewall fiberglass piping, spill containment basins, tank gauge system, automatic shutoff valves, line leak detectors, monitoring wells, sumps and Stage I and II vapor recovery equipment.

Claimed facility cost \$146,140  
(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 September 29, 1992 and placed into operation on September 29, 1992. The application for certification was submitted to the Department on July 22, 1994 and was considered to be complete and filed on September 5, 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 three steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment. One tank was decommissioned as part of the project. The applicant plans to decommission the two remaining unprotected tank systems in the future.

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 - Doublewall STI-P3 tanks and fiberglass piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps and automatic shutoff valves.
- 3) For leak detection - Tank gauge system, line leak detectors and monitoring wells.
- 4) For VOC reduction - Stage I and II vapor recovery piping, hoses & nozzles on 3 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$146,140) 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$24,180	68% (1)	\$16,442
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	386	100	386
Sumps	790	100	790
Automatic shutoff valves	1,250	100	1,250
<u>Leak Detection:</u>			
Tank gauge system	5,739	90 (2)	5,165
Line leak detectors	553	100	553
Monitoring wells	270	100	270
Stage I & II vapor recovery (incl. 6 hoses and nozzles on 3 dispensers)	2,606	100	2,606
Labor and materials	110,366	100	110,366
	_____	_____	_____
Total	\$146,140	94%	\$137,828

- (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 \$24,180 and the bare steel system is \$7,755, the resulting portion of the eligible tank and piping cost allocable to pollution control is 68%.
- (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 94%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$146,140 with 94% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4256.

Barbara J. Anderson  
(503) 229-5870  
October 24, 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 retail gas station at 1590 Willamette Falls Dr., West Linn, OR, Facility No. 8565

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are doublewall fiberglass piping, spill containment basins, line leak detectors and Stage II vapor recovery equipment.

Claimed facility cost \$69,131  
(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 April 1, 1994 and placed into operation on April 1, 1994. The application for certification was submitted to the Department on July 26, 1994 was considered to be complete and filed on October 24, 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 four steel tanks and piping with no corrosion protection and no spill and overflow prevention or leak detection equipment. One tank was decommissioned as part of the project.

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 - Doublewall fiberglass piping.
- 2) For spill and overflow prevention - Spill containment basins.
- 3) For leak detection - Line leak detectors.
- 4) For VOC reduction - Stage II vapor recovery piping, hoses & nozzles on four dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$69,131) 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 find any alternatives to consider. 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 Protection:</u>			
Doublewall fiberglass piping	\$1,532	76% (1)	\$1,164
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	145	100	145
<u>Leak Detection:</u>			
Line leak detectors	1,026	100	1,026
Stage II vapor recovery (incl. 8 hoses and nozzles on 4 dispensers)	7,230	100	7,230
Labor and materials	59,198	100	59,198
	_____	_____	_____
Total	\$69,131	99%	\$68,763

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected 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 \$1,532 and the bare steel system is \$369, the resulting portion of the eligible piping cost allocable to pollution control is 76%.

## 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 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$69,131 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4257.

Barbara J. Anderson  
(503) 229-5870  
October 24, 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 retail gas station at 262 1st St., Canby, OR, Facility No. 7963

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass tanks and piping (one tank has two compartments), spill containment basins, underground preparation for tank gauge system, automatic shutoff valves, line leak detectors, turbine leak detectors, monitoring wells, sumps and Stage I and II vapor recovery equipment.

Claimed facility cost \$117,388  
(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 April 1, 1994 and placed into operation on April 1, 1994. The application for certification was submitted to the Department on July 26, 1994 was considered to be complete and filed on October 24, 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 six 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 - Doublewall fiberglass tanks and piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps and automatic shutoff valves.
- 3) For leak detection - Underground preparation for tank gauge system, line leak detectors, turbine leak detectors and monitoring wells.
- 4) For VOC reduction - Stage I and II vapor recovery piping, hoses & nozzles on five dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$117,388) 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$27,140	52% (1)	\$14,113
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,325	100	1,325
Automatic shutoff valves	Included with labor & materials		
Sumps	2,160	100	2,160
<u>Leak Detection:</u>			
Underground preparation for tank gauge system	Included with labor & materials		
Turbine leak detectors	873	100	873
Line leak detectors	291	100	291
Monitoring wells	Included with labor & materials		
Stage I & II vapor recovery (incl. 24 hoses and nozzles on 5 dispensers)	4,802	100	4,802
Labor and materials	80,797	100	80,797
	_____	_____	_____
Total	\$117,388	89%	\$104,361

- (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 \$27,140 and the bare steel system is \$13,041, the resulting portion of the eligible tank and piping cost allocable to pollution control is 52%.

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 89%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$117,388 with 89% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4258.

Barbara J. Anderson  
(503) 229-5870  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

John's Automotive Service  
14723 S.E. 82nd Dr.  
Clackamas, OR 97015

The applicant owns and operates an automotive repair shop in Clackamas, 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: \$3,525  
(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 June 23, 1994. The facility was placed into operation on June 23, 1994. The application for final certification was submitted to the Department on July 27, 1994. The application was found to be complete on October 25, 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:

- Electricity consumption of machine
- Additional labor to operate machine
- 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 80%.

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 80%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$3,525 with 80% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4259.

Dennis E. Cartier  
SJO Consulting Engineers

October 31, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P O Box 607  
Wilsonville, OR 97070

The applicant owns and operates a commercial cardlock fueling station at 15055 SW 72nd Ave., Tigard, OR, Facility No. 10981.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are four doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, tank gauge system, overfill alarm, turbine leak detectors, monitoring wells, sumps, oil/water separator and Stage I and II vapor recovery equipment.

Claimed facility cost \$242,147  
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$160,826. This represents a difference of \$81,321 from the applicant's claimed cost of \$242,147 due to the decision by the Department that the facility is a new installation (no tanks have ever existed at the location) and is not a replacement for another facility 1/2 mile away (16650 SW 72nd) because the move from that facility was caused by a business decision rather than pollution control. Thus, costs to decommission tanks at the other location (\$15,281) and labor and materials to install tanks and piping at the new location (\$66,040) are not eligible for a tax credit pursuant to the definition of a pollution control facility in ORS 468.155.

The applicant disagrees with the Department in this conclusion. They believe the claimed facility should be considered a replacement for the other facility and include all decommissioning and labor costs and the tax credit determination should be made using the full claimed facility cost of \$242,147. They give their reasons for the move as follows (verbatim):

- 1) The landlord was strongly concerned about having a cardlock facility located on their property with the associated pollution regulations.
- 2) The cost to upgrade the existing facility to meet the environmental regulations was excessive considering the size of the facility.
- 3) The length of the remaining term provided in the existing lease, approximately two years.
- 4) Our belief that this site would be classified as a replacement site by the Department of Environmental Quality for the tax credit program.

To provide additional information relevant to this issue, the Department calculated the amount and percent allocable based on the applicant's full facility cost claim. A decision in favor of the applicant's argument, taking into account two prior tax credits related to the other facility that would require a slight adjustment to the applicant's claimed cost, would result in a tax credit of \$231,922 with 92% allocated to pollution control.

### 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 October 1, 1992 and placed into operation on October 1, 1992. The application for certification was submitted to the Department on August 1, 1994 was considered to be complete and filed on September 28, 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 location had never held a motor fuel storage facility.

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 - Doublewall fiberglass tanks and flexible doublewall piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, overflow alarm and oil/water separator.
- 3) For leak detection - Tank gauge system, monitoring wells and turbine leak detectors.
- 4) For VOC reduction - Stage I and II vapor recovery piping, hoses & nozzles on 5 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

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 considered the methods chosen to be the most cost effective. 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$50,752	64% (1)	\$32,481
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	402	100	402
Overfill alarm	195	100	195
Oil/water separator	4,584	100	4,584
Sumps	4,724	100	4,724
<u>Leak Detection:</u>			
Tank gauge system	8,000	90 (2)	7,200
Turbine leak detectors	1,329	100	1,329
Monitoring wells	256	100	256
Stage I & II vapor recovery (incl. 8 hoses and nozzles on 5 dispensers)	5,230	100	5,230
Labor and materials	85,354	100	85,354
Total	\$160,826	88%	\$141,755

- (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 \$50,752 and the bare steel system is \$18,059, the resulting portion of the eligible tank and piping cost allocable to pollution control is 64%.
- (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 88%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$160,826 with 88% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4262.

Barbara J. Anderson  
(503) 229-5870  
November 14, 1994



State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Fairgrounds Service, Inc.  
P. O. Box 3909  
Central Point, OR 97502

The applicant owns and operates a retail gas station at 1510 E. Pine St., Central Point, OR, Facility No. 787.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass coated steel tanks doublewall flexible piping, spill containment basins, tank gauge system, automatic shutoff valves, monitoring wells, overfill alarm, sumps and Stage I and II vapor recovery piping.

Claimed facility cost \$78,474  
(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 October 26, 1993 and placed into operation on October 27, 1993. The application for certification was submitted to the Department on August 1, 1994 and was considered to be complete and filed on October 24, 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 three 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 - Doublewall fiberglass coated steel tanks and doublewall flexible piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm, sumps and automatic shutoff valves.
- 3) For leak detection - Tank gauge system and monitoring wells.
- 4) For VOC reduction - Stage I vapor recovery and Stage II vapor recovery piping.

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 (\$78,474) 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$35,974	61% (1)	\$21,944
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,155	100	1,155
Overfill alarm	214	100	214
Sumps	2,530	100	2,530
Automatic shutoff valves	2,786	100	2,786
<u>Leak Detection:</u>			
Tank gauge system	8,017	90 (2)	7,215
Monitoring wells	231	100	231
Stage I vapor recovery and Stage II piping	1,687	100	1,687
Labor and materials	25,880	100	25,880
Total	\$78,474	81%	\$63,642

- (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 \$35,974 and the bare steel system is \$13,942, the resulting portion of the eligible tank and piping cost allocable to pollution control is 61%.
- (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 81%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$78,474 with 81% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4263.

Barbara J. Anderson  
(503) 229-5870  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

West Central Service, Inc.  
P O Box 1031  
Sutherlin, OR 97479

The applicant owns and operates a retail gas station at 1436 West Central, Sutherlin, OR, Facility No. 4428.

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 fiberglass tanks and doublewall fiberglass piping, spill containment basins, tank gauge system with overflow alarm, automatic shutoff valves, turbine leak detectors, sumps and monitoring wells.

Claimed facility cost	\$153,149
(Accountant's certification was provided)	

The Department concludes that the eligible facility cost for the project is \$113,149. This represents a difference of \$40,000 from the applicant's claimed cost of \$153,149 due to the fact that the facility is a new installation (no tanks have existed at that location since 1987) and labor and materials to install tanks and piping, estimated at \$40,000 by the applicant, are not eligible for a tax credit pursuant to the definition of a pollution control facility in ORS 468.155.

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 January 20, 1994 and placed into operation on January 20, 1994. The application for certification was submitted to the Department on August 29, 1994 was considered to be complete and filed on October 24, 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, there was no motor fuel storage facility. A previous underground storage tank facility at the site was permanently decommissioned in 1987.

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 overflow prevention - Spill containment basins, overflow alarm, sumps and automatic shutoff valves.
- 3) For leak detection - Tank gauge system, turbine leak detectors and monitoring wells.

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.

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 considered the methods chosen to be the best 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>Corrosion Protection:</u>			
Doublewall fiberglass tanks and piping	\$42,061	51% (1)	\$21,451
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,138	100	1,138
Sumps	6,432	100	6,432
Automatic shutoff valves	1,040	100	1,040
<u>Leak Detection:</u>			
Tank gauge w/alarm	9,666	90 (2)	8,699
Turbine leak detectors	1,826	100	1,826
Monitoring wells	Included with labor and materials		
Labor and materials	50,986	100	50,986
Total	\$113,149	81%	\$91,572

- (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 \$42,061 and the bare steel system is \$20,439, the resulting portion of the eligible tank and piping cost allocable to pollution control is 51%.
- (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 81%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$113,149 with 81% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4272.

Barbara J. Anderson  
(503) 229-5870  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Western Stations Co.  
P O Box 5969  
Portland, OR 97228-5969

The applicant owns and operates a retail gas station at 2809 N. Portland, Portland, OR, Facility No. 5645.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are two fiberglass clad steel tanks, doublewall flexible piping, spill containment basins, tank gauge system, line leak detectors, sumps and Stage I and II vapor recovery equipment.

Claimed facility cost \$100,733  
(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 April 19, 1994 and placed into operation on April 20, 1994. The application for certification was submitted to the Department on August 31, 1994 was considered to be complete and filed on October 24, 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 three 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 - Fiberglass clad steel tanks and doublewall flexible piping.
- 2) For spill and overfill prevention - Spill containment basins and sumps.
- 3) For leak detection - Tank gauge system and line leak detectors.
- 4) For VOC reduction - Stage I and II vapor recovery piping, hoses & nozzles on 4 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$100,733) 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 found there were no alternatives to consider. 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 Protection:</u>			
Fiberglass clad steel tanks & doublewall piping	\$27,325	72% (1)	\$19,674
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	918	100	918
Sumps	3,548	100	3,548
<u>Leak Detection:</u>			
Tank gauge system	5,802	90 (2)	5,222
Line leak detectors	380	100	380
Stage I & II vapor recovery (incl. 8 hoses and nozzles on 4 dispensers)	9,994	100	9,994
Labor and materials	52,766	100	52,766
Total	\$100,733	92%	\$92,502

- (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 \$27,325 and the bare steel system is \$7,700, the resulting portion of the eligible tank and piping cost allocable to pollution control is 72%.
- (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 92%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$100,733 with 92% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4273.

Barbara J. Anderson  
(503) 229-5870  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Western Stations Co.  
P O Box 5969  
Portland, OR 97228-5969

The applicant owns and operates a retail gas station at 4027 SE 39th, Portland, OR, Facility No. 6234.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are impressed current cathodic protection on three steel tanks, doublewall flexible piping, spill containment basins, tank gauge system, overfill alarm, automatic shutoff valves, line leak detectors, sumps and Stage I and II vapor recovery equipment.

Claimed facility cost \$94,707  
(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 April 4, 1994 and placed into operation on April 12, 1994. The application for certification was submitted to the Department on August 31, 1994 was considered to be complete and filed on October 24, 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 four steel tanks and piping with no corrosion protection and no spill and overfill prevention or leak detection equipment. One tank was permanently decommissioned as part of the project.

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 - Impressed current cathodic protection around steel tanks and doublewall flexible piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm, sumps and automatic shutoff valves.
- 3) For leak detection - Tank gauge system and line leak detectors.
- 4) For VOC reduction - Stage I and II vapor recovery piping, hoses & nozzles on 4 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$94,707) 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 chose the most cost effective methods. 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 Protection:</u>			
Doublewall piping	\$4,200	95% (1)	\$3,990
Cathodic protection	19,965	100	19,965
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,044	100	1,044
Automatic shutoff valves	Included with labor & materials		
Overfill alarm	197	100	197
Sumps	5,058	100	5,058
<u>Leak Detection:</u>			
Tank gauge system	6,134	90 (2)	5,521
Line leak detectors	903	100	903
Stage I & II vapor recovery (incl. 8 hoses and nozzles on 4 dispensers)	10,880	100	10,880
Labor and materials	46,326	100	46,326
Total	\$94,707	99%	\$93,884

- (1) The Department has determined the percent allocable on the cost of a corrosion protected piping system by using a formula based on the difference in cost between the protected 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 \$4,200 and the bare steel system is \$192, the resulting portion of the eligible piping cost allocable to pollution control is 95%.
- (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 99%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$94,707 with 99% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4274.

Barbara J. Anderson  
(503) 229-5870  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Company  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates Union Cardlock, a gasoline sales and service station on 8100 NE Union Avenue in Portland, 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, Dayco hoses, OPW adapters, OPW breakaway safety valves, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$32,105.55

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 11, 1994. The facility was placed into operation on March 11, 1994. The application for final certification was submitted to the Department on September 6, 1994, within two years of substantial completion of the facility. The application was found to be complete on October 27, 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 \$32,106 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4276.

Tonia C. Garbowsky: PRC Environmental Management, October 26, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Company  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates 29th Avenue Cardlock, a gasoline sales and service station on 3037 NW 29th Avenue in Portland, 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, Dayco hoses, OPW adapters, OPW breakaway safety valves, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$15,813.80

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 14, 1994. The facility was placed into operation on March 14, 1994. The application for final certification was submitted to the Department on September 6, 1994, within two years of substantial completion of the facility. The application was found to be complete on October 27, 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 \$15,814 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4277.

Tonia C. Garbowsky: PRC Environmental Management, October 26, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Company  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates Cardlock, a gasoline sales and service station on 7th and Alder Streets in Portland, 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, Dayco hoses, OPW adapters, OPW breakaway safety valves, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$16,298.37

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 February 22, 1994. The facility was placed into operation on February 22, 1994. The application for final certification was submitted to the Department on September 6, 1994, within two years of substantial completion of the facility. The application was found to be complete on October 27, 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 \$16,298 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4278.

Tonia C. Garbowsky: PRC Environmental Management, October 26, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail service station at 1720 N. Hwy. 99 West, McMinnville, OR 97128, Facility No. 7172.

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 a tank monitor system with alarm.

Claimed facility cost \$17,361  
(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 April 15, 1994 and placed into operation on April 15, 1994. The application for certification was submitted to the Department on September 6, 1994 and was considered to be complete and filed on October 24, 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 four cathodically protected tanks, with some spill and overfill prevention and monthly inventory control for leak detection.

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

- 1) For leak detection - A tank monitor system with alarm

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 (\$17,361) 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 considered the method chosen to be the most cost effective. 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>			
Tank monitor system	7,184	90% (1)	6,466
Labor and materials	10,177	100%	10,177
	_____	_____	_____
Total	\$17,361	96%	\$16,643

- (1) 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 96%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$17,361 with 96% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4279.

Stephanie Holmes  
(503) 229-6085  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Company  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates Cardlock, a gasoline sales and service station on 11426 NE Sandy Boulevard in Portland, 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, Dayco hoses, OPW adapters, OPW breakaway safety valves, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$17,894.77

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 28, 1994. The facility was placed into operation on March 28, 1994. The application for final certification was submitted to the Department on September 6, 1994, within two years of substantial completion of the facility. The application was found to be complete on October 27, 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 \$17,895 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4280.

Tonia C. Garbowsky: PRC Environmental Management, October 26, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Company  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates Wilsonville Cardlock, a gasoline sales and service station on 30100 SW Parkway in Wilsonville, 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 OPW nozzles, Dayco hoses, OPW adapters, OPW breakaway safety valves, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$18,594.16

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 February 22, 1994. The facility was placed into operation on February 22, 1994. The application for final certification was submitted to the Department on September 6, 1994, within two years of substantial completion of the facility. The application was found to be complete on October 27, 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 \$18,594 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4281.

Tonia C. Garbowsky: PRC Environmental Management, October 26, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Company  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates Arco, a gasoline sales and service station on 82nd and Liebe Streets in Portland, 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, Dayco hoses, OPW adapters, OPW breakaway safety valves, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$29,537.89

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 February 22, 1994. The facility was placed into operation on February 22, 1994. The application for final certification was submitted to the Department on September 6, 1994, within two years of substantial completion of the facility. The application was found to be complete on October 27, 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 \$29,538 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4282.

Tonia C. Garbowsky: PRC Environmental Management, October 26, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates a cardlock fueling station at 118 East Oak Street, Hillsboro, OR 97123, Facility No. 6710.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are a tank monitor system with alarm and Stage II vapor recovery equipment.

Claimed facility cost	\$29,853
(Accountant's certification was provided)	

3. Procedural Requirements

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

The facility was substantially completed on February 6, 1994 and placed into operation on February 6, 1994. The application for certification was submitted to the Department on September 6, 1994 and was considered to be complete and filed on October 24, 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 three cathodically protected tanks with some spill and overflow prevention, some leak detection equipment and no Stage II vapor recovery system.

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 leak detection - A tank monitor system with alarm
- 2) For VOC reduction - Stage II vapor recovery piping, hoses & nozzles on ? dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$29,853) 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 considered the method chosen to be the most cost effective. 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>			
Tank monitor system	8,305	90% (1)	7,475
<u>Stage II Vapor Recovery</u> (incl. 9 hoses and nozzles on 7 dispensers)			
	8,721	100%	8,721
Labor and materials	12,827	100%	12,827
	_____	_____	_____
Total	\$29,853	97%	\$29,023

- (1) 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 97%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$29,853 with 97% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4283.

Stephanie Holmes  
(503) 229-6085  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail service station at 10415 SW Parkway, Portland, OR 97225, Facility No. 7165.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are a tank monitor system with alarm and Stage II vapor recovery equipment.

Claimed facility cost \$36,059  
(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 January 18, 1994 and placed into operation on January 18, 1994. The application for certification was submitted to the Department on September 6, 1994 and was considered to be complete and filed on October 24, 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 some spill and overfill prevention, monthly inventory control for leak detection and no Stage II vapor recovery system.

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 leak detection - A tank monitor system with alarm
- 2) For VOC reduction - Stage II vapor recovery piping, hoses & nozzles on 6 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$36,059) 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 considered the method chosen to be the most cost effective. 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>			
Tank monitor system	8,305	90% (1)	7,475
<u>Stage II Vapor Recovery</u> (incl. 10 hoses and nozzles on 6 dispensers)			
	9,277	100%	9,277
Labor and materials	18,477	100%	18,477
	_____	_____	_____
Total	\$36,059	98%	\$35,229

- (1) 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 98%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$36,059 with 98% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4284.

Stephanie Holmes  
(503) 229-6085  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail service station at 3442 NE 82nd Ave., Portland OR 97220, Facility No. 6632.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are a tank monitor system with alarm and Stage II vapor recovery equipment.

Claimed facility cost \$36,267  
(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 2, 1994 and placed into operation on February 2, 1994. The application for certification was submitted to the Department on September 6, 1994 and was considered to be complete and filed on October 24, 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 some spill and overfill prevention, monthly inventory control for leak detection, and no Stage II vapor recovery system.

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 leak detection - A tank monitor system with alarm
- 2) For VOC reduction - Stage II vapor recovery piping, hoses & nozzles on six dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$36,267) 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 considered the method chosen to be the most cost effective. 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>			
Tank monitor system	7,184	90% (1)	6,466
<u>Stage II Vapor Recovery</u>			
(incl. 10 hoses and nozzles on 6 dispensers)	8,594	100%	8,594
Labor and materials	20,489	100%	20,489
	=====	=====	=====
Total \$	36,267	98%	35,549

- (1) 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 98%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$36,267 with 98% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4285.

Stephanie Holmes  
(503) 229-6085  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates a cardlock fueling station at 9225 Wilsonville Road, Wilsonville, OR 97070, Facility No. 7553.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are a tank monitor system with alarm and Stage II vapor recovery equipment.

Claimed facility cost \$58,017  
(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 January 24, 1994 and placed into operation on January 24, 1994. The application for certification was submitted to the Department on September 6, 1994 and was considered to be complete and filed on October 24, 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 some spill and overflow prevention, monthly inventory control for leak detection, and no Stage II vapor recovery system.

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 leak detection - A tank monitor system with alarm
- 2) For VOC reduction - Stage II vapor recovery piping, hoses & nozzles on two dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$58,017) 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 considered the method chosen to be the most cost effective. 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>			
Tank monitor system	9,401	90% (1)	8,461
<u>Stage II Vapor Recovery</u>			
(incl. 12 hoses and nozzles on two dispensers)	20,106	100%	20,106
Labor and materials	28,510	100%	28,510
	-----	-----	-----
Total	\$58,017	98%	\$57,077

- (1) 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 98%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$58,017 with 98% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4286.

Stephanie Holmes  
(503) 229-6085  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Obie's Import Repair, Inc.  
1114 S.W. Frazer Ave  
Pendleton, OR 97801

The applicant owns and operates an automotive repair shop in Pendleton, 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: \$1,995  
(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 6, 1994. The facility was placed into operation on September 6, 1994. The application for final certification was submitted to the Department on September 22, 1994. The application was found to be complete on October 25, 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 the cost to applicant of virgin coolant at \$7.00/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:

- Electricity consumption of machine
- Additional labor to operate machine
- 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 65%.

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 65%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1995 with 65% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4292.

Dennis E. Cartier  
SJO Consulting Engineers

October 25, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail service station at 18777 SE McLoughlin Blvd., Milwaukie, OR 97222, Facility No. 6547.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are a tank monitor system with alarm and Stage II vapor recovery equipment.

Claimed facility cost	\$22,066
(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 June 21, 1994 and placed into operation on June 21, 1994. The application for certification was submitted to the Department on September 22, 1994 and was considered to be complete and filed on October 24, 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 some spill and overfill prevention, monthly inventory control for leak detection, and no Stage II vapor recovery system.

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 leak detection - A tank monitor system with alarm
- 2) For VOC reduction - Stage II vapor recovery piping, hoses & nozzles on six dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$22,066) 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 considered the method chosen to be the most cost effective. 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>			
Tank monitor system	4,196	90% (1)	3,776
<u>Stage II Vapor Recovery</u> (incl. 12 hoses and nozzles on 6 dispensers)			
	11,017	100%	11,017
Labor and materials	6,853	100%	6,853
	_____	_____	_____
Total \$	22,066	98%	21,646

- (1) 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 98%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$22,066 with 98% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4293.

Stephanie Holmes  
(503) 229-6085  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail service station at 4829 NE Martin Luther King Blvd., Portland, OR 97211, Facility No. 6630.

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

2. Description of Claimed Facility

The claimed pollution control facility described in this application is Stage II vapor recovery equipment.

Claimed facility cost	\$28,237
(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 June 28, 1993 and placed into operation on June 28, 1993. The application for certification was submitted to the Department on September 22, 1994 and was considered to be complete and filed on October 24, 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 lacked a Stage II vapor recovery system.

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 VOC reduction - Stage II vapor recovery piping, hoses & nozzles on 6 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$28,237) 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 considered the method chosen to be the most cost effective. 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>Stage II Vapor Recovery</u> (incl. 10 hoses and nozzles on 6 dispensers)	8,515	100%	8,515
Labor and materials	19,722	100%	19,722
	_____	_____	_____
Total	\$28,237	100%	\$28,237

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 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$28,237 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4294.

Stephanie Holmes  
(503) 229-6085  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Company  
P.O. Box 607  
Wilsonville, OR 97070

The applicant owns and operates a gasoline sales and service station on 3510 Pacific, in Forest Grove, Oregon.

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

2. Description of Facility

The claimed facility is an above ground vacuum assist type system. The system is composed of OPW nozzles, Dayco hoses, OPW adapters, OPW breakaway safety valves, piping and additional miscellaneous equipment. Installation of the facility prevents the escape of gasoline vapors into the atmosphere.

Claimed Facility Cost: \$35,754.93

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 May 21, 1994. The facility was placed into operation on May 21, 1994. The application for final certification was submitted to the Department on September 22, 1994, within two years of substantial completion of the facility. The application was found to be complete on October 27, 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 \$35,755 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4295.

Tonia C. Garbowsky: PRC Environmental Management, October 26, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Ware's Auto Body, Inc  
885 N. First Place  
Hermiston, OR 97838

The applicant owns and operates an auto body repair shop in Hermiston, 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: \$1,995  
(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 July 6, 1994. The facility was placed into operation on July 6, 1994. The application for final certification was submitted to the Department on September 26, 1994. The application was found to be complete on October 28, 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 \$8.00/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:

- Electricity consumption of machine
- Additional labor to operate machine
- 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 65%.

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 65%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$1995 with 65% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. 4297.

Dennis E. Cartier  
SJO Consulting Engineers

October 28, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Winnoco, Inc.  
P O Box 954  
La Grande, OR 97850

The applicant owns and operates a retail gas station at 2614 Island Ave., La Grande, OR, Facility No. 1615.

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 a tank gauge system and line leak detectors installed on one existing underground storage tank system.

Claimed facility cost \$16,990  
(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 December 1, 1993 and placed into operation on December 1, 1993. The application for certification was submitted to the Department on September 26, 1994 was considered to be complete and filed on October 24, 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 corrosion protected tank and piping systems with spill and overfill prevention, but no leak detection equipment.

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

- 1) For leak detection - Tank gauge system and line leak detectors.

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 (\$16,990) 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 considered the methods chosen to be the most cost effective. 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>			
Tank gauge system	4,985	90 (1)	4,487
Line leak detectors	4,995	100	4,995
Labor and materials	7,010	100	7,010
Total	\$16,990	97%	\$16,492

- (1) 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 97%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$16,990 with 97% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4298.

Barbara J. Anderson  
(503) 229-5870  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Carmichael Columbia Oil Inc.  
510 Marine Drive  
Astoria, OR 97103

The applicant owns and operates a commercial cardlock station at Hwy 30 & Abbott Rd., Knappa, OR, Facility No. 11273.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass tanks and piping (one tank is 2-compartment), spill containment basins, tank gauge system, automatic shutoff valves, line leak detectors, sumps, oil/water separator and Stage I and II vapor recovery piping.

Claimed facility cost	\$119,744
(Accountant's certification was provided)	

The Department concludes that the eligible facility cost for the project is \$99,220. This represents a difference of \$20,524 from the applicant's claimed cost of \$119,744 due to the fact that the facility is a new installation (no tanks existed at that location prior to the project) and labor and materials to install tanks and piping, estimated at \$20,524 by the applicant, are not eligible for a tax credit pursuant to the definition of a pollution control facility in ORS 468.155.

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 November 3, 1993 and placed into operation on November 3, 1993. The application for certification was submitted to the Department on September 26, 1994 was considered to be complete and filed on October 24, 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, there was no motor fuel storage facility on the property.

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 - Doublewall fiberglass tanks and piping.
- 2) For spill and overfill prevention - Spill containment basins, sumps, oil/water separator and automatic shutoff valves.
- 3) For leak detection - Tank gauge system and line leak detectors.
- 4) For VOC reduction - Stage I vapor recovery and Stage II vapor recovery piping.

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.

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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$46,908	46% (1)	\$21,578
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	835	100	835
Oil/water separator	3,991	100	3,991
Sumps	4,476	100	4,476
Automatic shutoff valves	926	100	926
<u>Leak Detection:</u>			
Tank gauge system	2,600	90 (2)	2,340
Line leak detectors	1,184	100	1,184
Stage I vapor recovery & Stage II piping	2,158	100	2,158
Labor and materials	36,142	100	36,142
	_____	_____	_____
Total	\$99,220	74%	\$73,630

- (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 \$46,908 and the bare steel system is \$25,500, the resulting portion of the eligible tank and piping cost allocable to pollution control is 46%.
- (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 74%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$99,220 with 74% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4301.

Barbara J. Anderson  
(503) 229-5870  
October 24, 1994

Application No. TC-4306

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

WDD Partners  
230 N. W. 10th  
Portland, OR 97209

The applicant is an investment partnership which has purchased a truck to be leased to Denton Plastic a broker and processor of recyclable plastic. The claimed equipment will be used by Denton Plastic exclusively to transport recyclable plastic.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consisting of:

One Freightliner truck model FL-70, Serial Number 577548 with a 24 foot van box

The claimed facility investment costs consisted of:

Truck body	\$32,623
24 foot van box	7,515
2000 lb liftgate	1,945
Claimed Facility cost	\$42,083

An invoice and accountant's review statement were provided.

3. Procedural Requirements

The investment is governed by ORS 468.925 through 468.965, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification was received on September 16, 1994. The preliminary application was filed complete and 30 day waiting period was waived on

September 17, 1994.

- b. The request for preliminary certification was approved on October 17, 1994.
- c. The investment was made on September 27, 1994, prior to June 30, 1995.
- d. The request for final certification was submitted on October 13, 1994 and was filed complete on October 28, 1994.

4. Evaluation of Application

- a. The investment is eligible because the equipment is necessary to process reclaimed plastic.
- b. Allocable Cost Findings

In determining the portion of the investment costs properly allocable to reclaiming and recycling plastic material, the following factors from ORS 468.960 have been considered and analyzed as indicated:

- 1) The extent to which the claimed collection, transportation, processing or manufacturing process is used to convert reclaimed plastic into a salable or usable commodity.

This factor is applicable because the sole purpose of this truck is to transport recyclable plastic to a plastic processor where it is processed into a feed stock to be used to manufacture reclaimed plastic products. The waste plastic transported by this truck is generated by persons other than the applicant.

- 2) The alternative methods, equipment and costs for achieving the same objective.

The applicant investigated other alternatives and determined that this equipment is the most efficient and productive from an economic standpoint.

- 3) Any other factors which are relevant in establishing the portion of the actual cost of the investment properly allocable to the collection, transportation or processing of reclaimed plastic



or to the manufacture of a reclaimed plastic product.

No other factors were considered relevant.

The actual cost of the investment properly allocable to processing reclaimed plastic as determined by using these factors is 100%.

5. Summation

- a. The investment was made in accordance with all regulatory deadlines.
- b. The investment is eligible for final tax credit certification in that the equipment is necessary to manufacture a reclaimed plastic product.
- c. The qualifying business complies with DEQ statutes and rules.
- d. The portion of the investment cost that is properly allocable to reclaiming and recycling plastic is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$42,083 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4306.

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Dale A. Eisiminger  
66577 Brooks Road  
Imbler OR 97841

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

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

2. Description of Claimed Facility

The equipment described in this application is a Case IH Model 770 offset disk, located at 66577 Brooks Road, Imbler, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$6,500  
(The applicant provided copies of his canceled check.)

3. Description of Farm Operation Plan to Reduce Open Field Burning.

The applicant has 300 acres of perennial grass seed under cultivation. In each of the last three years the applicant has open field burned all 300 acres. Even the approximately 60 acres of perennial grass seed removed from production each year was open field burned because equipment was not available to penetrate the unburned grass seed stubble and straw residue.

The purchased heavy duty cover crop disk will be used to destroy perennial grass seed fields at the end of their production life. Straw will be baled off then the fields will be disked and plowed without open field burning. By enabling the applicant to chop up grass seed sod and stubble the disk will eliminate open field burning of approximately 60 acres annually.

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, 1992. The application was submitted on October 20, 1994; and the application for final certification was found to be complete on October 26, 1994. The application was filed within two years of substantial completion 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 no savings or increase in costs as a result of the equipment.
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 applicant states that the disk will be used for general farm use 20% of the time it is in use.

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 80%.

6. Summation

- a. The equipment was constructed 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 80%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$6,500, with 80% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4309.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792  
FAX: (503) 378-2590

JB:bk4309  
October 26, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Western Stations Co.  
P O Box 5969  
Portland, OR 97228-5969

The applicant owns and operates a retail gas station at 363 SE Baseline, Hillsboro, OR, Facility No. 6203.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three fiberglass clad steel tanks, doublewall flexible piping, spill containment basins, tank gauge system with builtin line leak detection, overflow alarm, sumps, automatic shutoff valves and Stage I and II vapor recovery equipment.

Claimed facility cost	\$133,507
(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 March 25, 1994 and placed into operation on March 25, 1994. The application for certification was submitted to the Department on October 20, 1994 was considered to be complete and filed on October 24, 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 four 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 - Fiberglass clad steel tanks and doublewall flexible piping.
- 2) For spill and overfill prevention - Spill containment basins, overfill alarm, automatic shutoff valves and sumps.
- 3) For leak detection - Tank gauge system with builtin line leak detectors.
- 4) For VOC reduction - Stage I and II vapor recovery piping, hoses & nozzles on 4 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$133,507) 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 Protection:</u>			
Fiberglass clad steel tanks & doublewall piping	\$37,851	72% (1)	\$27,253
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	1,044	100	1,044
Automatic shutoff valves	515	100	515
Overfill alarms	193	100	193
Sumps	6,026	100	6,026
<u>Leak Detection:</u>			
Tank gauge system with line leak detectors	7,712	90 (2)	6,941
Stage I & II vapor recovery (incl. 8 hoses and nozzles on 4 dispensers)	9,807	100	9,807
Labor and materials	70,359	100	70,359
	_____	_____	_____
Total	\$133,507	91%	\$122,138

- (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 \$37,851 and the bare steel system is \$10,775, the resulting portion of the eligible tank and piping cost allocable to pollution control is 72%.
- (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 91%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$133,507 with 91% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4310.

Barbara J. Anderson  
(503) 229-5870  
October 24, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P O Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 17455 SW TV Hwy, Aloha, OR, Facility No. 7166.

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

The applicant has claimed equipment in this application that replaced equipment claimed in prior tax credit (TC-2587) issued in 1990. The equipment was replaced before the end of its useful life. See Section 2 below for an explanation of the claimed cost adjustment. TC-2587 will be submitted for revocation.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, upgrade for tank gauge system, overfill alarm, monitoring wells, sumps and Stage I and II vapor recovery equipment.

Claimed facility cost \$113,136  
(Accountant's certification was provided)

The Department concludes that the eligible facility cost for the project is \$112,399. This represents a difference of \$737 from the applicant's claimed cost of \$113,136 due to an adjustment made by the Department to the claimed cost of spill containment basins that replaced the same equipment claimed in a prior tax credit (TC-2587). The previously claimed equipment was replaced before the end of its useful life and the adjustment reflects the amount of the tax credit remaining pursuant to Oregon Administrative Rules 340-16-025(3)(g)(B). See attached Worksheet 1.

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 5, 1994 and placed into operation on February 5, 1994. The application for certification was submitted to the Department on October 21, 1994 and was considered to be complete and filed on November 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 three registered tanks and piping with no corrosion protection or Stage I and II vapor recovery.

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 - Doublewall fiberglass tanks and flexible doublewall piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps and overflow alarm.

- 3) For leak detection - Upgrade for tank gauge system and monitoring wells.
- 4) For VOC reduction - Stage I and II vapor recovery piping, hoses & nozzles on 6 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

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 considered the methods chosen to be the most cost effective. 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$37,996	64% (1)	\$24,317
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	367	100	367
Sumps	1,863	100	1,863
<u>Leak Detection:</u>			
Tank gauge upgrade w/alarm	3,755	90 (2)	3,380
Monitoring wells	450	100	450
Stage I & II vapor recovery (incl. 12 hoses and nozzles on 6 dispensers)	6,800	100	6,800
Labor and materials	61,168	100	61,168
Total	\$112,399	87%	\$98,345

- (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 \$37,996 and the bare steel system is \$13,700, the resulting portion of the eligible tank and piping cost allocable to pollution control is 64%.

- (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 87%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$112,399 with 87% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4311.

Barbara J. Anderson  
(503) 229-5870  
November 14, 1994

WORKSHEET 1.  
PRIOR TAX CREDIT ADJUSTMENT TO CLAIMED COST

TRUAX HARRIS ENERGY CO.  
Current Application: TC-4311

Prior Tax Credit: TC-2587 \$2,315, 100% amount allocated

DETERMINATION OF TAX CREDIT REMAINING TO BE CLAIMED WHERE THE EQUIPMENT  
IS REPLACED BEFORE THE END OF ITS USEFUL LIFE (OAR 340-16-025(3)(g)(B))

A. CLAIM DETAIL: Spill containment basins, 5 on prior and 3 on current tax credit. (Prorating is used when the number of items of equipment claimed is different in prior and current tax credits.)

CLAIM DETAIL	PRIOR TAX CREDIT 5 BASINS	PRIOR PRORATED TO 3 (60%)	CURRENT TAX CREDIT CLAIM 3 BASINS
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TOTAL CLAIM - 100% (not reduced by any percentages)	\$2,315	\$1,389	\$1,779
Cost of spill basins	815	489	627
Installation cost	1,500	900	1,152 (1)
Amount claimed on prior credit	\$579	\$347	
100% amount allocable	579	347	
Amount of prior credit remaining (\$2315 - 579)	1,736	1042	

(1) Estimate of installation cost where precise amount not available:

Percent increase in price of basins (\$627 / 489) =	128%
Applied to installation cost (\$900 x 128%) =	\$1,152

B. TAX CREDIT REMAINING TO BE CLAIMED:

TOTAL AMOUNT	\$1,042 (*)
Spill containment basins	367
Installation cost	675

C. DIFFERENCE FROM APPLICANT'S CLAIMED COST (\$1779 - 1042) =

\$737

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(\*) This is the full amount eligible to be claimed on the current tax credit application. The actual tax credit taken would be no greater than 50 percent of that amount.

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P O Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 6820 N. Fessenden, Portland, OR, Facility No. 6709.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass tanks and flexible doublewall piping, tank gauge system, monitoring wells, sumps and Stage I and II vapor recovery equipment.

Claimed facility cost \$121,967  
(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 April 1, 1993 and placed into operation on April 1, 1993. The application for certification was submitted to the Department on October 21, 1994 and was considered to be complete and filed on November 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 five registered tanks and piping with no corrosion protection, but with spill and overfill prevention and turbine leak detectors.

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 - Doublewall fiberglass tanks and flexible doublewall piping.
- 2) For spill and overfill prevention - Sumps.
- 3) For leak detection - Tank gauge system and monitoring wells.
- 4) For VOC reduction - Stage I vapor recovery and Stage II vapor recovery piping, hoses & nozzles on 4 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$121,967) 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 considered the methods chosen to be the most cost effective. 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$39,329	65% (1)	\$25,564
<u>Spill &amp; Overfill Prevention:</u>			
Sumps	1,782	100	1,782
<u>Leak Detection:</u>			
Tank gauge system	9,516	90 (2)	8,564
Monitoring wells	259	100	259
Stage I & II vapor recovery (incl. 24 hoses and nozzles on 4 dispensers)	12,514	100	12,514
Labor and materials	58,567	100	58,567
	_____	_____	_____
Total	\$121,967	88%	\$107,250

- (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 \$39,329 and the bare steel system is \$13,884, the resulting portion of the eligible tank and piping cost allocable to pollution control is 65%.
- (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 88%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$121,967 with 88% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4312.

Barbara J. Anderson  
(503) 229-5870  
November 13, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P O Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 2585 River Rd., Eugene, OR, Facility No. 5996.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, upgrade for tank gauge system, monitoring wells, sumps, turbine leak detectors, oil/water separator and Stage I vapor recovery.

Claimed facility cost \$182,997  
(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 October 1, 1993 and placed into operation on October 1, 1993. The application for certification was submitted to the Department on October 21, 1994 and was considered to be complete and filed on November 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 three steel tanks and piping with no corrosion protection, spill and overflow prevention, or leak detection except for a tank gauge system.

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 - Doublewall fiberglass tanks and flexible doublewall piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps and oil/water separator.
- 3) For leak detection - Upgrade for tank gauge system, turbine leak detectors and monitoring wells.
- 4) For VOC reduction - Stage I vapor recovery.

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 (\$182,997) 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 considered the methods chosen to be the most cost effective. 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
	<hr/>	<hr/>	<hr/>
<u>Corrosion Protection:</u>			
Doublewall fiberglass tanks and piping	\$28,358	53% (1)	\$15,030
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	669	100	669
Sumps	3,077	100	3,077
Oil/water separator	4,107	100	4,107
<u>Leak Detection:</u>			
Tank gauge upgrade	3,182	90 (2)	2,864
Monitoring wells	259	100	259
Turbine leak detectors	895	100	895
Stage I vapor recovery	366	100	366
Labor and materials	142,084	100	142,084
	<hr/>	<hr/>	<hr/>
Total	\$182,997	93%	\$169,351

- (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 \$28,358 and the bare steel system is \$13,398, the resulting portion of the eligible tank and piping cost allocable to pollution control is 53%.
- (2) The applicant's cost for an upgrade 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 93%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$182,997 with 93% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4313.

Barbara J. Anderson  
(503) 229-5870  
November 13, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Dennis Thompson  
DBA Tigard Arco  
12475 SW Main Street  
Tigard, OR 97223

The applicant owns and operates a retail gas station at 12475 SW Main St., Tigard, OR, Facility No. 2371.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are sumps and Stage I and II vapor recovery equipment.

Claimed facility cost \$57,719  
(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 August 1, 1994 and placed into operation on August 1, 1994. The application for certification was submitted to the Department on October 25, 1994 was considered to be complete and filed on October 28, 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 three tanks and piping with corrosion protection, spill and overflow prevention and leak detection equipment, but no under dispenser sumps or Stage II vapor recovery.

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 spill and overflow prevention - Under-dispenser sumps.
- 2) For VOC reduction - Stage II vapor recovery piping, hoses & nozzles on 4 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$57,719) 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
	<hr/>	<hr/>	<hr/>
<u>Spill &amp; Overfill Prevention:</u>			
Sumps	1,647	100	1,647
Stage II vapor recovery (incl. 18 hoses and nozzles on 4 dispensers)	10,562	100	10,562
Labor and materials	45,510	100	45,510
	<hr/>	<hr/>	<hr/>
Total	\$57,719	100%	\$57,719

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 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$57,719 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4314.

Barbara J. Anderson  
(503) 229-5870  
October 28, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P O Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 7035 Nyberg Rd., Tualatin, OR, Facility No. 6580.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass tanks and flexible doublewall piping, monitoring wells, sumps and Stage I and II vapor recovery equipment.

Claimed facility cost \$99,362  
(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, 1993 and placed into operation on February 15, 1993. The application for certification was submitted to the Department on October 26, 1994 and was considered to be complete and filed on November 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 three registered tanks and piping with no corrosion protection, but with spill and overfill prevention and leak detection.

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 - Doublewall fiberglass tanks and flexible doublewall piping.
- 2) For spill and overfill prevention - Sumps.
- 3) For leak detection - Monitoring wells.
- 4) For VOC reduction - Stage I vapor recovery and Stage II vapor recovery piping, hoses & nozzles on 2 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$99,362) 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 considered the methods chosen to be the most cost effective. 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$30,930	57% (1)	\$17,630
<u>Spill &amp; Overfill Prevention:</u>			
Sumps	970	100	970
<u>Leak Detection:</u>			
Monitoring wells	258	100	258
Stage I & II vapor recovery (incl. 12 hoses and nozzles on 2 dispensers)	10,937	100	10,937
Labor and materials	56,267	100	56,267
Total	\$99,362	87%	\$86,062

- (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 \$30,930 and the bare steel system is \$13,451, the resulting portion of the eligible tank and piping cost allocable to pollution control is 57%.

## 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 87%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$99,362 with 87% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4315.

Barbara J. Anderson  
(503) 229-5870  
November 13, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P O Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 28851 West 11th, Eugene, OR, Facility No. 318.

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

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, tank gauge system with overflow alarm, turbine leak detectors, monitoring wells, sumps, oil/water separator and Stage I and II vapor recovery equipment.

Claimed facility cost \$219,570  
(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 September 1, 1994 and placed into operation on September 1, 1994. The application for certification was submitted to the Department on October 26, 1994 and was considered to be complete and filed on November 4, 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 four registered tanks and piping with no corrosion protection and no spill and overflow 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 - Doublewall fiberglass tanks and flexible doublewall piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, overflow alarm and oil/water separator.
- 3) For leak detection - Tank gauge system, monitoring wells and turbine leak detectors.
- 4) For VOC reduction - Stage I and II vapor recovery piping, hoses & nozzles on 6 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

The Department concludes that the costs claimed by the applicant (\$219,570) 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 considered the methods chosen to be the most cost effective. 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$49,926	72% (1)	\$35,947
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	627	100	627
Oil/water separator	6,888	100	6,888
Sumps	3,077	100	3,077
<u>Leak Detection:</u>			
Tank gauge w/alarm	7,184	90 (2)	6,466
Turbine leak detectors	921	100	921
Monitoring wells	229	100	229
Stage I & II vapor recovery (incl. 36 hoses and nozzles on 6 dispensers)	16,808	100	16,808
Labor and materials	133,910	100	133,910
	-----	-----	-----
Total	\$219,570	93%	\$204,873

- (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 \$49,926 and the bare steel system is \$14,155, the resulting portion of the eligible tank and piping cost allocable to pollution control is 72%.
- (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 93%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$219,570 with 93% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4316.

Barbara J. Anderson  
(503) 229-5870  
November 4, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Truax Harris Energy Co.  
P O Box 607  
Wilsonville, OR 97070

The applicant owns and operates a retail gas station at 1680 SW Third Street, Corvallis, OR, Facility No. 7156.

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

The applicant has claimed equipment in this application that replaced equipment claimed in prior tax credit (TC-2581) issued in 1990. The equipment was replaced before the end of its useful life. See Section 2 below for an explanation of the claimed cost adjustment. TC-2581 will be submitted for revocation.

2. Description of Claimed Facility

The claimed pollution control facilities described in this application are three doublewall fiberglass tanks and flexible doublewall piping, spill containment basins, tank gauge system, overfill alarm, turbine leak detectors, monitoring wells, sumps, oil/water separator and Stage I and II vapor recovery equipment.

Claimed facility cost \$201,797  
(Accountant's certification was provided)



The Department concludes that the eligible facility cost for the project is \$201,060. This represents a difference of \$737 from the applicant's claimed cost of \$201,797 due an adjustment made by the Department to the claimed cost of spill containment basins that replaced the same equipment claimed in a prior tax credit (TC-2581). The previously claimed equipment was replaced before the end of its useful life and the adjustment reflects the amount of the tax credit remaining pursuant to Oregon Administrative Rules 340-16-025(3)(g)(B). See attached Worksheet 1.

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 August 1, 1994 and placed into operation on August 1, 1994. The application for certification was submitted to the Department on October 26, 1994 and was considered to be complete and filed on November 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 four registered tanks and piping with no corrosion protection, no spill and overflow prevention except spill containment basins and no 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 - Doublewall fiberglass tanks and flexible doublewall piping.
- 2) For spill and overflow prevention - Spill containment basins, sumps, overflow alarm and oil/water separator.

- 3) For leak detection - Tank gauge system, monitoring wells and turbine leak detectors.
- 4) For VOC reduction - Stage I and II vapor recovery piping, hoses & nozzles on 6 dispensers.

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 facility is also in compliance with Stage II vapor recovery rules.

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 considered the methods chosen to be the most cost effective. 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 Protection:</u>			
Doublewall fiberglass tanks and piping	\$48,420	71% (1)	\$34,378
<u>Spill &amp; Overfill Prevention:</u>			
Spill containment basins	367	100	367
Oil/water separator	3,427	100	3,427
Sumps	3,077	100	3,077
Overfill alarm	187	100	187
<u>Leak Detection:</u>			
Tank gauge system	7,184	90 (2)	6,466
Turbine leak detectors	921	100	921
Monitoring wells	229	100	229
Stage I & II vapor recovery (incl. 36 hoses and nozzles on 6 dispensers)	31,743	100	31,743
Labor and materials	105,505	100	105,505
Total	\$201,060	93%	\$186,300

- (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 \$48,420 and the bare steel system is \$14,130, the resulting portion of the eligible tank and piping cost allocable to pollution control is 71%.

- (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 93%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$201,060 with 93% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4317.

Barbara J. Anderson  
(503) 229-5870  
November 14, 1994

WORKSHEET 1.  
PRIOR TAX CREDIT ADJUSTMENT TO CLAIMED COST

TRUAX HARRIS ENERGY CO.  
Current Application: TC-4317

Prior Tax Credit: TC-2581 \$1,852, 100% amount allocated

DETERMINATION OF TAX CREDIT REMAINING TO BE CLAIMED WHERE THE EQUIPMENT  
IS REPLACED BEFORE THE END OF ITS USEFUL LIFE (OAR 340-16-025(3)(g)(B))

A. CLAIM DETAIL: Spill containment basins, 4 on prior and 3 on current tax credit. (Prorating is used when the number of items of equipment claimed is different in prior and current tax credits.)

CLAIM DETAIL	PRIOR TAX CREDIT 4 BASINS	PRIOR PRORATED TO 3 (75%)	CURRENT TAX CREDIT CLAIM 3 BASINS
TOTAL CLAIM - 100% (not reduced by any percentages)	\$1,852	\$1,389	\$1,779
Cost of spill basins	652	489	627
Installation cost	1,200	900	1,152 (1)
Amount claimed on prior credit	\$463	347	
100% amount allocable	463	347	
Amount of prior credit remaining (\$1852 - 463)	1,389	1042	

(1) Estimate of installation cost where precise amount not available:

Percent increase in price of basins (\$627 / 489) =	128%
Applied to installation cost (\$900 x 128%) =	\$1,152

B. TAX CREDIT REMAINING TO BE CLAIMED:

TOTAL AMOUNT	\$1,042 (*)
Spill containment basins	367
Installation cost	675

C. DIFFERENCE FROM APPLICANT'S CLAIMED COST (\$1779 - 1042) =

\$737  
=====

(\*) This is the full amount eligible to be claimed on the current tax credit application. The actual tax credit taken would be no greater than 50 percent of that amount.

State of Oregon  
Department of Agriculture

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Lyle D. Neuschwander  
26262 Powerline Road  
Halsey, Oregon 97348

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

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

2. Description of Claimed Facility

The equipment described in this application is a John Deere 4850 200 HP Tractor, located at 26262 Powerline Road, Halsey, Oregon. The equipment is owned by the applicant.

Claimed equipment cost: \$49,865  
(Accountant's Certification was provided.)

3. Description of Farm Operation Plan to Reduce Open Field Burning.

The applicant has 50 acres of perennial grass seed and 600 acres of annual grass seed under cultivation. Prior to incorporating alternatives the applicant open field burned as many acres as the weather and smoke management program permitted.

The applicant's alternatives include flail chopping the straw, plowing the residue under, and rolling and dragging the field as preparation for seeding. The applicant states that the purchased tractor now enables him to work the fields in a timely fashion following harvest as an alternative to open field burning.

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 January 11, 1994. The application was submitted on October 26, 1994; and the application for final certification was found to be complete on November 10, 1994. The application was filed within two years of substantial completion 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 \$4,004 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>Machinery Capacity</u>	<u>Annual Operating Hours</u>
Roller and Drag	400 x 3 = 1200	5 A/H	240
Plow	300	8 A/H	<u>38</u>
Total Annual Operating Hours			278

The total annual operating hours of 278 divided by the average annual operating hours of 450 produces a percent allocable of 62%.

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

6. Summation

- a. The equipment was constructed 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 62%.

7. The Department of Agriculture's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$49,865, with 62% allocated to pollution control, be issued for the equipment claimed in Tax Credit Application Number TC-4318.

Jim Britton, Manager  
Smoke Management Program  
Natural Resources Division  
Oregon Department of Agriculture  
(503) 378-6792  
FAX: (503) 378-2590

JB:bk4318  
November 9, 1994



Application No. TC-4138

State of Oregon  
Department of Environmental Quality

RECLAIMED PLASTIC TAX CREDIT  
TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

DBD Leasing  
4427 N. E. 158th  
Portland, OR 97230

The applicant is a broker and processor of recyclable plastic. The applicant has purchased an extruding machine to convert scrap plastic into uniform pellets.

Application was made for Reclaimed Plastic Tax Credit.

2. Description of Equipment, Machinery or Personal Property

The claimed equipment consisting of:

One 6" 30:1 L/D Sterling/Davis-Standard Extruder with screw, Temperature control panel and 500 HP DC drive, Serial # N2246; one HSC-60 slide plate screen changer with hydraulic unit; and one GALA ES6/80 Underwater pelletizing system.

The claimed facility investment costs consisted of:

Extruder	\$212,000
Screen changer	21,790
Pelletizer	37,710
Freight	5,000
Installation wiring	<u>15,135</u>
Claimed Facility cost	\$291,635
Noneligible cost	<u>15,135</u>
Allocable facility cost	\$276,500

An invoice and accountant's certification of expenditures were provided.

3. Procedural Requirements

The investment is governed by ORS 468.925 through 468.965, and by OAR Chapter 340, Division 17.

The investment met all statutory deadlines in that:

- a. The request for preliminary certification from Denton Plastic was received on September 7, 1993. The preliminary application was filed complete and 30 day waiting period was waived on September 8, 1993.
- b. The request for preliminary certification was approved on September 15, 1993, before the application for final certification was made.
- c. The investment was made on December 20, 1993, prior to June 30, 1995.

A purchase order to hold the equipment was issued from Denton Plastic to Davis-Standard was issued on August 28, 1993, prior to preliminary certification. An invoice from Davis-Standard to Denton Plastic is dated September 29, 1993. In October 1993 Denton Plastic contacted the Department by phone and indicated that the equipment would be purchased by DBD leasing through US Bancorp and leased to Denton Plastic. DEQ staff responded that since there was common ownership of DBD Leasing and Denton Plastic and the same equipment was involved a new preliminary application was not necessary. Purchase and lease agreements between US Bancorp, the principals in DBD Leasing and Denton Plastics are dated December 20, 1993.

It is the staff's recommendation that due to the change in ownership after the initial purchase order was submitted the date of investment by the applicant, DBD Leasing, should be December 20, 1993.

- d. The request for final certification was submitted on July 14, 1994 and was filed complete on October 27, 1994.

4. Evaluation of Application

- a. The investment is eligible because the equipment is necessary to process reclaimed plastic.
- b. Allocable Cost Findings

In determining the portion of the investment costs properly allocable to reclaiming and recycling plastic material, the following factors from ORS 468.960 have been considered and analyzed as indicated:

- 1) The extent to which the claimed collection, transportation, processing or manufacturing process is used to convert reclaimed plastic into a salable or usable commodity.

This factor is applicable because the sole purpose of this extruder is to recycle scrap into a feed stock to be used to manufacture reclaimed plastic products. The waste plastic processed through this extruder is generated by persons other than the applicant.

- 2) The alternative methods, equipment and costs for achieving the same objective.

The applicant investigated other alternatives and determined that this equipment is the most efficient and productive form an economic standpoint. This extruder is "process specific " and the most appropriate type of equipment for processing scrap plastic into a feed stock for manufacture of reclaimed plastic products.

- 3) Any other factors which are relevant in establishing the portion of the actual cost of the investment properly allocable to the collection, transportation or processing of reclaimed plastic or to the manufacture of a reclaimed plastic product.

A. Electrical wiring installation costs were experienced by the lessee, Denton Plastic and not the Lessor, DBD Leasing. These costs are not allocable to the equipment costs of the applicant, DBD leasing. The amount of \$15,135 has been subtracted from the claimed facility cost.

B. The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional accounting review to determine if costs were properly allocated. This review was performed under contract by the accounting firm of Merina McCoy Gerritz, P.C. The cost allocation review of this application has identified \$15,135.43 of non

allowable costs for electrical wiring as stated in (A) above. This amount has been subtracted from the facility costs and results in a Department recommended allowable cost of \$276,5000.

The actual cost of the investment properly allocable to processing reclaimed plastic as determined by using these factors is 100%.

5. Summation

- a. The investment was made in accordance with all regulatory deadlines.
- b. The investment is eligible for final tax credit certification in that the equipment is necessary to manufacture a reclaimed plastic product.
- c. The qualifying business complies with DEQ statutes and rules.
- d. The portion of the investment cost that is properly allocable to reclaiming and recycling plastic is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Reclaimed Plastic Tax Credit Certificate bearing the cost of \$276,500 with 100% allocated to reclaiming plastic material, be issued for the investment claimed in Tax Credit Application No. TC-4138.

**MERINA McCOY GERRITZ, P.C.**  
CERTIFIED PUBLIC ACCOUNTANTS

**PARTNERS**

John W. Merina, CPA  
Michael E. McCoy, CPA  
Gerald V. Gerritz, Jr., CPA

CERTIFIED IN  
Oregon  
Washington

Oregon Department of  
Environmental Quality  
811 S.W. Sixth Avenue  
Portland, OR 97204

We have performed the procedures enumerated below, which were agreed to by the Oregon Department of Environmental Quality (DEQ), solely to assist the DEQ in evaluating DBD Leasing's (the Company) Pollution Control Tax Credit Application No. 4138 regarding the plastic extruder machine (the Equipment) in Portland, Oregon. The aggregate-claimed equipment costs on the application are \$291,635.43. The following agreed-upon procedures and related findings are:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits - Sections 469.150 - 468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits - Sections 340-16-005 through 340-16-050 (OAR's).
2. We reviewed and discussed the Application and Statutes with Charles Bianchi and William Bree of the Oregon Department of Environmental Quality (DEQ).
3. We reviewed and discussed the Application and Statutes with Dennis Denton and Paul Bartholemy, two Partners of the Company.
4. We inquired as to whether there were any direct or indirect Company costs charged or allocated to the Facility costs claimed in the Application. We were informed that no direct or indirect Company costs were included in the Application.

Based on our review of supporting documentation discussed in item number 5, below, we noted no direct or indirect Company costs were included in the Application.

5. We reviewed supporting documentation for 100% of the amount claimed on the Application through review of vendor invoices. All costs which we reviewed supporting the Application appeared to be from third-party vendors.
6. We reviewed all costs claimed in the Application for eligibility for pollution control tax credit certification under the rules and statutes that govern the Program.

We found that wiring costs of \$15,135.43 were not paid by the applicant and therefore are not allowable.

18670 WILLAMETTE DRIVE • WEST LINN, OR 97068-1707  
(503) 636-4864 • FAX (503) 636-2318

610 S.W. BROADWAY, SUITE 407 • PORTLAND, OR 97205-3405  
(503) 295-0859 • FAX (503) 295-0859

7. We reviewed the documents and workpapers of applicant's certified public accountants that relate to the facility claim.
8. We determined that there were no related-party or affiliate billings included in the Application. We further verified that DBD Leasing owns the equipment and has executed a lease with Denton Plastics, Inc., which company is using the machine for its tax credit purpose, DBD Leasing and Denton Plastics, Inc. have the following common owners:

	<u>DBD Leasing</u>	<u>Denton Plastics, Inc.</u>
Dennis Denton	25%	40%
Paul Bartholemy	25%	20%
Michael Denton	25%	20%
Ron Dyches	<u>25%</u>	<u>20%</u>
	<u>100%</u>	<u>100%</u>

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the Application should be adjusted, except for the \$15,135.43 of wiring costs. Had we performed additional procedures, or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company taken as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in evaluating the Company's Pollution Control Tax Credit Application and should not be used for any other purpose.

*Merina McCoy Gerritz*  
 Merina McCoy & Gerritz, CPA's, P.C.  
 West Linn, Oregon 97068  
 September 29, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

International Paper  
Industrial Packaging Group  
Two Manhattanville Road  
Purchase, New York 10577

The applicant owns and operates an unbleached kraft pulp and linerboard manufacturing plant in Gardiner, Oregon.

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

2. Description of Facility

The facility consists of 25 lineal feet of 36 inch diameter stainless steel pipe, about 1,550 lineal feet of 36 inch X SDR 32.5 HPDE pipe, a concrete inlet structure (8' by 21' by 21') located at aerated stabilization basin (ASB) and a second carbon steel outlet weir box at the neutralization tank.

Claimed Facility Cost: \$480,275  
(Accountant's Certification was provided).

Eligible Facility Cost: \$479,131

The claimed facility cost of \$480,275 has been adjusted to \$479,131 due to an ineligible cost related to a clean-up spill at the excavation site.

Claimed Facility Cost:	\$480,275
Less: Spill clean-up cost:	<u>\$ 1,144</u>
Total Eligible Cost:	\$479,131

3. Procedural Requirements

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

The facility met the statutory deadline in that construction, of the facility was substantially completed on November 15, 1991 and the application for certification was found to be complete on November 15, 1993, within 2 years of substantial completion of the facility.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the facility is to control, a substantial quantity of water pollution. This control is accomplished by the use of treatment works for industrial waste as defined in ORS 468B.005.

Prior to the construction of the claimed facility the wastewater pipeline between the neutralization tank and the aerated stabilization basin (ASB) was limited to a hydraulic capacity of 12.5 million gallons per day (mgd). Peak flow rates in the wastewater treatment system sometimes exceeded 12.5 mgd which is either produced by process changes or heavy rainfall. The peak flows resulted in the overflowing of the primary clarifier which is located upstream of the neutralization tank. Overflowing of the primary clarifier to the surface drainage is an unpermitted discharge.

Addition of the 36 inch line increased the hydraulic capacity of the system to 20 mgd. No overflows have occurred since the construction of the facility.

b. Eligible Cost Findings

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

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

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

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

There is no return on investment on this facility.

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



Two other alternatives were analyzed. One was to install valves and pumps after the neutralization tank that would automatically operate during high periods of flow. The second option was to increase the height of the primary clarifier walls and neutralization tank walls thus increasing the hydraulic head for moving the effluent through the pipe by gravity to the ASB.

The first option was found to be too complicated to operate and the second would cause structural problems with the primary clarifier.

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

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

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

The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional accounting review to determine if costs were properly allocated. This review was performed under contract by the accounting firm of Symonds, Evans & Larson. The cost allocation review of this application has identified \$1,144 associated to a clean-up spill at the project site. This amount was subtracted from the claimed facility cost and resulted in the Department's recommended eligible cost of \$479,131.

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 sole purpose of the facility is to control a substantial quantity of water pollution. The facility accomplishes this purpose by redesign to control industrial waste as defined in ORS 468B.005.
- c. The facility complies with DEQ statutes and rules and permit conditions.
- d. The portion of the facility cost that is properly allocable to pollution control is 100%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of \$479,131 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4175.

Ruben Kretzschmar:crw  
MW\WC12\WC12899.5  
(503) 269-2721  
August 30, 1994

**SYMONDS, EVANS & LARSON**  
CERTIFIED PUBLIC ACCOUNTANTS

Environmental Quality Commission  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

At your request, we have performed certain agreed-upon procedures with respect to International Paper's (the Company's) Pollution Control Tax Credit Application No. T-4175 (the Application) filed with the State of Oregon, Department of Environmental Quality (DEQ) for the Water Pollution Control Facility in Gardiner, Oregon (the Facility). The Application has a claimed Facility cost of \$480,275. Our procedures, findings and conclusion are as follows:

Procedures:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Sections 468.150 through 468.190 (the Statutes), and the Oregon Administrative Rules on Pollution Control Tax Credits – Sections 340-16-005 through 340-16-050 (OAR's).
2. We reviewed certain documents which support the cost of the Facility.
3. We discussed the Application, the Statutes and OAR's with Rene Dulay of the DEQ and Charles Bianchi, an independent contractor of the DEQ.
4. We discussed certain components of the Application with Robert North, Marty Bozulich and David Halko of the Company.
5. We toured the Facility with Mr. North.
6. We requested that Company personnel confirm the following:
  - A) There were no related parties or affiliates of the Company which had billings which were included in the Application.
  - B) The capacity of the Facility is adequate for the Company's present operations and does not include significant capacity for potential future operations.
  - C) The Company derives no income or cost savings from operating the Facility.
  - D) In accordance with ORS Section 468.155(2)(e), the Facility is not a "replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued..."

**SYMONDS, EVANS & LARSON**  
CERTIFIED PUBLIC ACCOUNTANTS

- E) All supply costs included in the Application related to the installation of the Facility and did not include unrelated operating supplies.
- F) All internal labor included in the Application was calculated using the Company's actual payroll costs, related directly to the installation of the Facility and was not related to maintenance and repairs.
- G) There was no previously existing equipment that was sold as a result of the installation of the Facility.
- H) The treated water from the Facility is not being directly reused by the Company.

Findings:

- 1. through 5.

No matters came to our attention that caused us to believe that the Application should be adjusted, except for \$1,144 in costs related to the clean-up of spills at the excavation site. As a result, the allowable costs for the Application should be reduced to \$479,131.

- 6. Company personnel confirmed in writing that such assertions were true and correct.

Conclusion:

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the specified items should be adjusted, except as noted above. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company, taken as a whole.

This report is solely for the use of the State of Oregon Environmental Quality Commission and Department of Environmental Quality in evaluating the Company's Pollution Control Tax Credit Application No. T-4175 with respect to its Water Pollution Control Facility in Gardiner, Oregon and should not be used for any other purpose.

*Symonds, Evans & Larson*

October 27, 1994

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

---

1. Applicant

South Coast Lumber Company  
Plywood Division  
815 Railroad Avenue  
Brookings, Oregon 97415

The applicant owns and operates a laminated veneer lumber manufacturing facility in Brookings, Oregon.

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

2. Description of Facility

The facility controls the finger jointing and rip saw dust emissions generated by South Coast Lumber's new Laminated Veneer Lumber (LVL) operation. The claimed facility consists of a Pneumafil #16-648-12 baghouse, two Twin Cities #660-HIB-24 fans and fire protection for the baghouse.

Claimed Facility Cost: \$263,577

A distinct portion of the facility makes an insignificant contribution to the principal purpose of pollution control. The Claimed facility costs included costs which were allocable to the applicants pneumatic wood waste collection system. The applicant indicated the total cost of the waste system was \$403,736. The applicant obtained an estimate of \$148,309, for the cost of a waste system without air pollution control equipment. The applicant originally estimated the waste system only costs to be lower resulting in a higher estimated portion allocated to air pollution control. This lower waste system estimate failed to include engineering expenses.

Adjusted facility cost: \$255,427.

The applicant indicated the useful life of the facility is 10 years.

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Installation of the facility was substantially completed on March 18, 1992 and placed into operation on March 19, 1993. The application for final certification was received by the Department on December 6, 1993. The application was found to be complete on September 6, 1994, within two years of substantial completion of the facility.

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 air pollution. This is in accordance with OAR Chapter 340, Division 21, sections 015 through 030. The applicant's Air Contaminant Discharge Permit, 08-0003, Condition 5, Addendum No. 1, requires the permittee to control the emission of particulate of the LVL baghouse. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The claimed facility controls the emission of particulate generated from the finger jointing and rip saw dust emissions generated by South Coast Lumber's new Laminated Veneer Lumber (LVL) operation. On September 6, 1991, the Department amended South Coast's Air Contaminant Discharge Permit to include the addition of a LVL operation. The baghouse was to ensure the control of emissions to the atmosphere from this operation. Department records indicate that the facility is considered to be in compliance. The claimed facility consists of a Pneumafil #16-648-12 baghouse, two Twin Cities #660-HIB-24 fans and fire protection for the baghouse. Installation of the facility required a foundation, structural and electrical materials and labor, and a fire protection system.

The system fan draws particulate from the LVL operation through metal ductwork (not part of the claimed facility cost) into the baghouse. Here the dirty air stream is forced through a series of fabric filters supported on tubular frames. The particulate collects on the outside of the bags. The filtered air then passes through the system fan and is emitted to the atmosphere. The accumulated particulate flows from the bottom of the baghouse bin into a rotary air lock star valve. The saw dust drops into a duct where a second fan blows it to a cyclone (not included in facility cost) which discharges the saw dust into a chip bin (not part of the facility cost).

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to controlling pollution, 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 recover waste products as a usable commodity consisting of wood chips used for boiler fuel. The applicant estimated the baghouse recovers 1,373 units of wood chips each year. The portion of the annual value of this recovered material allocable to the baghouse is \$17,370.

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

The income generated by using the particulate as boiler fuel is minimal compared to the annual operating expense of the facility; therefore, there is no annual percent return on the investment.

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

Baghouses are technically recognized as an appropriate method for controlling the emissions of particulate to the atmosphere.

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

The average annual savings from using the particulate from the facility as boiler fuel is \$17,370. The average annual cost of maintaining and operating the facility is \$47,000.

- 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.

The eligible facility costs have been determined to be \$255,427 after adjusting for distinct portions of the facility which do not have the principal purpose of pollution control. This is discussed in section 2 of this report.

The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional Departmental accounting review, to determine if costs were properly allocated. This review was performed under contract with the Department by the accounting firm of Boltd, Carlisle, & Smith (see attached report).

Other than the adjustments to the claimed facility cost made by the Department referenced in section 2, the cost allocation review of this application has identified no issues to be resolved and confirms the cost allocation as submitted in the application.

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

5. Summation

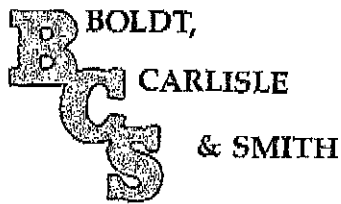
- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the principal purpose of the facility is to comply with a requirement imposed by the Department to control air pollution.
- c. The facility complies with 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 \$255,427 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4194.

Dennis Cartier  
SJO Consulting Engineers  
BKF:AQ  
August 31, 1994





CERTIFIED PUBLIC ACCOUNTANTS

FIR GROVE BUILDING, SUITE D  
2001 FRONT STREET N.E.  
SALEM, OR 97303-6651  
(503) 585-7751  
FAX 370-3751

408 NORTH THIRD AVENUE  
STAYTON, OR 97383-1797  
(503) 769-2186  
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OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY  
811 S. W. Sixth Avenue  
Portland, OR 97204

At your request, we have performed agreed upon procedures with respect to South Coast Lumber Company Pollution Tax Control Credit Application No.4194 regarding the installation of a dust collection system. The aggregate claimed Facility costs on the Application were \$403,736 of which \$263,577 were claimed as eligible for the pollution control credit. The agreed upon procedures and our related findings are as follows:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits - Section 468.150-468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits - Sections 340-16-005 through 340-16-050 (OAR'S).
2. We discussed the Application with Mr. Dennis Cartier of SJO Consulting Engineers, Inc. regarding the determination of the portion of the project costs eligible for the pollution control credit as well as other aspects of the project.
3. We also discussed the Application and Statutes with:
  - a) Mr. Gordon M. Ball of South Coast Lumber Company,
  - b) James P. Murphy of Deloitte & Touche LLP, and
  - c) Gary A. Wilson of KH2A Engineering Inc.
  - d) Dennis Cartier of SJO Consulting Engineers, Inc.
4. We inquired as to whether there were any direct or indirect Company costs charged to the Facility costs claimed in the Application. We were informed that no direct or indirect costs were included in the Application.

Based on our review of supporting documentation discussed in item no. 5 below, we noted no direct or indirect costs were included in the Application.

5. We reviewed supporting documentation for 87 percent of the amount claimed on the Application through review of vendor invoices. All costs which we reviewed supporting the Application appeared to be from third party vendors.

OREGON DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
Portland, OR 97204

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6. We discussed with Gary A. Wilson of KH2A Engineering, Inc. the extent to which non-allowable costs were excluded from the Application. It was noted that the original application did not allocate engineering costs between the eligible and non-eligible portions of the project. Subsequent analysis of this issue by KH2A Engineering, Inc. and Dennis Cartier of SJO Consulting Engineers, Inc. resulted in an \$8,150 reduction in the eligible pollution control facility costs. The adjusted eligible pollution control facility costs were determined to be \$255,427 rather than the \$263,577 originally claimed. Based on our discussions and review of specific contractor invoices (see item no. 5) we agree that the original application overstated the eligible pollution control facility costs by \$8,150. Except for this \$8,150 adjustment, the Company had properly excluded non-allowable costs from the application.

#### Conclusion

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the Application should be adjusted, except for the \$8,150 of non-allowable costs noted in item no. 6 above. Had we performed additional procedures, or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company taken as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in the evaluating of the Company's Pollution Control Tax Credit Application and should not be used for any other purpose.



Certified Public Accountants  
Salem, Oregon  
October 25, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Intel Corporation  
5200 NE Elam Young Parkway  
Hillsboro, Oregon 97124

The applicant owns and operates a microcomputer silicon wafer chip manufacturing facility in Aloha, Oregon.

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

2. Description of Facility

The claimed facility controls emissions of corrosive vapors and arsenic dust from an expansion of the D1 operations. The claimed facility consists of two Harrington wet scrubbers and support equipment. Also included in the claimed facility cost is a cartridge type air filter.

Total Claimed Facility Cost:	\$709,435
Arsenic Exhaust Filter System:	\$177,722
Acid Fume Scrubbers:	\$531,713

A distinct portion of the claimed facility makes an insignificant contribution to the principal of pollution control. The claimed facility costs for the arsenic exhaust filter included \$147,726 which were not allocable to pollution control. These costs were associated directly with the design and installation of the arsenic bead blast process expansion and work place safety ventilation. \$7,303 of the indirect costs for the wet scrubbers were determined to not be allocable to pollution control. This determination was made because the applicant did not demonstrate installation of the scrubbers increased expenses beyond that incurred from the overall expansion project in the following cost categories: safety, first aid, fire protection, temporary structures, sanitation, bonds, and insurance.

Ineligible Costs:	\$155,369
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Adjusted Facility Cost:	\$554,406
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The applicant indicated the useful life of the facility is 10 years.

Accountant's Certification was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

Installation of the facility was substantially completed on July 1, 1993 and placed into operation on July 1, 1993. The application for final certification was received by the Department on May 11, 1994. The application was found to be complete on October 1, 1994, within two years of substantial completion of the facility.

4. Evaluation of Application

a. Rationale For Eligibility

The facilities are eligible because their sole purpose is to control air pollution. The Department is currently developing rules under Title III, of the Clean Air Act Amendments of 1990, for the control of air toxics. In the interim, the Department is implementing guidelines that require new sources and major modifications to existing resources to quantify their emissions of air toxics. Proposed emission levels are evaluated relative to established Significant Emission Rates (SER) for each air toxic. New sources which generate air toxics above the SER are required to model concentration levels for site specific conditions to determine if emissions meet or exceed acceptable risk levels. The emission rates for each air toxic as controlled by the scrubbers, is below the SER. The control is accomplished by the elimination of air contaminants as defined in ORS 468.005.

The air contaminants controlled by the two Harrington wet scrubbers are the emissions of the following toxic air contaminants from the fab process: H<sub>2</sub>SO<sub>4</sub>, H<sub>3</sub>PO<sub>4</sub>, HNO<sub>3</sub>, HCl, HF and NH<sub>4</sub>F. These substances are used in the applicant's photo-resist developer chambers, etcher reaction boxes, and wet stations used for microcomputer chip wafer surface purification. The fab area exhaust scrubber system consists of two Harrington ECH913-5LB 60,000 scfm horizontal cross-flow, packed bed wet scrubbers with two Pace fans (size CL-54-AFSWS) with 125 horsepower motors, recirculation pumps and support systems. A DEQ site inspection conducted in September of 1994, and was found to be in compliance.

The other portion of the claimed facility is a dust filter added during the expansion of the arsenic bead blast process. The system consists of a Flanders Model ES4X3CGF4 Bag-Out filter housing, filter elements and exhaust fan that collects arsenic particulate from the arsenic bead blast operation. The filter media is a pleated HEPA cartridge unit which is 99.99% efficient on a 0.3 micron particle. The Arsenic Bead Blast operation was an existing process operation that was expanded 1993. Prior to the expansion, the arsenic dust generated by the arsenic bead blast equipment was collected from the process operations and vented through ducting and

discharged to the atmosphere without going through any filtration. As part of the expansion, several of the arsenic bead blast process modules were added. Ducting was added to remove the arsenic dust and other corrosive fumes away from the additional process equipment. The Flanders dust filter was added to the duct system just prior to the point it discharges the process exhaust to the atmosphere.

b. Eligible Cost Findings

In determining the percent of the pollution control facility cost allocable to controlling pollution, 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 recover waste products into a salable or usable commodity.

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

There is no income generated from the operation of the claimed facilities. Therefore, there is no annual percent return on the investment.

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

Wet scrubbers are technically recognized as an appropriate method for controlling the emissions of acid fumes to the atmosphere. The arsenic particulate filter unit that was installed is also the appropriate type of equipment to remove particulate.

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

There are no average annual savings associated with the use of these pollution control devices. The average annual cost of maintaining and operating the claimed facilities is \$162,209.

- 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.

The eligible facility costs have been determined to be \$554,406 for the three pollution control devices after adjusting for distinct portions of the facility which do not have the principal purpose of pollution control. This is also discussed in section 2 of this report.

The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional Departmental accounting review, to determine if costs were properly allocated. This review was performed under contract with the Department by the accounting firm of Symonds, Evans & Larson (see attached report).

Other than the adjustments to the claimed facility cost referenced in section 2, the cost allocation review of this application has identified no issues to be resolved and confirms the cost allocation as submitted in the application.

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 air pollution.
- c. The facility complies with 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 \$554,406 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4235.

Dennis Cartier  
SJO Consulting Engineers  
October 31, 1994

**SYMONDS, EVANS & LARSON**  
CERTIFIED PUBLIC ACCOUNTANTS

Environmental Quality Commission  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

At your request, we have performed certain agreed-upon procedures with respect to Intel Corporation's (the Company's) Pollution Control Tax Credit Application No. 4235 (the Application) filed with the State of Oregon, Department of Environmental Quality (the DEQ) for the Air Pollution Control Facility in Aloha, Oregon (the Facility). The Application has a claimed Facility cost of \$709,435 and was amended to \$554,406 by the DEQ and SJO Consulting Engineers, Inc., a contractor for the DEQ. Our procedures, findings and conclusion are as follows:

Procedures:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Sections 468.150 through 468.190 (the Statutes), and the Oregon Administrative Rules on Pollution Control Tax Credits – Sections 340-16-005 through 340-16-050 (OAR's).
2. We reviewed certain documents which support the cost of the Facility.
3. We discussed the Application, the Statutes and OAR's with Brian Fields of the DEQ, and Charles Bianchi and Dennis Cartier, independent contractors of the DEQ.
4. We discussed certain components of the Application with various Company personnel, including Lisa King and John Arand.
5. We toured the Facility with Mr. Arand and Ms. King.
6. We requested that Company personnel confirm the following:
  - a) There were no related parties or affiliates of the Company which had billings which were included in the Application.
  - b) The capacity of the Facility is adequate for the Company's present operations and does not include significant capacity for potential future operations.
  - c) The Company does not presently derive any income or cost savings from operating the Facility.

**SYMONDS, EVANS & LARSON**  
CERTIFIED PUBLIC ACCOUNTANTS

- d) In accordance with ORS Section 468.155(2)(e), the Facility is not a "replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued..."
- e) All supply costs included in the Application related to the installation of the Facility and did not include ongoing operating supplies.
- f) All internal labor costs included in the Application related directly to the installation of the Facility and were not related to maintenance and repairs.
- g) No previously existing equipment was sold as a result of the installation of the Facility.

Findings:

- 1. through 5.

No matters came to our attention that caused us to believe that the amended claimed Facility cost should be adjusted.

- 6. Company personnel confirmed in writing that such assertions were true and correct.

Conclusion:

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the amended claimed Facility cost should be adjusted. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company, taken as a whole.

This report is solely for the use of the State of Oregon Environmental Quality Commission and Department of Environmental Quality in evaluating the Company's Pollution Control Tax Credit Application No. 4235 with respect to its Air Pollution Control Facility in Aloha, Oregon and should not be used for any other purpose.

*Symonds, Evans & Larson*

November 10, 1994



**SYMONDS, EVANS & LARSON**  
CERTIFIED PUBLIC ACCOUNTANTS

Environmental Quality Commission  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

At your request, we have performed certain agreed-upon procedures with respect to Oregon Steel Mills, Inc.'s (the Company's) Pollution Control Tax Credit Application No. T-4243 (the Application) filed with the State of Oregon, Department of Environmental Quality (DEQ) for the Solid Waste Pollution Control Facility in Portland, Oregon (the Facility). The Application has a claimed Facility cost of \$12,889,408. Our procedures, findings and conclusion are as follows:

Procedures:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Sections 468.150 through 468.190 (the Statutes), and the Oregon Administrative Rules on Pollution Control Tax Credits – Sections 340-16-005 through 340-16-050 (OAR's).
2. We reviewed certain documents which support the cost of the Facility.
3. We discussed the Application, the Statutes and OAR's with Bill Bree of the DEQ and Charles Bianchi, an independent contractor of the DEQ.
4. We discussed certain components of the Application with Terry MacDonald, Judy Roberts and Jerry Richartz of the Company.
5. We toured the Facility with Mr. Richartz.
6. We requested that Company personnel confirm the following:
  - A) All amounts included in the Application related directly to pollution control, and none of the amounts included in the Application related to costs that would have been incurred by the Company to upgrade/maintain the Facility in the normal course of business.
  - B) All supply costs included in the Application related to the installation of the Facility and did not include unrelated operating supplies.

# SYMONDS, EVANS & LARSON

## CERTIFIED PUBLIC ACCOUNTANTS

- C) All internal labor costs included in the Application approximated the Company's actual payroll costs and were reasonable based on the work performed. Additionally, all internal costs included in the Application related directly to the construction of the Facility and were not related to maintenance and repairs.
- D) The payroll costs included in the Application for Dick Bird (the Company's Director of Engineering) were based on actual hours and costs directly related to the construction of the Facility.
- E) In accordance with ORS 468.155(2)(e), the Facility is not a "replacement or reconstruction of all or a part of any Facility for which a pollution control facility certificate has previously been issued..."
- F) There was no previously existing equipment that was sold as a result of the construction of the Facility.
- G) The construction of the Facility was completed and began operating in December 1992.
- H) All costs included in the Application which were charged by related parties were based on their actual costs and did not include any mark-up for profit.
- I) The total cost of the dryer unit and related storage bins (including internal labor and parts) was \$148,434.
- J) The Company will not receive reimbursement from Roger B. Ek & Associates or Glassification International Limited for any of the costs included in the Application.
- K) There are no provisions, sections, comments, etc., in the Joint Venture Agreement of Glassification International Limited which would affect the allowable costs of the Application.
- L) Based on Company personnel's knowledge of the industry and the glassification process, the useful life of the Facility is 15 years.
- M) All estimates and data which were used to calculate the return on investment calculation are true and accurate to the best of Company personnel's knowledge and belief.

**SYMONDS, EVANS & LARSON**  
CERTIFIED PUBLIC ACCOUNTANTS

- N) The Company has no plans to utilize the Facility to generate additional revenue or reduce costs related to the disposal of any hazardous wastes other than the electric arc furnace dust.
- O) All costs of the Facility related to research, development and start-up were excluded from the Application.

Findings:

1. through 5.

No matters came to our attention that caused us to believe that the claimed Facility costs should be adjusted, except for \$871,939 of non-allowable costs related to the following:

Asbestos removal	\$ 11,907
Maintenance and repairs	6,055
Charges from Glassification International Limited (a related party) for labor and materials that could not be supported by original vendor invoices.	76,400
Charges from Roger B. Ek (a related party) which appeared to be related to research and development	85,000
Charges incurred subsequent to when the Facility was placed in service (December 1992)	449,209
Spare parts for furnace charger	18,187
Spare parts for electrodes	69,395
Safety rails	7,352
Dryer unit and 6 storage bins that are no longer in use	<u>148,434</u>
Total non-allowable costs	<u>\$ 871,939</u>

As a result, the allowable costs for the Application should be reduced to \$12,017,469.

- 6. Company personnel confirmed in writing that such assertions were true and correct.

**SYMONDS, EVANS & LARSON**  
**CERTIFIED PUBLIC ACCOUNTANTS**

Conclusion:

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the specified items should be adjusted, except as noted above. Had we performed additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company, taken as a whole.

This report is solely for the use of the State of Oregon Environmental Quality Commission and Department of Environmental Quality in evaluating the Company's Pollution Control Tax Credit Application No. T-4243 with respect to its Solid Waste Pollution Control Facility in Portland, Oregon and should not be used for any other purpose.

*Symonds, Evans & Larson*

October 26, 1994

STATE OF OREGON  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

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1. Applicant

Willamette Industries, Inc  
1300 S. W. Fifth Avenue  
Portland, Oregon 97210

The applicant owns and operates a pulp and paper mill in Albany, Oregon. Application was made for tax credit for a modification and expansion of a secondary fiber utilization system from 600 ton/day to 750 ton/day capacity.

2. Description of Facility

The facility is a waste paper recovery and utilization system for old corrugated cardboard (OCC) which results in the expansion of mill capacity for utilization of OCC from 600 tons/day to 750 tons/day including replacement of some existing equipment and installation of a new contamination dispersion process. The facility consists of the following:

- a. Black and Clauson 24', 800HP, repulper (750 tons/day);
- b. Contaminant dispersion system (300 tons/day);  
One 300 ton/day Celleco screw press;  
One Sunds Defibrator model PSA 390;  
Two Sunds Defibrator transfer screws;  
ABB Process Automation computer control system;
- c. Bale conveyor and processing (750 tons/day);  
Three 10' wide Krause bale conveyors;  
Nielsen and Hiebert bale dewiring machine;  
SSI Model ED5000 bale shredder;
- d. 200 ton tile high density storage tank (300 tons/day);
- e. ABB Process Automation Computer control system w/ control room (750 tons/day);
- f. Pumps and piping (300-750 tons/day);
- g. Electrical systems (300-750 tons/day);  
One 5,000 KVA Transformer;  
Three 1,000 KVA transformers;  
Electronic controls and instruments;
- h. Two Rayfo Model DW-10078 reject material dewatering presses (750 tons/day);
- i. Rejects screws, conveyors and press (750 tons/day);  
Rejects compactor;
- j. Black and Clauson screening and cleaning equipment (150-300 tons/day);  
One 25" liquid cyclone cleaner;  
One hydropurger, model HP33-3000;

One model III ultrascreen;  
Two Model Ultra V500 pressure screens;  
One 64-3-CBT x-clone reverse cleaner bank;  
Ninety retroclone reverse cleaners;  
One rebuild 16', 300 ton/day, Dorr Oliver decker;

- k. Recycled paper stock preparation system for storage, handling and distribution of recycled fiber to paper machines, including two 30,000 gallon stainless steel storage tanks (150-300 tons/day);
- l. Pumps, piping, foundations, enclosures, and support steel (750 tons/day);
- m. 120' by 30' material receiving platform (750 tons/day);
- n. 100 foot Toledo Model 7560 truck scale (750 tons/day).

Claimed facility costs include:

a. Repulper	\$ 1,411,722
b. Dispersion system	\$ 930,991
c. Shredder/dewire system	\$ 756,236
d. 200 ton high density tank	\$ 701,478
e. ABB Automation computer systems	\$ 2,759,944
f. Pipes, valves and fillings	\$ 1,762,662
g. Electrical equipment and power supply	\$ 1,526,468
h. Reject press	\$ 228,643
i. Compactor	\$ 101,718
j. Screens and cleaners	\$ 393,141
k. Agitators and pumps	\$ 291,989
l. Pipe bridge and equipment access	\$ 245,897
m. Receiving platform and enclosure	\$ 700,762
n. Truck scales	\$ 76,682
o. Other auxiliary and support equipment	\$ 390,129
Total claimed facility cost	\$12,278,462

An Independent accountant certification of costs was provided.

3. **Procedural Requirements**

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

The facility met all statutory deadlines in that:

- a. Installation of the facility was started on September 1, 1992.
- b. The facility was placed into operation on May 1, 1993.
- c. The application for tax credit was submitted to the Department on June 27, 1994, within two years of substantial completion of the facility.
- d. The application was found to be technically complete and was filed on September 15, 1994.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the claimed facility is to reduce a substantial quantity of solid waste through recycling.
- 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.  
  
This factor is applicable because the facility is used exclusively to process recyclable materials.  
  
The percent allocable by using this factor would be 100%.
- 2) The estimated annual percent return on the investment in the facility.
  - A) The administrative rules amendments adopted January 29, 1993 establish a separate set of standards for calculation of return on investment for pollution control facilities which are "integral to the applicant's business".

OAR 340-16-030(g) states: "'Pollution control facilities integral to the operation of the applicant's business' means that the business is unable to operate or is only able to operate at reduced income levels, without the claimed pollution control facility." The definition continues by providing four factors that the Department may use to determine whether pollution control facilities are integral to the operation of the business.

The applicant has reviewed the four factors in OAR 340-16-030(g) as they relate to the new secondary fiber system at the Albany pulp and paper mill. Based upon that review they conclude that the claimed pollution control facility is not integral to the operation of the mill. Pollution control facilities represent 16 percent (less than 25%) of the total assets of the mill. The claimed facility has reduced the gross revenues the mill. And, the operating expenses of all the claimed or certified facilities are 22 percent (less than 50%) of the operating expenses of the mill.

Using a general evaluation, the claimed facility is an integrated part of a mill which manufactures pulp and paper from a combination of virgin wood fiber and reclaimed paper fiber. All of the secondary fiber used by the mill passes through the claimed facility as some point in the repulping process. That secondary fiber stock is eventually utilized in the paper making portion of the mill. The installation of

the claimed facility improves the handling of all secondary fiber and has resulted in an increase in secondary fiber content in the final paper produced from 43.3 percent secondary fibers to 53.3 percent secondary fibers. It would appear, in general, that the preparation of secondary fiber was an integral part of the operation of the pulp and paper mill.

On the other hand, the Albany mill could operate and produce an equivalent paper product without the use of secondary fibers. The choice to use secondary fibers in this mill has a substantial impact upon the business but the failure to do so would not render the business unable to operate.

It is the staff recommendation that the claimed pollution control facility not be considered integral to the operation of the business

B) Actual Cost of Claimed Facility

I) The applicant has received tax credit certification of two previous applications for equipment related to this facility. A review of the specific equipment claimed in the present application and each of the previous applications identified two areas where the new application contained equipment which was partially in replacement of previously certified items.

Three pumps, claimed in previous tax credit applications, t-917 (1977) and t-1290 (1980) were replaced by equipment in this new facility. The present replacement value of the previously certified equipment is \$56,529.

II) The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional accounting review to determine if costs were properly allocated. This review was performed under contract by the accounting firm of Coopers & Lybrand. The cost allocation review of this application has identified \$235,141 of non allowable costs for spare parts. This amount has been subtracted from the facility costs.

Original cost of claimed facility	\$12,278,462
Replacement equipment	\$ 56,529
Other ineligible costs	<u>\$235,141</u>
Total ineligible cost	\$291,670
Adjusted cost of claimed facility	\$11,986,792



C) Annual Percentage Return on Investment

The annual percentage return on investment was calculated by comparing the cost per ton of product, linerboard, before and after installation of the claimed facility multiplied by annual production. This figure produces an average annual cash flow for this facility of \$880,418. This cash flow and "adjusted cost of the claimed facility" result in a return on investment factor of (13.61).

D) Useful Life

The applicant has claimed a ten year useful life. As a result of using Table 1, OAR 340-16-030, for a ten year useful life, the return on investment for the claimed facility is 0% and the percent allocable is 100%.

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

The applicant considered other methods for processing recyclable materials and determined that this method was environmentally acceptable and economically feasible. It is the Department's determination that the proposed facility is an acceptable method of achieving the material recovery objective.

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

There are no savings, other than those considered in (2) above, associated with the purchase or use of this facility.

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

There are no other factors to consider in establishing the actual cost of the facility properly allocable to material recovery from solid waste.

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 sole purpose of the facility is to reduce a substantial quantity of solid waste through recycling.
- c. The facility complies with DEQ statutes 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 the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$11,986,792 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application No. T-4252

WRB:wrb  
wp51\tax\tc4252RR.STA  
(503)229-5934  
October 31, 1994

Oregon Department of Environmental Quality  
811 S. W. Sixth Avenue  
Portland Oregon 97204

At your request, we have performed certain agreed upon procedures with respect to Willamette Industries, Inc. (the Company) Pollution Tax Control Credit Application No. 4252, regarding the Secondary Fiber Expansion in Linn County, Oregon (the Facility). The aggregate claimed Facility costs on the Application were \$12,278,462. The agreed upon procedures and related findings are as follows:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits - Sections 469.150-468.190 (the Statutes) and the Oregon Administrative Rules on Pollution Control Tax Credits - Sections 340-16-005 through 340-16-050 (OAR'S).
2. We discussed the Application and Statutes with Mr. Charles Bianchi and Mr. William Bree of the Oregon Department of Environmental Quality (DEQ).
3. We discussed the Application and Statutes with Mr. James Aden, Assistant Tax Manager of the Company.
4. We inquired as to whether there were any direct or indirect Company costs charged to the Facility costs claimed in the Application. We were informed that \$935 of direct costs were included in the Application.

Based on our review of supporting documentation discussed in item no. 5 below, we noted that the direct costs charged to the Application appeared to be properly allowable.

5. We reviewed supporting documentation for 73% of the amount claimed on the Application through review of vendor invoices. All costs which we reviewed supporting the Application appeared to be from third party vendors.
6. We discussed with Mr. James Aden, Assistant Tax Manager for the Company, the extent to which non-allowable costs were excluded from the Application. This was accomplished by reviewing specific contractor invoices (see item no. 5) with Mr. Aden. We determined that the Company expended \$235,141 for spare parts which related to the Facility. We also noted that the Company expended \$315,347 which related to the project but were incurred after the May 1993 facility start-up date. Based on our review and consultation with Mr. Charles Bianchi and Mr. William Bree concerning these two findings, we have determined that the expenditure for spare parts are non-allowable costs. Accordingly, the Facility costs claimed on the Application should have been \$12,043,321 instead of \$12,278,462.

Oregon Department of Environmental Quality  
Page Two

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the Application should be adjusted except for the \$235,141 of costs noted in item no. 6 above. Had we performed additional procedures, or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company taken as a whole.

This report is solely for the State of Oregon Department of Environmental Quality in the evaluating the Company's Pollution Control Tax Credit Application and should not be used for any other purpose.

Coopers & Lybrand L.L.P.

Portland, Oregon  
October 27, 1994

State of Oregon  
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Neste Resins Corporation  
1600 Valley River Drive, Suite 390  
Eugene, OR 97401

The applicant owns and operates a synthetic resin and formaldehyde manufacturing facility in Springfield, Oregon.

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

2. Description of Facility

The facility controls formaldehyde, phenol and methanol emissions which are classified as Hazardous Air Pollutants (HAP). These emissions are generated from the production and storage of formaldehyde, phenolic and urea-formaldehyde resins. The facility consists of a Durr brand regenerative thermal oxidizer (RTO) and the necessary ducting from the process and storage tanks to the RTO.

Claimed Facility Cost: \$981,109

A distinct portion of the claimed facility makes an insignificant contribution to the principal of pollution control. The applicant claimed \$5,162 for interest that would have paid if the funds for the project were borrowed. In addition the applicant claimed \$17,842 for spare parts.

Ineligible Costs: \$23,004

Adjusted Facility Cost: \$958,105

Accountant's Certification was provided.

The applicant indicated the useful life of the facility is 15 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:

Installation of the facility was substantially completed on February 18, 1994, and placed into operation on January 17, 1994. The application for final certification was received by the Department on September 26, 1994. The application was found to be complete on October 2, 1994, within two years of substantial completion of the facility.

4. Evaluation of Application

a. Rationale For Eligibility

The facility is eligible because the sole purpose of the facility is for air pollution control in anticipation of the requirements of OAR Chapter 340, Divisions 20, General Air Pollution Control Regulations and 32, Hazardous Air Pollutants. These divisions will require existing sources who have the potential to emit 10 tons per year of any one HAP or an aggregate of 25 tons per year of two or more HAPs to comply with the standards set by the Clean Air Act. The emission reduction is accomplished by the elimination of air contaminants as defined in ORS 468A.005.

The sole purpose of the facility is to eliminate over 164,000 pounds per year of HAPs air emissions. This reduction is accomplished by the installation of a fume collection ducting system that collects the emissions and feeds them to the RTO. The RTO has a destruction efficiency of 98.5%. The majority of the emissions are generated as a result of the production of formaldehyde and phenolic resins. Additional emissions are collected from the 21 raw material and finished product storage tanks. The RTO operates at 1520°F and does not require any auxiliary fuel due to the high heating value of the incoming gases. The plant was found to be in compliance during a recent inspection by the Lane Regional Air Pollution Authority.

b. Eligible Cost Findings

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

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

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

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

There is no income or savings from the operation of the claimed facility. Therefore, there is no return on the investment.

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

The applicant has stated that absorber gases are at a maximum recycle within the process to minimize the load to the RTO. A catalytic incinerator and a recuperative thermal oxidizer were evaluated. The RTO was chosen because of its high destruction and thermal efficiency. The RTO the applicant installed operates at higher than average destruction efficiency.

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

There are no annual savings associated with the use of the pollution control device. The average annual cost of maintaining and operating the facility is \$37,000.

- 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.

The eligible facility costs have been determined to be \$958,105 after adjusting for distinct portions of the facility which do not have the principal purpose of pollution control. This is discussed in section 2 of this report.

The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional Departmental accounting review, to determine if costs were properly allocated. This review was performed under contract with the Department by the accounting firm of Symonds, Evans & Larson (see attached report).

Other than the adjustments to the claimed facility cost referenced in section 2, the cost allocation review of this application has identified no issues to be resolved and confirms the cost allocation as submitted in the application.

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

5. Summation

- a. The facility was constructed in accordance with all regulatory deadlines.
- b. The facility is eligible for final tax credit certification in that the sole purpose of the facility is to reduce air pollution.
- c. The facility complies with 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 \$958,105 with 100% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. TC-4300.

Dennis E. Cartier  
SJO Consulting Engineers

October 24, 1994



**SYMONDS, EVANS & LARSON**  
CERTIFIED PUBLIC ACCOUNTANTS

Environmental Quality Commission  
811 S.W. Sixth Avenue  
Portland, Oregon 97204

At your request, we have performed certain agreed-upon procedures with respect to Neste Resins Corporation's (the Company's) Pollution Control Tax Credit Application No. 4300 (the Application) filed with the State of Oregon, Department of Environmental Quality (the DEQ) for the Air Pollution Control Facility in Springfield, Oregon (the Facility). The Application has a claimed Facility cost of \$981,109. Our procedures, findings and conclusion are as follows:

Procedures:

1. We read the Application, the Oregon Revised Statutes on Pollution Control Facilities Tax Credits – Sections 468.150 through 468.190 (the Statutes), and the Oregon Administrative Rules on Pollution Control Tax Credits – Sections 340-16-005 through 340-16-050 (OAR's).
2. We reviewed certain documents which support the cost of the Facility.
3. We discussed the Application, the Statutes and OAR's with Brian Fields of the DEQ and Dennis Cartier of SJO Consulting Engineers, Inc., a contractor for the DEQ.
4. We discussed certain components of the Application with various Company personnel, including Joseph Anderson, Larry Lowenkron, Cathy Bates and Marlin Franssen.
5. We toured the Facility with Mr. Anderson
6. We requested that Company personnel confirm the following:
  - a) There were no related parties or affiliates of the Company which had billings which were included in the Application.
  - b) The capacity of the Facility is adequate for the Company's present operations and does not include significant capacity for potential future operations.

**SYMONDS, EVANS & LARSON**  
CERTIFIED PUBLIC ACCOUNTANTS

- c) The Company does not presently derive any income or cost savings from operating the Facility.
- d) In accordance with ORS Section 468.155(2)(e), the Facility is not a "replacement or reconstruction of all or a part of any facility for which a pollution control facility certificate has previously been issued. . ."
- e) All supply costs included in the Application related to the installation of the Facility and did not include ongoing operating supplies.
- f) All internal labor costs included in the Application related directly to the installation of the Facility and were not related to maintenance and repairs.
- g) The estimated percentages used to compute the cost of payroll for Mr. Anderson and Roger Smith that was allocated to the Facility are true and accurate to the best of the Company personnel's knowledge and belief.
- h) No previously existing equipment was sold as a result of the installation of the Facility.

**Findings:**

1. through 5.

No matters came to our attention that caused us to believe that the Application should be adjusted, except for \$23,004 of non-allowable costs related to the following:

<u>Description</u>	<u>Amount</u>
Capitalized interest	\$ 5,162
Spare parts	<u>17,842</u>
Total non-allowable costs	<u>\$ 23,004</u>

As a result, the allowable costs for the Application should be reduced to \$958,105.

6. Company personnel confirmed in writing that such assertions were true and correct.

**Conclusion:**

Because the above procedures do not constitute an audit conducted in accordance with generally accepted auditing standards, we do not express an opinion on any of the items referred to above. In connection with the procedures referred to above, no matters came to our attention that caused us to believe that the specified items should be adjusted, except as noted. Had we performed

**SYMONDS, EVANS & LARSON**  
CERTIFIED PUBLIC ACCOUNTANTS

additional procedures or had we conducted an audit of the financial statements of the Company in accordance with generally accepted auditing standards, other matters might have come to our attention that would have been reported to you. This report relates only to the items specified above and does not extend to any financial statements of the Company, taken as a whole.

This report is solely for the use of the State of Oregon Environmental Quality Commission and Department of Environmental Quality in evaluating the Company's Pollution Control Tax Credit Application No. 4300 with respect to its Air Pollution Control Facility in Springfield, Oregon and should not be used for any other purpose.

*Symonds, Evans & Larson*

November 10, 1994

**STATE OF OREGON**  
**Department of Environmental Quality**  
**TAX RELIEF APPLICATION REVIEW REPORT**

---

**1. Applicant**

Oregon Steel Mills, Inc.  
P O Box 2760  
Portland, Oregon 97208-0363

The applicant owns and operates a steel mill, which includes a melt shop and plate rolling mill, in Portland, Oregon. Application was made for tax credit for a baghouse dust glassification plant.

**2. Description of Facility**

The facility is an electric arc furnace (EAF) baghouse dust glassification plant which processes mineral powder, classified as a K061 hazardous waste, into non-leachable glass products. The glassification process receives EAF dust directly from the baghouse blends the dust with other ingredients and melts the mixture in an electric glass furnace. The glass product is then granulated and screened prior to sale. The facility utilizes 8,000 tons per year of EAF dust. The facility consists of the following:

- a. 24 storage and processing bins;
- b. 3 electric glass furnaces;
- c. Wet granulation system;
- d. Wet frit storage building;
- e. Drying system
- f. Screening and classification system;
- g. Finished product storage and shipping area;
- h. Electrical systems including transformers, electronic controls and instruments;
- i. Computer process control and control room

## Claimed facility costs include:

a. Machinery		7,614,361
Design	1,682,764	
Construction management	542,463	
Mechanical/structural	5,212,613	
Misc.	176,521	
b. Furnace		1,048,142
Design	284,604	
Construction management	43,239	
Mechanical/structural	720,299	
Misc.		
c. Electrical		3,165,914
Design	753,159	
Construction management	110,769	
Mechanical/structural	2,226,333	
Misc.	75,653	
d. Building		1,060,990
Design	100,000	
Construction management		
Site prep/building	960,990	
Misc.		
Total claimed facility cost		\$12,889,407

An independent accountant's certification of costs was provided.

3. Procedural Requirements

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

The facility met all statutory deadlines in that:

- a. Installation of the facility was started on August 1, 1991.
- b. The facility was placed into operation on December 1, 1992.
- c. The application for tax credit was submitted to the Department on May 27, 1994, within two years of substantial completion of the facility.
- d. The application was found to be technically complete and was filed on September 15, 1994.

4. Evaluation of Application

- a. The facility is eligible because the sole purpose of the claimed facility is to reduce a substantial quantity of solid waste through recycling.
- 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.

This factor is applicable because the facility uses a material which would other wise be solid waste as feedstock to produce a glass product.

The percent allocable by using this factor would be 100%.

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

- A) The administrative rule amendments adopted January 29, 1993 establish a separate set of standards for calculation of return on investment for pollution control facilities which are "integral to the applicant's business".

The applicant has reviewed the four factors in OAR 340-16-030(g) as they relate to the EAF baghouse dust glassification plant. Based upon that review they conclude that the claimed pollution control facility is not integral to the operation of the steel mill. Pollution control facilities represent less than 25% of the total assets of the mill. The claimed facility has reduced the gross revenues of the mill. And, the operating expenses of all claimed or certified facilities are less than 50% of the operating expenses of the mill.

It is the staff recommendation that the claimed pollution control facility not be considered integral to the operation of the business

B) Actual Cost of Claimed Facility

The Environmental Quality Commission has directed that tax credit applications at or above \$250,000 go through an additional accounting review to determine if costs were properly allocated. This review was performed under contract by the accounting firm of Coopers & Lybrand. The cost allocation review of this application has identified \$871,939 of non allowable costs as outlined in the attached letter. This amount has been subtracted from the facility costs.

Original cost of claimed facility	\$12,889,407
Total ineligible cost	\$871,939
Adjusted cost of claimed facility	\$12,017,469

C) Annual Percentage Return on Investment

The annual percentage return on investment was calculated by comparing the calculated average annual income and operating expenses for the claimed facility. This calculation produces an average annual cash flow for this facility of \$467,703. This cash flow and "adjusted cost of the claimed facility" result in a return on investment factor of 25.69%.

The applicant has claimed a fifteen year useful life. As a result of using Table 1, OAR 340-16-030, for a fifteen year useful life, the return on investment for the claimed facility is 0% and the percent allocable is 100%.

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

The applicant considered other methods for processing recyclable materials and determined that this method was environmentally acceptable and economically feasible. It is the Department's determination that the proposed facility is an acceptable method of achieving the material recovery objective.

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

There are no savings, other than those considered in (2) above, associated with the purchase or use of this facility.

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

There are no other factors to consider in establishing the actual cost of the facility properly allocable to material recovery from solid waste.

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 sole purpose of the facility is to reduce a substantial quantity of solid waste through recycling.
- c. The facility complies with DEQ statutes 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 the findings, it is recommended that a Pollution Control Facility certificate bearing the cost of \$12,017,469 with 100% allocable to pollution control be issued for the facility claimed in Tax Credit Application No. T-4243

# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item C  
December 2, 1994 Meeting

<b>Title:</b> Acid Rain, Stratospheric Ozone Protection, Radionuclide NESHAP		
<b>Summary:</b> These proposed rules would adopt by reference the Federal rules for acid rain, stratospheric ozone protection and radionuclide NESHAP. Adoption of these rules would provide the Department with the legal authority to place these Federal regulations in federal operating permits, as required under Title V of the 1991 Clean Air Act Amendments.		
<b>Department Recommendation:</b> The Department recommends that the Commission adopt these rules.		
<i>Pat Easton</i> Report Author	<i>Gregory A. Gre</i> Division Administrator	<i>Russell Taylor</i> Director

November 15, 1994

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

- ADAPTATION BY  
REF.  
- REF'S FOR TITLE V  
PROGRAM



ADDENDUM

Hazardous Air Pollutants

Emission Standards and Procedural  
Requirements for Hazardous Air  
Contaminants Regulated Prior to  
the 1990 Amendments to  
the Federal Clean Air Act

Federal Regulations Adopted by Reference  
340-32-5520

(1) Except as provided in section (2) of this rule, 40 CFR Part 61, Subparts A through F, I, J, L, N through P, V, and Y through FF ( July 1, 1993) are by this reference adopted and incorporated herein.

(2) Where "Administrator" or "EPA" appears in 40 CFR Part 61, "Department" shall be substituted, except in any section of 40 CFR Part 61 for which a federal rule or delegation specifically indicated that authority will not be delegated to the state.

(3) If a discrepancy is determined to exist between OAR 340-32-5530 through 340-32-5650 and the applicable sections of 40 CFR Part 61, 40 CFR Part 61 shall apply.

Emission Standards for Airborne Radionuclides  
340-32-5585

(1) Emission Standard for Airborne Radionuclide Emission From Facilities Licensed by the Nuclear Regulatory Commission.

(a) Applicability

(A) This rule applies to any federal operating permit source which is a major source under OAR 340-28-110(45) that is also subject to 40 CFR 61.100.

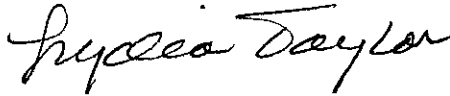
State of Oregon  
Department of Environmental Quality

Memorandum<sup>†</sup>

Date: November 15, 1994

To: Environmental Quality Commission

From: Lydia Taylor, Interim Director



Subject: Agenda Item C, December 2, 1994, EQC Meeting

Acid Rain, Stratospheric Ozone Protection, Radionuclide NESHP

**Background**

On August 11, 1994, the Director authorized the Air Quality Division to proceed to a rulemaking hearing on proposed rules which would adopt Federal regulations by reference allowing DEQ to place acid rain, stratospheric ozone protection, and radionuclide regulations in Federal Operating Permits.

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on September 1, 1994. On August 18, 1994, the Hearing Notice and informational materials were mailed to the mailing list of those persons who have 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.

A Public Hearing was held September 20, 1994 in Portland, Oregon with Patti Seastrom serving as Presiding Officer. The Presiding Officer's Report (Attachment C) indicates that no written or oral testimony was presented at the hearing.

Written comment was received through September 21, 1994 at 5:00 p.m. No written comments were received and no modifications were made to the rules following the public comment period.

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 how the rule will work and how it is proposed to be implemented, and a recommendation for Commission action.

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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).

Memo To: Environmental Quality Commission  
Agenda Item C  
December 2, 1994 Meeting  
Page 2

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

Approval of the Department's Federal Operating Permit program is contingent upon the Department's legal authority to place all applicable federal regulations into these permits. This proposed adoption by reference will give the Department that authority.

**Relationship to Federal and Adjacent State Rules**

These rules are proposed for adoption by reference, and are therefore identical to federal requirements.

**Authority to Address the Issue**

ORS 468.020, ORS 468A.310(2)

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

Each of the rules proposed for adoption will fulfill requirements specified by EPA for an approvable Federal Operating Permit Program. Because EPA has indicated it will only allow a narrow margin of flexibility for rules intended to fulfill these requirements, and because the federal requirements will only apply to federal operating permit sources, adoption by reference is the simplest and most expeditious alternative to meet the EPA requirements.

The proposed rules were presented to the Department's Industrial Source Advisory Committee. The Committee had no objections to the rules as proposed. A list of committee members is included as Attachment D.

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

The Acid Rain rules proposed for adoption require electrical generating units of a certain size to limit SO<sub>2</sub> emissions to a baseline rate. The PGE Boardman plant is the only existing source in Oregon affected by this rule; two new electrical generating units near or under construction will become affected sources once electrical generation

Memo To: Environmental Quality Commission  
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commences. These acid rain rules are not new rules, the federal rules have been in effect for some time now. With this proposed rule adoption, the Department will assume the role of permitter. As required in the federal rules, EPA will retain compliance monitoring and enforcement responsibilities.

The Stratospheric Ozone Protection rules proposed for adoption are numerous and varied. Generally, the rules limit the manufacture, sale, distribution, or use of any specified ozone-depleting substances; require labelling of all products that contain or are manufactured with a regulated ozone-depleting substance; and establishes standards and requirements for servicing motor vehicle air conditioners. These rules are proposed for adoption for **major** sources only.

The Airborne Radionuclide Emissions rules will authorize the Department to include applicable federal standards for emissions of airborne radionuclides in Federal Operating Permits. The Department estimates there are three or four sources that currently will be affected by the proposed rules.

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

No comments were received and no changes were made to the proposed rules.

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

All of the proposed rules will be implemented through the Department's existing Federal Operating Permit program.

#### **Recommendation for Commission Action**

It is recommended that the Commission adopt the rules/rule amendments regarding acid rain, stratospheric ozone protection, and radionuclide NESHAP as presented in Attachment A of the Department Staff Report.

**Attachments**

- A. Rules Proposed for Adoption
- B. Supporting Procedural Documentation:
  - 1. Legal Notice of Hearing
  - 2. Public Notice of Hearing (Memo to Interested Persons)
  - 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 Officer's Report on Public Hearing
- D. Advisory Committee Membership
- E. Rule Implementation Plan

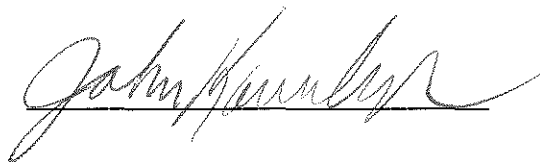
**Reference Documents (available upon request)**

Code of Federal Regulations, Title 40, Parts 72, Acid Rain, 82, Control of Ozone Depleting Chemicals, and 61, Subpart I, Emission Standards for Airborne Radionuclides, July 1, 1994.

Approved:

Section:

Division:



Report Prepared By: Patti Seastrom

Phone: 229-5143

Date Prepared: November 15, 1994

## DIVISION 22

### GENERAL GASEOUS EMISSIONS

#### New Rules Proposed for Adoption

#### Acid Rain

##### Federal Regulations Adopted By Reference

###### 340-22-075

- (1) **40 CFR Part 72 (July 1, 1994)** is by this reference adopted and incorporated herein, for purposes of implementing an acid rain program that meets the requirements of title IV of the Clean Air Act. The term "permitting authority" shall mean the Oregon Department of Environmental Quality and the term "Administrator" shall mean the Administrator of the United States Environmental Protection Agency.
- (2) If the provisions or requirements of **40 CFR Part 72** conflict with or are not included in OAR 340-28-2100 through 340-28-2740, the **Part 72** provisions and requirements shall apply and take precedence.

#### Control of Ozone Depleting Chemicals

##### Federal Regulations Adopted By Reference

###### 340-22-420

- (1) Except as provided in Section (2) of this rule, **40 CFR Part 82 (July 1, 1994)** is by this reference adopted and incorporated herein for major sources only, for purposes of implementing a stratospheric ozone protection program that meets the requirements of title VI of the Clean Air Act.
- (2) Where "Administrator" or "EPA" appears in **40 CFR Part 82**, "Department" shall be substituted, except in any section of **40 CFR Part 82** for which a federal rule or delegation specifically indicates that authority will not be delegated to the state.
- (3) Where a discrepancy is determined to exist between OAR 340-22-405 through 340-22-415 and **40 CFR Part 82**, **40 CFR Part 82** will apply.

## DIVISION 32

### HAZARDOUS AIR POLLUTANTS

#### Emission Standards and Procedural Requirements for Hazardous Air Contaminants Regulated Prior to the 1990 Amendments to the Federal Clean Air Act

#### **Federal Regulations Adopted by Reference**

##### **340-32-5520**

- (1) Except as provided in section (2) of this rule, **40 CFR Part 61, Subparts A through F, I, J, L, N through P, V, and Y through FF** (July 1, 1993) are by this reference adopted and incorporated herein.
- (2) Where "Administrator" or "EPA" appears in **40 CFR Part 61**, "Department" shall be substituted, except in any section of **40 CFR Part 61** for which a federal rule or delegation specifically indicates that authority will not be delegated to the state.
- (3) If a discrepancy is determined to exist between OAR 340-32-5530 through 340-32-5650 and the applicable sections of **40 CFR Part 61**, **40 CFR Part 61** shall apply.

#### **New Rule Proposed for Adoption**

#### **Emission Standards for Airborne Radionuclides**

##### **340-32-5585**

Emission Standard for Airborne Radionuclide Emissions From Facilities Licensed by the Nuclear Regulatory Commission.

- (1) Applicability.
  - (a) This rule applies to any stationary source which is a major source under OAR 340-28-110(59) and has been issued a radioactive material license by the Nuclear Regulatory Commission or the Oregon Health Division, as administrator of an Agreement State program.
  - (b) This rule does not apply to any stationary source identified by (A) in this subparagraph which possesses and uses radionuclides only in the form of sealed sources.
- (2) Requirements. Stationary sources subject to this rule shall comply with **40 CFR Part 61, Subpart I**, as adopted under OAR 340-32-5520.
- (3) Definitions. As used in this rule:
  - (a) "Agreement State" means any state with which the U.S. Nuclear Regulatory Commission or the U.S. Atomic Energy Commission has entered into an effective agreement under subsection 274b. of the Atomic Energy Act of 1954, as amended (73 Stat. 689).
  - (b) "Radioactive material" means any solid, liquid, or gas which emits radiation

spontaneously.

- (c) "Sealed source" means radioactive material that is permanently bonded or fixed in a capsule or matrix designed to prevent release and dispersal of the radioactive material under the most severe conditions which are likely to be encountered in normal use and handling.



# 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:** 9/20/94      **TIME:** 11 a.m.      **LOCATION:** DEQ Headquarters, Room 10A

**HEARINGS OFFICER(s):** Patti Seastrom

**STATUTORY AUTHORITY:** ORS 468.020, ORS 468A.310(2)

**ADOPT:** OAR 340-22-075, OAR 340-22-420 and OAR 340-32-5585

**AMEND:** OAR 340-32-5520

**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:**

This rulemaking adopts by reference Federal regulations concerning acid rain, stratospheric ozone protection and airborne radionuclide emissions. These regulations would apply only to sources affected by the Department's Federal Operating Permit Program. Adoption of these regulations would provide the Department with the required legal authority to place acid rain, stratospheric ozone protection, and airborne radionuclide emission regulations in Federal Operating Permits.

**LAST DATE FOR COMMENT:** September 21, 1994, 5:00 p.m.

**DATE PROPOSED TO BE EFFECTIVE:** Upon adoption by the Environmental Quality Commission and subsequent filing with the Secretary of State.

**AGENCY RULES COORDINATOR:** Chris Rich, (503) 229-6775  
**AGENCY CONTACT FOR THIS PROPOSAL:** Patti Seastrom  
**ADDRESS:** Air Quality Division  
811 S. W. 6th Avenue  
Portland, Oregon 97204  
**TELEPHONE:** (503) 229-5143  
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

9/15/94  
Date

Date: August 15, 1994

To: Interested and Affected Public

Subject: Rulemaking Proposal - Acid Rain, Stratospheric Ozone Protection and Airborne Radionuclide Emissions

This memorandum contains information on a proposal by the Department of Environmental Quality (the Department) to adopt new rules regarding acid rain, stratospheric ozone protection and airborne radionuclide emissions. This proposal would adopt by reference the existing federal regulations which govern acid rain production, stratospheric ozone protection and airborne radionuclide emissions. These regulations would apply only to sources affected by the Department's Federal Operating Permit program (FOP). Adoption of these regulations would provide the Department with the legal authority to place acid rain, stratospheric ozone protection, and airborne radionuclide emission regulations in Federal Operating permits.

### What's in this Package?

Attachments to this memorandum provide details on the proposal as follows:

- |              |  |
|--------------|--|
| Attachment A | The actual language of the proposed rules.   |
| Attachment B | The "Legal Notice" of the Rulemaking Hearing. (required by ORS 183.335)  |
| Attachment C | The official Rulemaking Statements for the proposed rulemaking action. (required by ORS 183.335)                 |
| Attachment D | The official statement describing the fiscal and economic impact of the proposed rule. (required by ORS 183.335) |

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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).

Attachment E            A statement providing assurance that the proposed rules are consistent with statewide land use goals and compatible with local land use plans.

## Hearing Process Details

You are invited to review these materials and present written or oral comment in accordance with the following:

**Date:**            September 20, 1994  
**Time:**            11:00 p.m.  
**Place:**            811 SW Sixth Avenue, Room 10A

**Deadline for submittal of Written Comments:** September 21, 1994, 5:00 p.m.

Patti Seastrom will be the Presiding Officer at this hearing. Following close of the public comment period, the Presiding Officer will prepare a report which summarizes the oral testimony presented and identifies written comments submitted. The Environmental Quality Commission (EQC) will receive a copy of the Presiding Officer's report and all written comments submitted. The public hearing will be tape recorded, but the tape will not be transcribed.

If you wish to be kept advised of this proceeding and receive a copy of the recommendation that is presented to the EQC for adoption, you should request that your name be placed on the mailing list for this rulemaking proposal.

## What Happens After the Public Comment Period Closes

The Department will review and evaluate comments received, and prepare responses. Final recommendations will then be prepared, and scheduled for consideration by the EQC.

The EQC will consider the Department's recommendation for rule adoption during one of their regularly scheduled public meetings. The targeted meeting date for consideration of this rulemaking proposal is December 2, 1994. This date may be delayed if needed to provide additional time for evaluation and response to testimony received in the hearing process. You will be notified of the time and place for final

Memo To: Interested and Affected Public  
August 15, 1994  
Page 3

EQC action if you present oral testimony at the hearing or submit written comment during the comment period or ask to be notified of the proposed final action on this rulemaking proposal.

The EQC expects testimony and comment on proposed rules to be presented **during** the hearing process so that full consideration by the Department may occur before a final recommendation is made. The EQC may elect to receive comment during the meeting where the rule is considered for adoption; however, such comment will be limited to the effect of changes made by the Department after the public comment period in response to testimony received. The EQC strongly encourages people with concerns regarding the proposed rule to communicate those concerns to the Department at the earliest possible date so that an effort may be made to understand the issues and develop options for resolution where possible.

## **Background on Development of the Rulemaking Proposal**

### **What is the problem**

The Department is seeking approval by Environmental Protection Agency (EPA) of its FOP program. As a condition of the pending approval of that program, the Department must secure legal authority to place all applicable federal regulations in its Federal Operating permits.

### **How does this proposed rule help solve the problem**

Adoption of these federal regulations regarding acid rain, stratospheric ozone protection and airborne radionuclide emissions provides the Department with the authority to place the appropriate federal regulations in its FOP program.

### **How was the rule developed**

The federal regulations are being adopted verbatim, with the exception that stratospheric ozone protection rules and airborne radionuclide emission rules will only apply to FOP program sources. The Department's authority to implement these rules is limited to FOP

sources. The federal regulations still apply to other affected sources, but the authority to implement the rules as to these sources will remain with EPA.

The proposed rules were presented to the Industrial Source Advisory Committee at its April and July meetings. The committee concurred with the Department's approach to this rule adoption. Adoption by reference language was developed in accordance with guidance from EPA.

#### **How does it affect the public, regulated community, other agencies**

Since the federal regulations are already in place and currently apply to affected sources, no additional regulatory burden will result from this rule adoption. What will change after these rules are adopted is the authority to implement and enforce these regulations will be delegated by EPA to the Department.

#### **How does the rule relate to federal requirements or adjacent state requirements**

Acid rain, stratospheric ozone protection and airborne radionuclide emission proposed rules adopt the federal regulations unchanged.

The proposed acid rain regulations limit SO<sub>2</sub> emissions to a specified allowance. Existing state regulations currently place SO<sub>2</sub> emissions limitation on sources. The acid rain restriction will stand alone from the state emission limit, and therefore the proposed acid rain rules will not affect existing state regulations.

The proposed stratospheric ozone protection regulations affect a broader range of sources than existing state rules and statutes. Existing state rules will remain in effect for sources not subject to the Federal Operating Permit Program.

The proposed airborne radionuclide emissions rules also affect a broader range of sources than existing state rules and statutes. However, since they adopt existing federal regulations by reference, they do not differ from federal regulations in regulatory burden.

#### **How will the rule be implemented**

Memo To: Interested and Affected Public  
August 15, 1994  
Page 5

The proposed rules will be implemented through the Department's existing FOP program upon delegation by EPA.

**Are there time constraints**

Yes. EPA is requiring states to have the necessary legal authority to place acid rain, stratospheric ozone, and airborne radionuclide emission regulations in Federal Operating Permits by January 1, 1995.

**Contact for more information**

If you would like more information on this rulemaking proposal, or would like to be added to the mailing list, please contact:

**Acid rain or Stratospheric Ozone Protection:**

Patti Seastrom  
Air Quality Division  
Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, OR 97204-1390

(503) 229-5143  
1-800-452-4011 (in Oregon)

**Radionuclides:**

John Kinney  
Air Quality Division  
Department of Environmental Quality  
811 S.W. Sixth Avenue  
Portland, OR 97204-1390

(503) 229-6819  
1-800-452-4011 (in Oregon)

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Acid Rain, Stratospheric Ozone Protection  
and  
Airborne Radionuclide Emissions

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 468A.310(2)

2. Need for the Rule

Title V of the Clean Air Act Amendments of 1990 requires that the Department have statutory and regulatory authority to place acid rain, stratospheric ozone protection and airborne radionuclide emissions regulations in Federal Operating Permits. Statutory authority is contained in ORS 468.310(2). Adoption of these rules would provide the necessary regulatory authority. EPA has required that states have such authority in place by January 1, 1995.

3. Principal Documents Relied Upon in this Rulemaking

Federal Operating Permit Program Submittal, November 15, 1993.

Acid Rain: **40 CFR, Parts 72 through 76**

Memorandum from Lydia Wegman, EPA Office of Air Quality Planning and Standards, May 21, 1993 to EPA Region Air Divisions, "Title IV-Title V Interface Guidance for States".

Stratospheric Ozone Protection: **40 CFR, Part 82**

ORS 468A.625 through 468A.660

Airborne Radionuclide Emissions: **40 CFR Part 61, Subpart I**

4. Advisory Committee Involvement

The proposed acid rain and stratospheric ozone protection rules were brought before the Industrial Source Advisory Committee at its April, 1994, meeting. The committee concurred with the rule adoption as proposed. The committee also requested that the Department study the resources required to adopt and implement these rules for all sources, not just Federal Operating Permit Program sources.

The airborne radionuclide emission rules were presented to the Industrial Source Advisory Committee at its July, 1994, meeting. The committee also concurred with the rule adoption as proposed.



State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Acid Rain, Stratospheric Ozone Protection  
and  
Airborne Radionuclide Emissions from NRC-Licensed Sources

Fiscal and Economic Impact Statement

**Introduction**

This proposed rulemaking is not expected to have a significant fiscal and economic impact. The rules proposed for adoption simply adopt federal rules already being implemented. No new requirements will be added.

**Acid Rain/Stratospheric Ozone Protection** -- This rule adoption will allow State enforcement of the federal acid rain and stratospheric ozone protection regulations for sources subject to the Department's Federal Operating Permit program.

**Airborne Radionuclide Emissions** -- The proposed rules will authorize the Department to include applicable federal standards for emissions of airborne radionuclides in Federal Operating Permits (FOPs). The Department proposes adopting these rules only as applicable to FOP program sources. The Department does not have the resources to implement and enforce these rules for a broader population of sources. The Department estimates there are three or four FOP program sources that currently will be affected by the proposed rules.

**General Public**

There would be no economic impact to the general public as a result of these proposed rules.

**Small Business**

**Acid Rain** -- There will be no impact on small business as a result of this rule adoption.

**Stratospheric Ozone Protection** -- Retailers and manufacturers of goods containing controlled substances are already subject to federal law. Similarly, businesses that service motor vehicle air conditioners are affected sources, and are already required by federal law to comply. Since no new requirements are added in this proposed rulemaking, there is no additional impact on small business.

**Airborne Radionuclide Emissions** -- There should be no significant economic impact on small businesses as a result of these proposed rules. Small businesses must both emit airborne radionuclides and be subject to the Federal Operating Permit program for the proposed rules to apply. The Department anticipates this circumstance to be rare. However, if a small business does meet both conditions, it must comply with equivalent federal regulations anyway. The proposed rules ease regulatory burden by consolidating air emissions regulation under one authority.

### Large Business

**Acid Rain** -- The federal acid rain rules proposed for adoption apply to certain electric utilities. The PGE Boardman plant is the only affected source in Oregon. Two additional electrical generating plants under construction will become affected sources upon completion. From the point of view that no additional rules are proposed, this rulemaking will not result in any additional impact on large business. The Department does not anticipate charging an acid rain permit application fee in addition to the Federal Operating Permit application fee.

**Stratospheric Ozone Protection** -- Manufacturers of controlled substances are most directly impacted by the federal regulations. As no additional rules are proposed for adoption, this rulemaking will not result in additional impacts on large business.

**Airborne Radionuclide Emissions** -- There should be no significant economic impact on large businesses as a result of these proposed rules. Large businesses, like small businesses, must both emit airborne radionuclides and be subject to the Federal Operating Permit program for the proposed rules to apply. The Department anticipates this circumstance will be rare. Currently, the Department has identified only three such sources. However, if a large business does meet both conditions, it must comply with equivalent federal regulations anyway. The Department intends to request delegation of federal authority to implement and enforce equivalent federal regulations. The proposed rules ease regulatory burden by consolidating air emissions regulation under one authority.

### Local Governments

This rulemaking will not affect local governments.

## State Agencies

### **Acid Rain/Stratospheric Ozone Protection:**

**DEQ** -- Acid rain and stratospheric ozone protection rules will be implemented through the Department's Federal Operating Permit program. These rules will be just a few of many rules applicable to sources permitted under this program. The additional workload resulting from this rule adoption will be absorbed by staffing and resources established to implement the Federal Operating Permit program.

**Other Agencies** -- LRAPA will be the administering agency in Lane County for stratospheric ozone protection rules. There are no acid rain affected sources in Lane County. Stratospheric ozone protection rules will be implemented through LRAPA's existing Federal Operating Permit program, relying on staff and resources committed to that program.

### **Airborne Radionuclide Emissions:**

**DEQ** -- The Department will implement the proposed rules through the Federal Operating Permit program. The Department estimates that the workload resulting from these rules will be minimal since the rules will apply to few sources. This workload will be absorbed by staffing and resources established to implement the Federal Operating Permit program.

**Other Agencies** -- LRAPA will be the administering agency in Lane County for airborne radionuclide emissions rules. There are no known FOP sources in Lane County that emit airborne radionuclides. However, these rules will be implemented through LRAPA's existing Federal Operating Permit program, relying on staff and resources committed to that program.

## Assumptions

This analysis assumes that sources are in compliance with existing federal rules. Sources which are not in compliance may be subject to additional costs due to an increase in compliance assurance activities under the federal operating permit program.

Reporting determinations of compliance with all air emissions requirements to a state agency through the existing requirement of a Federal Operating Permit is less costly than reporting compliance with some requirements to a state agency and compliance with other requirements to a federal agency.

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Acid Rain, Stratospheric Ozone Protection  
and  
Airborne Radionuclide Emissions from NRC-Licensed Sources

## Land Use Evaluation Statement

**1. Explain the purpose of the proposed rules.**

The proposed adoption by reference of federal acid rain and stratospheric ozone protection rules, for Federal Operating Permit Program sources, will allow the Department to comply with EPA requirements for an approvable Title V program.

The National Emissions Standards for Hazardous Air Pollutants (NESHAPs) for airborne radionuclides apply to some FOP program sources in Oregon. The Department proposes emission rules for airborne radionuclides to provide authority to include conditions, consistent with applicable radionuclide NESHAPs, in Federal Operating Permits. Such authority will allow the Department to comply with EPA requirements for an approvable Title V program.

**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

**a. If yes, identify existing program/rule/activity:**

Air Quality Federal Operating Permit Program

**b. If yes, do the existing statewide goal compliance and local plan compatibility procedures adequately cover the proposed rules?**

Yes  No  (if no, explain):

The proposed rules would be implemented through the Department's existing Federal Operating Permit Program. A land use compatibility statement must be approved by the affected local government before a permit can be issued.

c. If no, apply the following criteria to the proposed rules.

Not applicable.

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.

Not applicable.

Gregory A. Lee  
Division

Robert Lyle  
Intergovernmental Coord.

8/10/94  
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?*

The rules proposed for adoption are the federal rules.

2. *Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?*

not applicable

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?*

not applicable

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?*

not applicable

5. *Is there a timing issue which might justify changing the time frame for implementation of federal requirements?*

not applicable

6. *Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?*

not applicable

7. *Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)*

not applicable

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?*

not applicable

10. *Is demonstrated technology available to comply with the proposed requirement?*

not applicable

11. *Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?*

not applicable

State of Oregon  
Department of Environmental Quality

Memorandum

Date: September 21, 1994

**To:** Environmental Quality Commission  
**From:** Patti Seastrom  
**Subject:** Presiding Officer's Report for Rulemaking Hearing

Hearing Date and Time: September 20, 1994, 11 a.m.  
Hearing Location: 811 S.W. Sixth Avenue, Rm. 10A  
Portland, Oregon

Title of Proposals: Hardboard Rule Revision  
Acid Rain Rule Adoption  
Stratospheric Ozone Protection Rule Adoption  
Radionuclide Rule Adoption

The rulemaking hearing on the above titled proposals was convened at 11 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.

One person was in attendance and chose to submit written comments by the deadline rather than testify.

Prior to closing the hearing, staff responded to questions from the audience regarding the hardboard rule revisions and discussed analytical strategies.

The hearing was closed at 11:45 a.m.



Oregon Department of Environmental Quality  
Air Quality Industrial Source Advisory Committee III  
Members

Chair

Judge Jacob Tanzer  
Ball, Janik & Novack  
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Ex Officio

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State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Acid Rain/Stratospheric Ozone Protection/Radionuclide NESHAP

## Rule Implementation Plan

### **Summary of the Proposed Rule**

The proposed rules adopt by reference federal requirements for acid rain, stratospheric ozone protection, and radionuclides. The rules will apply to major sources only.

### **Proposed Effective Date of the Rule**

The rules will become effective upon adoption.

### **Proposal for Notification of Affected Persons**

Affected sources will be notified through the Federal Operating Permit application process.

### **Proposed Implementing Actions**

Federal Operating Permit application forms have already been modified to include these new requirements. Affected sources will have to comply with the federal requirements as contained in the CFR.

### **Proposed Training/Assistance Actions**

Air quality managers have been briefed on the proposed rules. Inspector training will be conducted following rule adoption.

# Environmental Quality Commission

- Rule Adoption Item
- Action Item
- Information Item

Agenda Item D  
December 2, 1994 Meeting

**Title:**

Adoption of Solid Waste Rule Amendments: Criteria for Financial Assurance for Closure and Post-Closure Care

**Summary:**

The proposed rule amendments would implement changes in provision of financial assurance required by 1993 Legislation and integrate those with federal regulations. They would establish criteria and procedures for provision of financial assurance for closure, post-closure care and corrective action by permittees of solid waste land disposal sites. They would also require permittees to prepare two kinds of closure and post-closure plans in order to estimate costs of closure and post-closure maintenance.

**Department Recommendation:**

Adoption of the proposed rules as presented in Attachment A.

 Report Author	 Division Administrator	 Director
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November 14, 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: November 15, 1994

To: Environmental Quality Commission

From: Lydia Taylor, Interim Director *Lydia Taylor*

Subject: Agenda Item D, December 2, 1994, EQC Meeting.

Solid Waste Rule Amendments: Criteria for Financial Assurance for  
Closure and Post-Closure Care

**Background**

On August 11, 1994, the Director authorized the Waste Management and Cleanup Division to proceed to a hearing on proposed rules and rule amendments which would establish criteria and procedures for provision of financial assurance for closure, post-closure care and corrective action by permittees of solid waste land disposal sites. The Rulemaking Proposal also specified that permittees must prepare two kinds of closure and post-closure plans in order to estimate costs of closure and post-closure maintenance.

Pursuant to the authorization, hearing notice was published in the Secretary of State's Bulletin on September 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 August 24 and 25, 1994.

Public Hearings were held October 4, 5 and 6, 1994, in Bend, Portland, The Dalles, Medford and Eugene with Don Bramhall, Joan Grimm, Wayne Thomas, Charles Hensley and Bob Barrows, respectively, serving as Presiding Officers. The Presiding Officers' Reports (Attachment C) summarize the oral testimony presented at the hearings.

Written comment was received through 5 p.m., October 12, 1994. A list of persons providing written comments is included as Attachment D. (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).

Memo To: Environmental Quality Commission  
Agenda Item D  
December 2, 1994 Meeting  
Page 2

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

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**

After a landfill (or a landfill unit or "cell") has reached its capacity and cannot receive further solid waste, it must be closed. Closure entails placing a permanent cover or "cap" over the landfill. This consists of a layer of compacted soil and/or other material to keep rainwater out of the landfill and thus prevent creation of leachate, and another layer of soil planted with vegetation to prevent erosion. After closure, the owner or operator is required to monitor the landfill during 30 years of "post-closure care." This may include groundwater monitoring (to ensure no pollution from leachate is occurring), monitoring of methane gas creation and maintenance of monitoring systems and the cap. During closure and post-closure care periods the owner/operator does not receive revenue from disposal fees from that cell. Therefore an owner/operator is required to provide financial assurance in advance through an instrument (bonds, creation of a trust fund, etc.) to guarantee that sufficient funds will be available when needed for closure and post-closure care activities.

Since January 1984, permittees of solid waste land disposal sites have been required by state law to apply for a "closure permit" at least five years before the anticipated closure of the site. This permit is intended to ensure that sites are closed with proper environmental engineering and do not constitute an environmental problem after closure. One of the requirements of a closure permit was a financial assurance plan to cover the costs of properly closing the site and providing post-closure maintenance. Federal criteria (40 CFR Part 258, or "Subtitle D") established new financial assurance requirements for municipal solid waste landfills. DEQ requested certain additional authorities from the 1993 Legislature to fully implement the federal criteria. 1993 Senate Bill 1012 (SB 1012) modified state law to match the federal requirements, including:

1. Financial assurance for the costs of closure and post-closure care is required at the time a permit is issued for new landfills, and by April 9, 1995 for most existing landfills. (Certain very small municipal landfills meeting federal criteria have until October 9, 1995 to provide financial assurance.)
2. If a municipal solid waste landfill permittee is required to perform corrective action to clean up groundwater contamination, the permittee must provide financial assurance for the corrective action.
3. The permittee must update the financial assurance annually.

The federal requirements apply only to municipal solid waste landfills, but SB 1012 applied the above changes to all "land disposal sites," which include industrial landfills, sludge disposal sites, etc.

Rule amendments are necessary to incorporate the legislative changes and clarify how municipal solid waste landfills may comply with both federal and state requirements.

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

1. **Federal.** The proposed general financial assurance requirements including their effective dates are equivalent to federal requirements for municipal solid waste landfills. State law (SB 1012) also applies these requirements to other non-municipal land disposal sites (including construction and demolition, and industrial landfills). Currently there are no federal criteria for financial assurance for non-municipal land disposal sites, so Oregon law is more stringent for non-municipal sites. The Oregon Legislature established financial assurance requirements for all land disposal sites in 1983, recognizing that non-municipal sites as well as municipal sites incur costs of closure and, often, post-closure care. In extending more stringent financial assurance requirements similar to those in Subtitle D to non-municipal land disposal sites, the Legislature considered that the "five years before closure" date for provision of financial assurance was not always practical. Non-municipal land disposal facilities are more likely to change ownership and close unexpectedly, depending on the economic situation of the permittee. An up-front financial assurance requirement for these facilities is more likely to result in funds being available when needed for closure and post-closure care. In addition, there is a provision for the Department to exempt non-municipal sites from financial assurance requirements

if the site is not likely to cause environmental problems. Sewage sludge land disposal sites are subject to federal regulation under 40 CFR Part 503, which is less stringent (three-year post-closure monitoring for methane, no financial assurance requirements). Sludge sites could be exempted from the financial assurance requirements of the proposed rule if they meet exemption criteria.

The requirements for financial assurance for corrective action are tied to both the federal standards (and are therefore equivalent) and to the state groundwater protection standards which in some cases are more stringent than federal requirements. The existing rule for final engineered site closure plans including post-closure maintenance activities, subject to Department approval, is more stringent than federal requirements.

The proposed rule requires certification by a qualified third party of any proposed "alternative" financial assurance mechanism; there is no comparable federal requirement. Third-party review will facilitate the Department's review by limited staff available for this purpose. This is analogous to the existing requirement for engineering plans to be approved by a professional engineer before submittal to DEQ.

See Attachment B-6 for further discussion.

2. Adjacent States. *Washington.* Washington requires financial assurance for closure and post-closure care for all types of landfill facilities. This financial assurance must be provided at the time a new permit is applied for. Existing facilities had to provide the financial assurance by November 27, 1989. Financial assurance for corrective action is required for municipal solid waste landfills only, not industrial, so Oregon statute is here more stringent for non-municipal land disposal sites. The Washington Department of Ecology must approve financial assurance instruments. An independent CPA firm must audit the financial assurance annually to certify that the amount of funds agreed on is available.

*California.* California requires financial assurance for closure, post-closure care and corrective action for all types of solid waste landfills, except those receiving only inert wastes. The corrective action financial assurance is for foreseeable as well as for known releases. The schedule for provision of financial assurance is the same as the Subtitle D schedule for municipal solid waste landfills. In addition, financial responsibility for operating liability is required. Certification by a third party is not required except for a corporation submitting a financial means test. Staff in a special section reviews the financial assurance mechanisms

(four analysts and one manager to handle 300 landfills). In general, Oregon is less stringent than California.

*Idaho.* Municipal solid waste landfills must meet Subtitle D requirements, but by state statute, Idaho may not impose any requirement stricter than the federal regulations. Idaho has no financial assurance requirements for non-municipal land disposal facilities. One-year post-closure cover maintenance is required for non-municipal facilities. Oregon is more stringent than Idaho for non-municipal facilities.

*Nevada.* Nevada requires financial assurance (closure, post-closure and corrective action) for all types of landfills, on the Subtitle D schedule. Oregon is comparable to Nevada.

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

ORS 459.045, 459.209, 459.248, 459.270, 459.272, and 468.020. Oregon has also received "approved state" designation from the US Environmental Protection Agency (EPA), and thus may independently implement the requirements of Subtitle D for municipal solid waste landfills.

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

Previous solid waste rule amendments incorporated other changes made necessary by the Subtitle D criteria and 1993 legislation. Rule changes to accommodate the changes in financial assurance requirements were originally scheduled to be a part of the April 22, 1994 solid waste rule adoption by the EQC. However the Solid Waste Advisory Committee (SWAC) at its December 16, 1993 meeting felt that the financial assurance provisions in the rule package needed further work. Instead of delaying adoption of the other solid waste rule amendments, the financial assurance part was removed for further consideration. The Department convened a special Work Group on Financial Assurance to better define and address issues involving provision of financial assurance.

The Work Group advised the Department on such issues as whether financial assurance would be "approved" by the Department, length of DEQ permit (maximum five years) vs. federal pay-in period requirement for the trust fund option, how the annual update should work, and how to deal with the statutory requirement for return of any excess



funds collected for financial assurance. The first issue received much attention, and is discussed below.

**Review of financial assurance.** There was considerable discussion on how DEQ would review the financial assurance mechanism and whether third-party certification would be required. The statutory changes in SB 1012 removed the requirement for Department approval of financial assurance. Third-party certification was discussed as one way to ensure the adequacy of financial assurance. The Work Group's eventual recommendation was that it was sufficient for the permittee to "certify" to DEQ that the financial assurance met all state and federal requirements. At its August 4, 1994 meeting the SWAC considered a re-drafted rule, and agreed with the Work Group on the third-party certification issue.

The Department ultimately agreed with the recommendation from the Work Group and the SWAC that third-party certification was not necessary, except when a permittee proposes to provide "alternative financial assurance." "Alternative financial assurance" may be used only after review and approval by the Department. The Department believes review by a third party is appropriate in this circumstance, and the proposed rule requires a qualified third party to certify that "alternative" forms of financial assurance meet applicable state and federal regulations.

See Attachment G for membership of the Financial Assurance Work Group.

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

The Rulemaking Proposal Presented for Public Hearing contained procedures for provision of the required financial assurance and preparation of closure and post-closure plans. Two sorts of closure and post-closure plans are required for all permittees. An earlier, less-detailed plan is to be kept on file by the permittee and used to estimate costs for financial assurance. A second more-detailed plan with engineering plans for actual closure (and post-closure care) will later be submitted to DEQ for approval. Permittees of municipal solid waste landfills and non-municipal land disposal sites are treated separately, since only municipal sites are subject to federal regulations (which cover closure, post-closure care and corrective action). Major provisions included:

1. Closure Plans. Financial assurance for final closure of a landfill must be based on costs of actions spelled out in a closure plan.

- a. **Municipal solid waste landfill permittees.** Subtitle D requires a closure plan covering closure of the site at the time when closure would be most expensive, and associated financial assurance. Subtitle D requires this financial assurance to be provided by April 9, 1995<sup>††</sup> for most facilities. The Rulemaking Proposal called this a "worst case" closure plan. The Department will not review these plans, but they must be kept in the facility operating record. At least five years before final closure, a permittee must apply for a closure permit, and prepare a Final Engineered Site Closure Plan, subject to Department approval. The permittee's financial assurance must be based on the Final Engineered Site Closure Plan, when prepared.
  
- b. **Non-municipal land disposal site permittees.** SB 1012 requires these permittees to demonstrate evidence of financial assurance for the costs of closure of the land disposal site "at the time a disposal site permit is issued" or, for existing sites, by April 9, 1994<sup>†††</sup> or at a later date established by the EQC. By previously adopted rule, April 9, 1995 was set as the date for provision of financial assurance to have consistent dates for all solid waste land disposal sites. The Rulemaking Proposal based the initial financial assurance for closure on a conceptual "worst-case" closure plan. The Department will not review these plans, but they must be kept at the operations office of the facility. Similarly to municipal sites, a non-municipal permittee must also apply for a closure permit at least five years before final closure. The application for a closure permit includes the preparation of a Final Engineered Site Closure Plan, subject to Department approval.

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<sup>††</sup> On October 18, 1994 EPA published a proposed rule that would further delay implementation of the Subtitle D financial assurance responsibilities for all municipal solid waste landfills until April 9, 1996. The Commission may wish to direct the Department to consider adopting this extended compliance date for both municipal and non-municipal landfills upon final adoption by EPA.

<sup>†††</sup> April 9, 1994 was the date originally set by federal regulation for provision of financial assurance for municipal solid waste landfills. That date was subsequently delayed to April 9, 1995, and an additional extension has recently been proposed. See <sup>††</sup> above.

2. Post-closure plans. Financial assurance for costs associated with post-closure maintenance of a site must be based on actions specified in a post-closure plan.
  - a. **Municipal solid waste landfill permittees.** Subtitle D requires financial assurance for post-closure care of the facility to be based on a post-closure plan whose contents are spelled out in federal regulations. The Rulemaking Proposal called this a "Subtitle D post-closure plan." The Department will not review these plans, but again they must be placed in the facility's operating record. A Final Engineered Post-closure Plan must be prepared at the same time as the Final Engineered Site Closure Plan, again subject to Department approval.
  - b. **Non-municipal land disposal site permittees.** SB 1012 requires provision of financial assurance for post-closure care on the same schedule as financial assurance for closure. The Rulemaking Proposal based the initial financial assurance for post-closure care on a "conceptual" post-closure plan. The Department will not review these plans. A Final Engineered Post-closure Plan must be prepared at the same time as the Final Engineered Site Closure Plan, which is subject to Department approval.
3. Financial Assurance.
  - a. **Financial assurance submittal procedures.** Submittal procedures for financial assurance are the same for municipal and non-municipal permittees:
    - o *Initial submittal of financial assurance (all types).* A copy of a financial assurance plan containing the financial assurance mechanism(s) must be placed at the facility by the date specified in rule (April 9, 1995 for most sites). Standard forms must be used (included in the Rulemaking Proposal). A copy of the financial assurance mechanism must also be submitted to the Department by that date. The permittee must certify to the Department that the financial assurance complies with applicable law and rule.

- o *Department review; third-party certification.* The Department may at any time request that a permittee submit their financial assurance mechanism(s) for Department review. If a permittee wants to use an "alternative" form of financial assurance (for which there is no standard form), this is subject to Department review and approval. The submittal of the alternative financial assurance mechanism must include certification by a qualified third party that the proposed financial assurance complies with applicable law and rule.
- b. **Corrective Action.** Financial assurance for corrective action must be provided when corrective action is required pursuant to OAR 340 Division 40 or 40 CFR §258.58.
- c. **Annual Update.** All permittees are required by law to annually review and update all applicable financial assurance. The Rulemaking Proposal required permittees to perform the update, based on any estimated cost changes, and certify annually to the Department that the update had been completed.
- d. **Discount rate.** While Subtitle D requires costs of closure and post-closure care to be based on "current costs," it does not specify a discount rate. The Department assumes that most standard financial protocols would use a discount rate to calculate "current costs." A discount rate equal to the current yield of a 5-Year U.S. Treasury Note was included in the Rulemaking Proposal to calculate post-closure costs. The 5-year rate corresponds to the term (five years) for which solid waste permits are issued.
- e. **Trust fund pay-in period.** One of the options for financial assurance is to use a trust fund where the permittee would pay in a certain amount annually to build up the amount of financial assurance to be available when needed. Federal Subtitle D regulations require that the trust fund be fully funded by the term of the initial permit, or by the end of the remaining life of the landfill unit, whichever is shorter. DEQ solid waste permits are generally issued for five years. The Work Group on Financial Assurance (see page 5) noted that the five-year timeframe creates a hardship under the federal rules, especially for a site with a short permit period and long remaining site life.

The trust fund mechanism is attractive because it allows a permittee to build up funds over time. The Department believes it should be reasonably available to permittees as an option. The Rulemaking Proposal addressed this problem by allowing a "state-approved trust fund" as a "state-approved mechanism" for financial assurance. Subtitle D allows a permittee to use "any other mechanism that meets the criteria" specified in that regulation if approved by the Director of an approved state (such as Oregon). The criteria include the requirement that the financial assurance mechanism "must ensure that funds be available in a timely fashion *when needed.*" [Emphasis added] The end of the remaining site life is when the funds will normally be needed; the Department believes that is the appropriate pay-in period term. The proposed rule adds a "state-approved trust fund" as a possible "alternative financial assurance mechanism" (OAR 340-94-145(5)(g)), with a pay-in period "over the remaining life of the municipal solid waste landfill unit." The Department believes this is in line with the intent of the federal regulation, since the Subtitle D Appendix H--Supplemental Information for Subpart G--Financial Assurance Criteria makes a point of saying that "By allowing an extended 'pay-in' period for trust funds, the burden of funding closure, post-closure care and corrective action obligations will be spread out over the economic life of the facility..." Department staff has discussed this issue with EPA Region X staff. While EPA staff did not see any way around the explicit trust fund pay-in period laid out in Subtitle D, they did not object to using a different pay-in period for an approved state mechanism.

This approach will require a permittee wishing to use this option to submit their financial assurance mechanism to the Department for approval together with third-party certification. A permittee still has the option of using the "Subtitle D" trust fund mechanism; this would alleviate review by the Department, but would require meeting the Subtitle D pay-in period (by the expiration date of the permit).

- f. **Corporate financial test.** One person who commented during the Department's previous rulemaking in April 1994 said the corporate financial test should be revised. They said that the existing requirements are overstringent, and discourage use of this option for

financial assurance. They recommended that the corporate test consist of two parts: 1) tangible net worth of at least \$10 million; and 2) current "investment grade" bond ratings. The Department agreed that some relaxation of the current criteria may be appropriate, but disagreed with using the bond rating. The Rulemaking Proposal revised the two corporate financial test alternatives. Both of the alternatives would allow use of certain ratios together with the \$10 million net worth criterion.

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

The greatest number of comments came from a representative of Douglas County. He expressed a number of local government concerns including appropriate discount rate, requirement to notify the Department before expending trust fund monies, and requirement that the Department be a beneficiary of the financial assurance mechanism used. The Department believes most of these issues were discussed thoroughly by the Work Group, and has stayed with its recommendations. Only a few minor changes were made to the proposed rule as a result of public comment (specifying that landfills closed before January 1, 1980 are not subject to DEQ closure permit; and allowing the amount of financial assurance to be reduced if estimated costs go down).

See Attachment E for more complete discussion, and for comments not summarized below. The Comment number at the end of each paragraph refers to its numbering in Attachment E, followed by the party making the comment.

1. Landfill Closure Cutoff Date. OAR 340-94-120(4) COMMENT: The rule provision setting closure requirements and requiring written approval from the Department of the closure of a landfill is overly broad. There are many landfills that have closed in the last hundred years. This provision leaves a local government vulnerable to hidden or unknown liabilities. There should be an exemption for landfills closed prior to a specific point in time, e.g. 1975, 1980, etc. (Comment 8, public sector landfill operator)

DEPARTMENT RESPONSE: In 1983 the Department was given explicit statutory authority to regulate closed landfills; at that time DEQ was also allowed to require closure permits for any landfills closing after January 1, 1980. To clarify regulatory intent, the Department is adding the January 1, 1980 date to this rule and to the corresponding rule for non-municipal land disposal sites (OAR 340-95-070).

2. Reduction of Cost Estimates. OAR 340-94-140(6)(d)(B) and 340-95-090(6)(d)(B) COMMENT: A permittee should be able to reduce estimates of landfill closure as changing circumstances at the facility (e.g. filling cells) reduce the maximum financial exposure of the permittee. (Comment 20, engineering consultant)

DEPARTMENT RESPONSE: The Department agrees, and is changing the proposed rules for municipal and non-municipal landfills to reflect the comment.

3. Trust fund pay-in period. OAR 340-94-145(5)(g) COMMENT: The rules allow a trust fund to be built up over the entire projected life of the site [as an "alternative," state-approved financial assurance mechanism]. This means that adequate funds would not be available for closure and post-closure cost if the site closed unexpectedly. Allowing this pay-in approach could have the effect of encouraging inadequately financed permittees to postpone recognition of their true liabilities. This is counter to the intent of the rule. If DEQ believes the "pay-in" approach is acceptable, the same standard should be applied to other mechanisms such as surety bonds. The required bond amount in any given year would be the same as the amount required to be in a trust fund in that year, and would similarly increase year to year. (Comment 3, private sector landfill operator)

DEPARTMENT RESPONSE: A trust fund is different from other financial assurance mechanisms in that it provides actual cash to be used for its stated purposes. DEQ's financial assurance rule closely parallels the federal Subtitle D rule, which specifically allows a pay-in period for trust funds. Federal regulations do not allow "phasing in" for the amount required for other types of financial assurance. The financial assurance plan for a facility must be designed to fit the individual case; the maximum amount of funding required will change over time. This could allow eventual reduction of the maximum amount to be covered by whatever mechanism is chosen. The proposed rules were not changed in response to this comment.

4. Disposal of Excess Monies Accumulated in Financial Assurance Mechanism. OAR 340-94-140(4)(e) COMMENT: The rule requires the financial assurance plan to contain a proposal, with provisions satisfactory to the Department, for disposing of any excess monies received for financial assurance. The rule also specifies how any such excess funds

shall be used. These provisions should not apply to counties that use general revenue to fund landfill operation, development and closure. When such a county completes post-closure requirements, any excess funds should be released to the county to be appropriated in any manner the local budget law permits. DEQ should not dictate use of these funds. This appears to violate local budget laws. (Comment 9, public sector landfill operator)

DEPARTMENT RESPONSE: The rule language referred to is taken directly from statute (ORS 459.273). This requires an applicant to "establish provisions satisfactory to the department for disposing of any excess moneys received or interest earned on moneys received for financial assurance." The statute further establishes two areas for which excess funds are to be used "to the extent practicable." The Attorney General's Office has informed DEQ that they do not see a conflict between the rule and any local requirements. The proposed rules were not changed in response to this comment.

5. Use of Bond Rating for Corporate Guarantee. OAR 340-94-145(5)(f)  
COMMENT: The Rulemaking Proposal modified the corporate guarantee test to rely, partially, on Altman's Z-Score and Beaver's Ratio. Bond ratings are a frequently used and reliable indicator of the financial strength of corporate entities. There is a strong historic correlation between corporate defaults and previous downgrades of bond ratings. Bond ratings are simple to determine and easy to verify (unlike Altman's or Beaver's). The use of the latter would likely increase costs of compliance in developing the multiple "alternative ratios." We believe it is appropriate to use a bond ratings-based approach. (Comment 16, private corporation)

DEPARTMENT RESPONSE: A bond rating usually applies to a specific security, not to the corporation itself. A bond rating in itself does not give a complete financial picture of the corporation. While a bond rating may give a reasonably good indication of a corporation's long-term viability, it does not measure the corporation's liquidity. If funds are needed for an unanticipated current problem, liquidity is a greater concern. The Department believes that the Altman's Z-Score and Beaver's Ratio are not unduly complicated; they use quite standard formulas. They have the advantage of being less weighted to equity and more to cash flow, giving a better picture of the company.



On October 12, 1994, the EPA issued a proposed rule which would add two financial assurance mechanisms to the Subtitle D rules for municipal solid waste landfills: a financial test for use by corporate owners and operators, and a corporate guarantee. EPA anticipates that promulgation of a final rule will take approximately one year. The Department received a comment after the close of the public comment period which recommended that the Department withdraw the rulemaking in light of the EPA developments. The Department does not believe that withdrawal of the rulemaking is warranted -- procedures for provision of financial assurance need to be established so permittees will be able to plan for them. Since the proposed EPA rule was issued very recently, the Department has not been able to review it within the context of this current rulemaking. The Department will, however, review its "corporate guarantee" rule provisions in light of EPA's proposal, and will consider adopting EPA's final rule provisions in the future.

Meanwhile, the proposed rules were not changed in response to this comment.

6. Account with the Local Government Investment Pool. OAR 340-94-145(5)  
COMMENT: The Department should consider adding another financial assurance mechanism for local governments. They should be allowed to establish an account with the State of Oregon Local Government Investment Pool (LGIP) under the joint custody of DEQ and the permittee. The LGIP is widely used by government agencies, is effectively administered, and less onerous than use of performance bonding. (Comment 17, public sector landfill operator)

DEPARTMENT RESPONSE: Use of the LGIP may offer advantages to local governments as a means of providing financial assurance, and the Department would encourage interested permittees to explore this option. There are, however, some unresolved questions as to how this might work in practice. Under current rule a local government permittee could propose this use of the LGIP as an "alternative" financial assurance mechanism. The Department will be very willing to work with a permittee who proposes this. But because of the unresolved issues, the Department does not recommend changing the proposed rules to establish use of the LGIP as an outright approved mechanism.

7. Local Government Financial Test. COMMENT: The Rulemaking Proposal did not include the "Local Government Financial Test" from 40 CFR Part 258, Subsection 258.74(f) ("Subtitle D"), as an allowable mechanism. It was our understanding that DEQ would adopt this to conform to EPA's rule. We have based our financial assurance plan on the criteria in that document. (Comment 18, public sector landfill operator)

DEPARTMENT RESPONSE: The Subtitle D Local Government Financial Test referred to was included in a proposed rule issued by EPA on December 17, 1993. EPA has not yet promulgated a final rule on this issue. The final rule may be changed making it either more or less stringent than the proposed rule. If the final rule were more stringent, and DEQ had adopted the rule as originally proposed, the Department's rule would be invalid. For that reason the Department prefers to wait until EPA adopts a final rule, and will at that time consider adopting the EPA rule. In the meanwhile, a local government wishing to use the proposed Subtitle D Local Government Financial Test as a financial assurance mechanism may so propose to DEQ as an alternative form of financial assurance under OAR 340-94-145(5)(g). The proposed rules were not changed in response to this comment.

The Department has also made some housekeeping changes from the Rulemaking Proposal put forward for public comment.

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

The actions a permittee will be required to take and the schedule for these actions differ based on its regulatory category.

Provision of financial assurance for closure and post-closure care for most existing land disposal sites is required by April 9, 1995<sup>†††</sup>; certain very small municipal facilities have until October 9, 1995. This includes providing a copy of the financial assurance mechanism to the Department by those dates.

Municipal solid waste landfills are required by Subtitle D to provide a "worst case" closure plan and "Subtitle D" post-closure plan by October 9, 1993 (for "large"

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<sup>†††</sup>But see footnote ††.

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facilities); April 9, 1994 for "small" facilities; or October 9, 1995 for certain very small facilities meeting federal criteria. They are all required to prepare a Final Engineered Site Closure Plan and Final Engineered Post-closure Plan (as in current rule) five years before their proposed closure date.

Non-municipal land disposal sites are required to prepare a conceptual "worst-case" closure plan and a conceptual post-closure plan by April 9, 1995. They are also required to prepare a Final Engineered Site Closure Plan and Final Engineered Post-closure Plan five years before the proposed closure date.

For more details see Attachment F, "Rule Implementation Plan."

#### **Recommendation for Commission Action**

It is recommended that the Commission adopt the rules and rule amendments regarding criteria for provision of financial assurance for closure, post-closure maintenance and corrective action by permittees of solid waste land disposal sites 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
- D. List of Written Comments Received
- E. Department's Evaluation of Public Comment
- F. Rule Implementation Plan
- G. Financial Assurance Work Group Membership

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**Reference Documents (available upon request)**

Written Comments Received (listed in Attachment D)  
1993 Senate Bill 1012  
40 CFR Part 258

Approved:

Section:

E. Patricia Kern

Division:

Mary Wall

Report Prepared By: Deanna Mueller-Crispin

Phone: (503) 229-5808

Date Prepared: November 14, 1994

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**ATTACHMENT A**

**FINANCIAL ASSURANCE RULE**

***Redlining*** indicates proposed additions.

~~*Strikethrough and brackets*~~ indicate proposed deletions.

**PERMIT REQUIRED**

**340-93-050**

- (1) Except as provided by section (2) of this rule, no person shall establish, operate, maintain or substantially alter, expand, improve or close a disposal site, and no person shall change the method or type of disposal at a disposal site, until the person owning or controlling the disposal site obtains a permit therefor from the Department.
- (2) Persons owning or controlling the following classes of disposal sites are specifically exempted from the above requirements to obtain a permit under OAR Chapter 340 Divisions 93 through 97, but shall comply with all other provisions of OAR Chapter 340 Divisions 93 through 97 and other applicable laws, rules, and regulations regarding solid waste disposal:
- (a) A facility authorized by a permit issued under ORS 466.005 to 466.385 to store, treat or dispose of both hazardous waste and solid waste;
  - (b) Disposal sites, facilities or disposal operations operated pursuant to a permit issued under ORS 468B.050;
  - (c) A land disposal site used exclusively for the disposal of clean fill, unless the materials have been contaminated such that the Department determines that their nature, amount or location may create an adverse impact on groundwater, surface water or public health or safety;
- NOTE: Such a landfill may require a permit from the Oregon Division of State Lands. A person wishing to obtain a permit exemption for an inert waste not specifically mentioned in this subsection may submit a request to the Department with such information as the Department may require to evaluate the request for exemption, pursuant to OAR 340-93-080.
- (d) Composting operations used only by the owner or person in control of a dwelling unit to dispose of food scraps, garden wastes, weeds, lawn cuttings, leaves, and prunings generated at that residence and operated in a manner approved by the Department;
  - (e) Facilities which receive only source separated materials for purposes of material recovery or for composting, except when the Department determines that the nature, amount or location of the materials is such that they constitute a potential threat of adverse impact on the waters of the state or public health;
  - (f) A site used to transfer a container, including but not limited to a shipping container, or other vehicle holding solid waste from one mode of transportation to another (such as barge to truck), if:

- 1 (A) The container or vehicle is not available for direct use by the general  
2 public;  
3  
4 (B) The waste is not removed from the original container or vehicle; and  
5  
6 (C) The original container or vehicle does not stay in one location longer  
7 than 72 hours, unless otherwise authorized by the Department.  
8  
9 (3) The Department may, in accordance with a specific permit containing a compliance  
10 schedule, grant reasonable time for solid waste disposal sites or facilities to comply  
11 with OAR Chapter 340 Divisions 93 through 97.  
12  
13 (4) If it is determined by the Department that a proposed or existing disposal site is not  
14 likely to create a public nuisance, health hazard, air or water pollution or other  
15 environmental problem, the Department may waive any or all requirements of  
16 OAR 340-93-070, 340-93-130, 340-93-140, 340-93-150, 340-94-060(2) and 340-95-  
17 030(2) and issue a letter authorization in accordance with OAR 340-93-060.  
18  
19 (5) Each person who is required by sections (1) and (4) of this rule to obtain a permit  
20 shall:  
21  
22 (a) Make prompt application to the Department therefor;  
23  
24 (b) Fulfill each and every term and condition of any permit issued by the  
25 Department to such person;  
26  
27 (c) Comply with OAR Chapter 340 Divisions 93 through 97;  
28  
29 (d) Comply with the Department's requirements for recording, reporting,  
30 monitoring, entry, inspection, and sampling, and make no false statements,  
31 representations, or certifications in any form, notice, report, or document  
32 required thereby[~~];~~  
33  
34 (e) Allow the Department or an authorized governmental agency to enter the  
35 property under permit at reasonable times to inspect and monitor the site and  
36 records as authorized by ORS 459.385 and 459.272. [Renumbered from 340-  
37 94-100(9) and 340-95-050(9)]  
38  
39 (6) Failure to conduct solid waste disposal according to the conditions, limitations; or terms  
40 of a permit or OAR Chapter 340 Divisions 93 through 97, or failure to obtain a permit  
41 is a violation of OAR Chapter 340 Divisions 93 through 97 and shall be cause for the  
42 assessment of civil penalties for each violation as provided in OAR Chapter 340,  
43 Division 12 or for any other enforcement action provided by law. Each and every day  
44 that a violation occurs is considered a separate violation and may be the subject of  
45 separate penalties.  
46  
47

48 **OAR 340 Division 94: MUNICIPAL SOLID WASTE LANDFILLS**

49  
50  
51 **CLOSURE AND POST-CLOSURE CARE: CLOSURE PERMITS**

52 **340-94-100 [Renumbered from 340-61-028; incorporates part of 340-61-020]**

1 If a municipal solid waste landfill is subject to 40 CFR, Part 258 as provided in 40 CFR, §258.1, the  
2 owner or operator shall comply with closure criteria in 40 CFR, §258.60. All municipal solid waste  
3 permittees shall also comply with this rule.  
4

5 (1) [Renumbered from 340-61-020(7):] Closure Permit:  
6

7 (a) At least five years prior to anticipated *final* closure of a municipal solid waste  
8 landfill, the person holding the disposal site permit shall apply to renew the  
9 permit to cover the period of time remaining for site operations, closure of the  
10 site, and all or part of the time that active post-closure site maintenance is  
11 required by the Department~~[-]~~. *This last permit issued before final closure of*  
12 *the landfill is scheduled to occur shall be called a "closure permit;"*  
13

14 (b) The person who holds or last held the disposal site permit, or, if that person  
15 fails to comply, then the person owning or controlling a municipal solid waste  
16 landfill that is closed and no longer receiving solid waste after January 1,  
17 1980, must continue or renew the disposal site permit after the site is closed  
18 for the duration of the period in which the Department continues to actively  
19 supervise the site, even though solid waste is no longer received at the site.  
20

21 (2) [Renumbered from 340-61-028] Applications for closure permits must include but are  
22 not limited to:  
23

24 (a) A ~~{closure plan}~~ *Final Engineered Site Closure Plan* prepared in accordance  
25 with OAR 340-94-110~~[-]~~. *In lieu of requiring the Final Engineered Site*  
26 *Closure Plan as a part of the application for a closure permit, the Department*  
27 *may specify a date in the closure permit for submission of the Final*  
28 *Engineered Site Closure Plan;*  
29

30 ~~(b) A Final Engineered Post-closure Plan prepared in accordance with OAR 340-~~  
31 ~~94-115. In lieu of requiring the Final Engineered Post-closure Plan as a part~~  
32 ~~of the application for a closure permit, the Department may specify a date in~~  
33 ~~the closure permit for submission of the Final Engineered Post-closure Plan;~~  
34

35 ~~{(b) A financial assurance plan prepared in accordance with OAR 340-94-140~~  
36 ~~unless exempted by the Department pursuant to section (3) of this rule;}~~  
37

38 (c) If the permittee does not own and control the property, *a demonstration* ~~{the~~  
39 ~~permittee shall demonstrate}~~ to the Department that the permittee has access to  
40 the landfill property after closure to monitor and maintain the site and operate  
41 any environmental control facilities;  
42

43 (d) If any person other than the permittee assumes any responsibility for any  
44 closure or post-closure activities, that responsibility shall be evidenced by a  
45 written contract between the permittee and each person assuming any  
46 responsibility.  
47

48 ~~{(3) The Department may exempt from the financial assurance requirements existing~~  
49 ~~municipal solid waste landfills which stopped receiving waste before October 9, 1993~~  
50 ~~(or which stop receiving waste before April 9, 1994, if a "small landfill" meeting~~  
51 ~~criteria in 40 CFR, §258.1(e)(2)) and complete installation of final cover by October 9,~~  
52 ~~1994. The Department may also exempt from the financial assurance requirement an~~  
53 ~~existing "very small landfill serving certain small communities" meeting criteria in 40~~

1 ~~CFR, §258.1(f)(1), if such a landfill stops receiving waste before October 9, 1995 and~~  
2 ~~completes installation of final cover by October 9, 1996. To be eligible for this~~  
3 ~~exemption, the applicant shall demonstrate to the satisfaction of the Department that the~~  
4 ~~site meets all of the following criteria and that the site is likely to continue to meet all of~~  
5 ~~these criteria until the site is closed in a manner approved by the Department.~~

6  
7 ~~(a) The landfill poses no significant threat of adverse impact on groundwater or~~  
8 ~~surface water;~~

9  
10 ~~(b) The landfill poses no significant threat of adverse impact on public health or~~  
11 ~~safety;~~

12  
13 ~~(c) No system requiring active operation and maintenance is necessary for~~  
14 ~~controlling or stopping discharges to the environment;~~

15  
16 ~~(d) The area of the landfill that has been used for waste disposal and has not yet~~  
17 ~~been properly closed in a manner acceptable to the Department is less than and~~  
18 ~~remains less than two acres or complies with a closure schedule approved by~~  
19 ~~the Department.]~~

20  
21 ~~[(4) In determining if the applicant has demonstrated that a site meets the financial~~  
22 ~~assurance exemption criteria, the Department will consider existing available~~  
23 ~~information including, but not limited to, geology, soils, hydrology, waste type and~~  
24 ~~volume, proximity to and uses of adjacent properties, history of site operation and~~  
25 ~~construction, previous compliance inspection reports, existing monitoring data, the~~  
26 ~~proposed method of closure and the information submitted by the applicant. The~~  
27 ~~Department may request additional information if needed.]~~

28  
29 ~~(5) An exemption from the financial assurance requirement granted by the Department will~~  
30 ~~remain valid only so long as the site continues to meet the exemption criteria in section~~  
31 ~~(3) of this rule. If the site fails to continue to meet the exemption criteria, the~~  
32 ~~Department may modify the closure permit to require financial assurance.] [340-94-~~  
33 ~~100(3)-(5) renumbered to 340-94-140(2)]~~

34  
35 **(3)** ~~[(6)]~~ While a closure permit is in effect, the permittee shall submit a report to the  
36 Department within 90 days of the end of the permittee's fiscal year or as otherwise  
37 required in writing by the Department, which contains but is not limited to:

38  
39 (a) An evaluation of the approved closure or post-closure plan as applicable  
40 discussing current status, unanticipated occurrences, revised closure date  
41 projections, necessary changes, etc.;

42  
43 (b) A copy of the annual update of financial assurance as required by OAR 340-  
44 94-140(6)(d). If the financial mechanism used is a trust fund, the permittee  
45 shall include a ~~[(4)]~~ In evaluation of the ~~[approved]~~ financial assurance plan  
46 documenting an accounting of amounts deposited and expenses drawn from the  
47 fund, as well as its current balance. This evaluation must also assess the  
48 adequacy of the financial assurance and justify any ~~[requests for]~~ changes in the  
49 ~~[approved]~~ plan;

50  
51 (c) Other information requested by the Department to determine compliance with  
52 the rules of the Department.



1 **(4)** ~~[(7)]~~The Department shall terminate closure permits for municipal solid waste landfills  
2 not later than 30 years after the site is closed unless the Department finds there is a  
3 need to protect against a significant hazard or risk to public health or safety or the  
4 environment.  
5

6 **(5)** ~~[(8)]~~Any time after a municipal solid waste landfill is closed, the permit holder may  
7 apply for a termination of the permit, a release from one or more of the permit  
8 requirements or termination of any applicable permit fee. Before the Department grants  
9 a termination or release under this section, the permittee must demonstrate and the  
10 Department must find that human health and the environment will be protected and  
11 there is no longer a need for:  
12

- 13 (a) Active supervision of the site;  
14  
15 (b) Maintenance of the site; or  
16  
17 (c) Maintenance or operation of any system or facility on the site.  
18

19 ~~[(9)]~~ ~~The Department or an authorized governmental agency may enter a municipal solid~~  
20 ~~waste landfill property at reasonable times to inspect and monitor the site as authorized~~  
21 ~~by ORS 459.285.]~~ [Renumbered to 340-93-050(5)(e)]  
22

23 **(6)** ~~[(10)]~~ The closure permit remains in effect and is a binding obligation of the permittee  
24 until the Department terminates the permit according to section ~~[(7) or (8)](4) or (5)~~ of  
25 this rule or upon issuance of a new closure permit for the site to another person  
26 following receipt of a complete and acceptable application.  
27

28 [Publications: The publication(s) referred to or incorporated by reference in this rule are  
29 available from the Department of Environmental Quality.]  
30  
31

## 32 CLOSURE AND POST-CLOSURE CARE: CLOSURE PLANS

### 33 340-94-110 [Renumbered from 340-61-033]

34 If a municipal solid waste landfill is subject to 40 CFR, Part 258 as provided in 40 CFR, §258.1, the  
35 owner or operator shall comply with closure ~~and post-closure care~~ requirements in 40 CFR, Part 258,  
36 Subpart F. All municipal solid waste permittees shall also comply with this rule.  
37  
38

39 **(1)** Two types of written closure plans shall be prepared.  
40

41 **(a)** The two types of closure plan are:  
42

43 **(A)** A Subtitle D or "worst-case" closure plan, as required by 40 CFR  
44 §258.60(c); and subsequently  
45

46 **(B)** A Final Engineered Site Closure Plan, as required by OAR 340-94-  
47 100(2)(a), which shall include all the elements of and replace the  
48 "worst-case" closure plan.  
49

50 **(b)** Schedule for preparation of closure plans.  
51

52 **(A)** The "worst-case" closure plan shall be prepared and placed in the  
53

1 facility operating record and the Director shall be notified of that  
2 action no later than the effective dates specified in OAR 340-94-001(2)  
3 or by the initial receipt of waste, whichever is later;  
4

5 (B) The Final Engineered Site Closure Plan shall be prepared and  
6 submitted to the Department five years before the anticipated final  
7 closure date, or at a date specified in the permittee's closure permit  
8 pursuant to OAR 340-94-100(2)(a).  
9

10 (3) Requirements for closure plans. ~~{(1)}~~ A closure plan ~~{must}~~ shall specify the  
11 procedures necessary to completely close the *municipal solid waste* landfill at the end of  
12 its intended operating life. ~~{The plan must also identify the post closure activities which~~  
13 ~~will be carried on to properly monitor and maintain the closed municipal solid waste~~  
14 ~~landfill site. At a minimum, the plan shall include:}~~  
15

16 (a) Requirements for the "worst-case" closure plan shall include all elements  
17 specified in 40 CFR §258.60, and consist of at least the following:  
18

19 (A) A description of the steps necessary to close all municipal solid waste  
20 landfill units at any point during their active life;  
21

22 (B) A description of the final cover system that is designed to minimize  
23 infiltration and erosion;  
24

25 (C) An estimate of the largest area of the municipal solid waste landfill  
26 unit ever requiring a final cover;  
27

28 (D) An estimate of the maximum inventory of wastes ever on-site over the  
29 active life of the landfill facility; and  
30

31 (E) A schedule for completing all activities necessary to satisfy the closure  
32 criteria in 40 CFR §258.60.  
33

34 (b) Requirements for the Final Engineered Site Closure Plan. In addition to the  
35 requirements for the "worst-case" closure plan, the Final Engineered Site  
36 Closure Plan shall consist of at least the following elements:  
37

38 (A) ~~{(a)}~~ Detailed plans and specifications consistent with the applicable  
39 requirements of OAR 340-93-140 and 340-94-060(2), unless an  
40 exemption is granted as provided in OAR 340-93-070(4);  
41

42 NOTE: If some of this information has been previously submitted,  
43 the permittee shall review and update it to reflect current conditions  
44 and any proposed changes in closure ~~{or post-closure}~~ activities.  
45

46 (B) ~~{(b)}~~ A description of how and when the facility will be closed. The  
47 description shall, to the extent practicable, show how the disposal site  
48 will be closed as filling progresses to minimize the area remaining to  
49 be closed at the time that the site stops receiving waste. A time  
50 schedule for completion of closure shall be included;  
51

52 ~~{(c)}~~ Details of how leachate discharges will be minimized and controlled and  
3 treated if necessary;

1 ~~(d) — Details of any landfill gas control facilities, their operation and frequency of~~  
2 ~~monitoring;~~

3  
4 (C) ~~{(e)}~~ Details of final cover including soil texture, depth and slope;

5  
6 (D) ~~{(f)}~~ Details of surface water drainage diversion; and

7  
8 ~~{(g)} — A schedule of monitoring the site after closure; —~~

9  
10 ~~{(h)} — A projected frequency of anticipated inspection and maintenance activities at~~  
11 ~~the site after closure, including but not limited to repairing, recovering and~~  
12 ~~regrading settlement areas, cleaning out surface water diversion ditches, and~~  
13 ~~re-establishing vegetation;~~

14  
15 (E) ~~{(i)}~~ Other information requested by the Department necessary to  
16 determine whether the disposal site will comply with all applicable  
17 rules of the Department.

18  
19 (4) ~~{(2) Approval of Closure Plan.}~~ Department approval. The Final Engineered Site  
20 Closure Plan is subject to written approval by the Department. After approval by the  
21 Department, the permittee shall implement the Final Engineered Site C~~e~~l~~o~~s~~u~~r~~e~~ P~~l~~a~~n  
22 within the approved time schedule.~~

23  
24 (5) ~~{(3)}~~ Amendment of Plan. The approved Final Engineered Site C~~e~~l~~o~~s~~u~~r~~e~~ P~~l~~a~~n  
25 may be amended at any time ~~{during the active life of the landfill or during the~~  
26 ~~post closure care period}~~ as follows:~~

27  
28 (a) The permittee must amend the plan whenever changes in operating plans or  
29 facility design, or changes in OAR Chapter 340 Divisions 93 through 97, or  
30 events which occur during the active life of the landfill ~~{or during the~~  
31 ~~post closure care period}~~ significantly affect the plan. The permittee must  
32 also amend the plan whenever there is a change in the expected year of  
33 closure. The permittee must submit the necessary plan amendments to the  
34 Department for approval within 60 days after such changes or as otherwise  
35 required by the Department;

36  
37 (b) The permittee may request to amend the plan to alter the closure  
38 requirements, ~~to alter the post closure care requirements, or to extend or~~  
39 ~~reduce the post closure care period}~~ based on cause. The request must include  
40 evidence demonstrating to the satisfaction of the Department that:

41  
42 (A) The nature of the landfill makes the closure ~~{or post closure care}~~  
43 requirements unnecessary; or

44  
45 ~~{(B)} — The nature of the landfill supports reduction of the post closure care~~  
46 ~~period; or}~~

47  
48 (B) ~~{(C)}~~ The requested ~~{extension in the post closure care period or}~~  
49 alteration of closure ~~{or post closure care}~~ requirements is necessary  
50 to prevent threat of adverse impact on public health, safety or the  
51 environment.

52  
3 (c) The Department may amend a permit to require the permittee to modify the

1 plan if it is necessary to prevent the threat of adverse impact on public health,  
2 safety or the environment. Also, the Department may ~~extend or reduce the~~  
3 ~~post-closure care period or~~ alter the closure ~~for post-closure care~~  
4 requirements based on cause.  
5

6 [Publications: The publication(s) referred to or incorporated by reference in this rule are  
7 available from the Department of Environmental Quality.]  
8  
9

10 **CLOSURE AND POST-CLOSURE CARE: POST-CLOSURE PLANS**

11  
12 **340-94-115**

13  
14 **If a municipal solid waste landfill is subject to 40 CFR, Part 258 as provided in 40 CFR, §258.1, the**  
15 **owner or operator shall comply with post-closure care requirements in 40 CFR, §258.61. All municipal**  
16 **solid waste permittees shall also comply with this rule.**  
17

18 **(1) Two types of written post-closure plans shall be prepared:**

19  
20 **(a) A "Subtitle D" post-closure plan as required by 40 CFR §258.61(c); and**  
21 **subsequently**

22  
23 **(b) A Final Engineered Post-closure Plan as required by OAR 340-94-100(2)(b).**  
24 **When prepared, this shall include all requirements of and replace the "Subtitle**  
25 **D" post-closure plan.**  
26

27 **(2) Schedule for preparation of post-closure plans.**

28  
29 **(a) The "Subtitle D" post-closure plan shall be placed in the facility operating**  
30 **record and the Director shall be notified of that action no later than the**  
31 **effective dates specified in OAR 340-94-001(2) or by the initial receipt of**  
32 **waste, whichever is later;**

33  
34 **(b) The Final Engineered Post-closure Plan shall be prepared in conjunction with**  
35 **and submitted to the Department together with the Final Engineered Site**  
36 **Closure Plan required by OAR 340-94-100(2)(a).**  
37

38 **(3) Requirements for post-closure plans. Post-closure plans shall identify the post-closure**  
39 **activities which will be carried on to properly monitor and maintain the closed**  
40 **municipal solid waste landfill site.**

41  
42 **(a) Requirements for the "Subtitle D" post-closure plan shall include all elements**  
43 **specified in 40 CFR §258.61, and consist of at least the following:**

44  
45 **(A) Maintaining the integrity and effectiveness of any final cover;**

46  
47 **(B) Maintaining and operating the leachate collection system;**

48  
49 **(C) Monitoring the groundwater;**

50  
51 **(D) Maintaining and operating the gas monitoring system;**

52  
53 **(E) Monitoring and providing security for the landfill site; and**

1 (F) Description of the planned uses of the property during the post-closure  
2 care period.

3  
4 (b) Requirements for the Final Engineered Post-closure Plan. In addition to the  
5 requirements for the "Subtitle D" post-closure plan, the Final Engineered Post-  
6 closure Plan shall consist of at least the following elements:

7  
8 (A) Detailed plans and specifications consistent with the applicable  
9 requirements of OAR 340-93-140 and 340-94-060(2), unless an  
10 exemption is granted as provided in OAR 340-93-070(4);

11  
12 NOTE: If some of this information has been previously submitted,  
13 the permittee shall review and update it to reflect current conditions  
14 and any proposed changes in closure or post-closure activities.

15  
16 (B) Details of how leachate discharges will be minimized and controlled  
17 and treated if necessary;

18  
19 (C) Details of any landfill gas control facilities, their operation and  
20 frequency of monitoring;

21  
22 (D) A schedule of monitoring the site after closure;

23  
24 (E) A projected frequency of anticipated inspection and maintenance  
25 activities at the site after closure, including but not limited to  
26 repairing, recovering and regrading settlement areas, cleaning out  
27 surface water diversion ditches, and re-establishing vegetation; and

28  
29 (F) Any other information requested by the Department necessary to  
30 determine whether the disposal site will comply with all applicable  
31 rules of the Department.

32  
33 (c) Department approval. The Final Engineered Post-closure Plan is subject to  
34 written approval by the Department. After approval by the Department, the  
35 permittee shall implement the Final Engineered Post-closure Plan within the  
36 approved time schedule.

37  
38 (d) Amendment. The approved Final Engineered Post-closure Plan may be  
39 amended at any time as follows:

40  
41 (A) The permittee must amend the Plan whenever changes in operating  
42 plans or facility design, or changes in OAR Chapter 340 Divisions 93  
43 through 97, or events which occur during the active life of the landfill  
44 or during the post-closure care period, significantly affect the Plan.  
45 The permittee must submit the necessary plan amendments to the  
46 Department for approval within 60 days after such changes or as  
47 otherwise required by the Department;

48  
49 (B) The permittee may request to amend the Plan to alter the post-closure  
50 care requirements, or to extend or reduce the post-closure care period  
51 based on cause. The request must include evidence demonstrating to  
52 the satisfaction of the Department that:

53  
54 (i) The nature of the landfill makes the post-closure care

requirements unnecessary; or

(ii) The nature of the landfill supports reduction of the post-closure care period; or

(iii) The requested extension in the post-closure care period or alteration of post-closure care requirements is necessary to prevent threat of adverse impact on public health, safety or the environment.

(C) The Department may amend a permit to require the permittee to modify the Plan if it is necessary to prevent the threat of adverse impact on public health, safety or the environment. Also, the Department may extend or reduce the post-closure care period or alter the post-closure care requirements based on cause.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the Department of Environmental Quality.]

## CLOSURE REQUIREMENTS

### 340-94-120 [Renumbered from 340-61-042]

If a municipal solid waste landfill is subject to 40 CFR, Part 258 as provided in 40 CFR, §258.1, the owner or operator shall comply with closure and post-closure care requirements in 40 CFR, Part 258, Subpart F. All municipal solid waste permittees shall also comply with this rule for any landfill that closes after January 1, 1980.

- (1) When solid waste is no longer received at a municipal solid waste landfill, the person who holds or last held the permit issued under ORS 459.205 or, if the person who holds or last held the permit fails to comply with this section, the person owning or controlling the property on which the landfill is located, shall close and maintain the site according to the requirements of ORS Chapter 459, all applicable rules adopted by the Commission under ORS 459.045 and all requirements imposed by the Department as a condition to renewing or issuing a disposal site permit.
- (2) Unless otherwise approved or required in writing by the Department, no person shall permanently close or abandon a municipal solid waste landfill, except in the following manner:
  - (a) All areas containing solid waste not already closed in a manner approved by the Department shall be covered with at least three feet of compacted soil of a type approved by the Department graded to a minimum two percent and maximum 30 percent slope unless the Department authorizes a lesser depth or an alternative final cover design. In applying this standard, the Department will consider the potential for adverse impact from the disposal site on public health, safety or the environment, and the ability for the permittee to generate the funds necessary to comply with this standard before the disposal site closes. A permittee may request that the Department approve a lesser depth of cover material or an alternative final cover design based on the type of waste, climate, geological setting, or degree of environmental impact;

- (b) Final cover material shall be applied to each portion of a municipal solid waste landfill within 60 days after said portion reaches approved maximum fill elevation, except in the event of inclement weather, in which case final cover shall be applied as soon as practicable;
  - (c) The finished surface of the closed areas shall consist of soils of a type or types consistent with the planned future use and approved by the Department. Unless otherwise approved by the Department, a vegetative cover of native grasses shall be promptly established over the finished surface of the closed site;
  - (d) All surface water must be diverted around the area of the disposal site used for waste disposal or in some other way prevented from contacting the waste material;
  - (e) All systems required by the Department to control or contain discharges to the environment must be completed and operational.
- (3) Closure of municipal solid waste landfills shall be in accordance with the detailed Final Engineered Site Closure Plan[s] approved in writing by the Department pursuant to OAR 340-94-110.
- (4) Closure approval:
- (a) When closure is completed, the permittee shall submit a written request to the Department for approval of the closure;
  - (b) Within 30 days of receipt of a written request for closure approval, the Department shall inspect the facility to verify that closure has been effected in accordance with the approved closure plan and the provisions of OAR Chapter 340 Divisions 93 and 94;
  - (c) If the Department determines that closure has been properly completed, the Department shall approve the closure in writing. Closure shall not be considered complete until such approval has been made. The date of approval notice shall be the date of commencement of the post-closure period.

[Publications: The publication(s) referred to or incorporated by reference in this rule are available from the Department of Environmental Quality.]

**POST-CLOSURE CARE REQUIREMENTS**

**340-94-130 [Renumbered from 340-61-043]**

If a municipal solid waste landfill is subject to 40 CFR, Part 258 as provided in 40 CFR, §258.1, the owner or operator shall comply with post-closure care requirements in 40 CFR, Part 258, Subpart F. All municipal solid waste permittees shall also comply with this rule.

- (1) Post-closure requirements:
  - (a) Upon completion or closure of a landfill, a detailed description of the site

1 including a plat ~~shall~~ ~~should~~ be filed with the appropriate county land  
2 recording authority by the permittee. The description should include the  
3 general types and location of wastes deposited, depth of waste and other  
4 information of probable interest to future land owners;

- 5  
6 (b) During the post-closure care period, the permittee must, at a minimum:
- 7 (A) Maintain the approved final contours and drainage system of the site;
  - 8 (B) Consistent with final use, ensure that a healthy vegetative cover is  
9 established and maintained over the site;
  - 10 (C) Operate and maintain each leachate and gas collection, removal and  
11 treatment system present at the site;
  - 12 (D) Operate and maintain each groundwater and surface water monitoring  
13 system present at the site;
  - 14 (E) Comply with all conditions of the closure permit issued by the  
15 Department.

- 16 (2) Post-closure care period. Post-closure care must continue for 30 years after the date of  
17 completion of closure of the land disposal site, unless otherwise approved or required  
18 by the Department according to OAR 340-94-100(4) and (5).~~[(7) and (8)].~~

19 [Publications: The publication(s) referred to or incorporated by reference in this rule are  
20 available from the Department of Environmental Quality.]

21  
22  
23  
24  
25  
26  
27  
28  
29  
30 **FINANCIAL ASSURANCE CRITERIA**

31  
32 **340-94-140 [Renumbered from 340-61-034]**

33  
34 If a municipal solid waste landfill is subject to 40 CFR, Part 258 as provided in 40 CFR, §258.1, the  
35 owner or operator shall comply with financial assurance criteria in 40 CFR, Part 258, Subpart G. All  
36 municipal solid waste permittees shall also comply with this rule.

- 37  
38 (1) Financial Assurance Required. The owner or operator of a municipal solid waste  
39 landfill shall maintain a financial assurance plan with detailed written cost estimates of  
40 the amount of financial assurance that is necessary and shall provide evidence of  
41 financial assurance for the costs of:
- 42 (a) Closure of the municipal solid waste landfill;
  - 43 (b) Post-closure maintenance of the municipal solid waste landfill; and
  - 44 (c) Any corrective action required by the Department to be taken at the municipal  
45 solid waste landfill, pursuant to OAR 340-94-080(3).

- 46  
47  
48  
49  
50 (2) Exemptions. The Department may exempt from the financial assurance requirements  
51 existing municipal solid waste landfills which stopped receiving waste before October 9,  
52 1993 (or which stopped receiving waste before April 9, 1994, if a "small landfill"  
3 meeting criteria in 40 CFR, §258.1(e)(2)), and completed installation of final cover by



1 October 9, 1994. The Department may also exempt from the financial assurance  
2 requirements an existing "very small landfill serving certain small communities"  
3 meeting criteria in 40 CFR, §258.1(f)(1), if such a landfill stops receiving waste before  
4 October 9, 1995 and completes installation of final cover by October 9, 1996.

5  
6 (a) Exemption criteria. To be eligible for this exemption, the applicant shall  
7 demonstrate to the satisfaction of the Department that the site meets all of the  
8 following criteria and that the site is likely to continue to meet all of these  
9 criteria until the site is closed in a manner approved by the Department:

10  
11 (A) The landfill poses no significant threat of adverse impact on  
12 groundwater or surface water;

13  
14 (B) The landfill poses no significant threat of adverse impact on public  
15 health or safety;

16  
17 (C) No system requiring active operation and maintenance is necessary for  
18 controlling or stopping discharges to the environment;

19  
20 (D) The area of the landfill that has been used for waste disposal and has  
21 not yet been properly closed in a manner acceptable to the Department  
22 is less than and remains less than two acres or complies with a closure  
23 schedule approved by the Department.

24  
25 (b) In determining if the applicant has demonstrated that a site meets the financial  
26 assurance exemption criteria, the Department will consider existing available  
27 information including, but not limited to, geology, soils, hydrology, waste type  
28 and volume, proximity to and uses of adjacent properties, history of site  
29 operation and construction, previous compliance inspection reports, existing  
30 monitoring data, the proposed method of closure and the information submitted  
31 by the applicant. The Department may request additional information if  
32 needed.

33  
34 (c) An exemption from the financial assurance requirement granted by the  
35 Department will remain valid only so long as the site continues to meet the  
36 exemption criteria in subsection (2)(a) of this rule. If the site fails to continue  
37 to meet the exemption criteria, the Department may modify the closure permit  
38 to require financial assurance. [Renumbered from 340-94-100 (3)-(5)]

39  
40 (3) ~~{(2)}~~ Schedule for provision of financial assurance.

41  
42 (a) For costs associated with the "worst-case" closure plan and the "Subtitle D"  
43 post-closure plan prepared pursuant to 40 CFR Subparts F and G and OAR  
44 340-94-110(1)(a)(A) and OAR 340-94-115(1)(a), respectively: Evidence of the  
45 required financial assurance for closure and post-closure maintenance of the  
46 landfill ~~has determined in the financial assurance plan required by OAR 340-~~  
47 ~~94-100(2)(b) shall be provided to the Department and placed in the facility~~  
48 ~~operating record~~ shall be provided on the following schedule:

49  
50 (A) For a new municipal solid waste landfill: no later than the time the  
51 solid waste permit is issued by the Department and prior to first  
52 receiving waste;

- 1 (B) For a regional disposal site operating under a solid waste permit on  
2 November 4, 1993: by May 4, 1994; ~~{the effective date of this rule;}~~  
3  
4 (C) For other~~{a}~~ municipal solid waste landfills operating under a solid  
5 waste permit on November 4, 1993: by April 9, 1995~~{, or at the time~~  
6 ~~a financial assurance plan is required by OAR 340-94-100(2)(b),~~  
7 ~~whichever is sooner}~~; or  
8  
9 (D) For a "very small landfill serving certain small communities" meeting  
10 criteria in 40 CFR, §258.1(f)(1) and operating under a solid waste  
11 permit on November 4, 1993: by October 9, 1995~~{, or at the time a~~  
12 ~~financial assurance plan is required by OAR 340-94-100(2)(b),~~  
13 ~~whichever is sooner}~~.  
14

15 (b) For costs associated with the Final Engineered Site Closure Plan and the Final  
16 Engineered Post-closure Plan prepared pursuant to OAR 340-94-110(1)(a)(B)  
17 and OAR 340-94-115(1)(b) respectively: Evidence of the required financial  
18 assurance for closure and post-closure maintenance of the landfill shall be  
19 provided at the same time those two Plans are due to the Department.  
20

21 (c) ~~{(b)}~~ Evidence of financial assurance for corrective action shall be provided  
22 ~~{to the Department}~~ before beginning corrective action.  
23

24 (d) Continuous financial assurance shall be maintained for the facility until the  
25 permittee or other person owning or controlling the site is no longer required  
26 to demonstrate financial responsibility for closure, post-closure care or  
27 corrective action (if required).  
28

29 (4) ~~{(3)}~~ Financial assurance plans. The financial assurance plan is a vehicle for  
30 determining the amount of financial assurance necessary and demonstrating that  
31 financial assurance is being provided. A financial assurance plan ~~{required by OAR~~  
32 340-94-100(2)(b)} shall include but not be limited to the following, as applicable:  
33

34 (a) Cost Estimates. A detailed written estimate of the third-party costs in current  
35 dollars (as calculated using a discount rate equal to the current yield of a 5-  
36 year U.S. Treasury Note as published in the Federal Reserve's H.15 (519)  
37 Selected Interest Rates for the week in which the calculation is done) of:  
38

39 (A) Closing the municipal solid waste landfill;

40 (B) Providing post-closure care, including ~~if~~ installing, operating and  
41 maintaining any environmental control system required on the landfill  
42 site;  
43

44 (C) Performing required corrective action activities; and  
45

46 ~~{(C) Monitoring and providing security for the landfill site; and}~~  
47

48 (D) Complying with any other requirement the Department may impose as  
49 a condition of ~~{renewing the permit.}~~ issuing a closure permit, closing  
50 the site, maintaining a closed facility, or implementing corrective  
51 action.  
52

1 (b) The source of the cost estimates;

2  
3 (c) ~~[(b)]~~ A detailed description of the form of the financial assurance and a copy

4 of the financial assurance mechanism;

5

6 (d) ~~[(c)]~~ A method and schedule for providing for or accumulating any required

7 amount of funds which may be necessary to meet the financial assurance

8 requirement;

9

10 (e) ~~[(d)]~~ A proposal with provisions satisfactory to the Department for disposing

11 of any excess moneys received or interest earned on moneys received for

12 financial assurance, if applicable.

13

14 (A) To the extent practicable and to the extent allowed by any franchise

15 agreement, the applicant's provisions for disposing of the excess

16 moneys received or interest earned on moneys shall provide for:

17

18 (i) ~~[(4)]~~ A reduction of the rates a person within the area served

19 by the municipal solid waste landfill is charged for solid

20 waste collection service as defined by ORS 459.005; or

21

22 (ii) ~~[(B)]~~ Enhancing present or future solid waste disposal

23 facilities within the area from which the excess moneys were

24 received.

25

26 (B) If the municipal solid waste landfill is owned and operated by a

27 private entity not regulated by a unit of local government, excess

28 moneys and interest remaining in any financial assurance reserve shall

29 be released to that business entity after post-closure care has been

30 completed and the permittee is released from permit requirements by

31 the Department.

32

33 (f) Adequate accounting procedures to insure that the permittee does not collect or

34 set aside funds in excess of the amount specified in the financial assurance plan

35 or any updates thereto or use the funds for any purpose other than required by

36 paragraph(8)(a)of this rule; [Renumbered from 340-94-140(6)(b)]

37

38 (g) The certification required by subsection (6)(c) of this rule; and

39

40 (h) The annual updates required by subsection (6)(d) of this rule.

41

42 (5) ~~[(4)]~~ Amount of Financial Assurance Required. ~~[The amount of financial assurance~~

43 required shall be established based upon the estimated closure and post closure care

44 costs included in the approved closure plan. ~~This required amount may be adjusted as~~

45 the plan is amended.] The amount of financial assurance required shall be established

46 as follows:

47

48 (a) Closure. Detailed cost estimates for closure shall be based on the "worst-case"

49 closure plan or the Final Engineered Site Closure Plan, as applicable. Cost

50 estimates for the Final Engineered Site Closure Plan shall take into

51 consideration at least the following:

52

3 ~~[(a)]~~ In reviewing the adequacy of the amount of financial assurance proposed by the

1 *applicant, the Department shall consider the following:}*

- 2
- 3 (A) Amount and type of solid waste deposited in the site;
- 4
- 5 (B) Amount and type of buffer from adjacent land and from drinking
- 6 water sources;
- 7
- 8 (C) Amount, type, availability and cost of required cover;
- 9
- 10 (D) Seeding, grading, erosion control and surface water diversion
- 11 required;
- 12
- 13 (E) Planned future use of the disposal site property;
- 14
- 15 ~~{(F) Type, duration of use, initial cost and maintenance cost of any active~~
- 16 ~~system necessary for controlling or stopping discharges;}~~
- 17
- 18 (F) ~~{(G)}~~ The portion of the site property closed before final closure of
- 19 the entire site; and
- 20
- 21 (G) ~~{(H)}~~ Any other conditions imposed on the permit relating to closure
- 22 ~~{or post-closure}~~ of the site~~};~~.
- 23
- 24 ~~{(I) The financial capability of the applicant.}~~

25

26 ~~(b) After reviewing the proposed amount of financial assurance, the Department~~

27 ~~may either:~~

28

29 ~~(A) Approve the amount proposed by the applicant; or~~

30

31 ~~(B) Disapprove the amount and require the applicant to submit a revised~~

32 ~~amount consistent with the factors considered by the Department.}~~

33

34 (b) Post-closure care. Detailed cost estimates for post-closure care shall be based

35 on the "Subtitle D" post-closure plan or the Final Engineered Post-closure

36 Plan, as applicable. Cost estimates for the Final Engineered Post-closure Plan

37 shall also take into consideration at least the following:

38

39 (A) Type, duration of use, initial cost and maintenance cost of any active

40 system necessary for controlling or stopping discharges; and

41

42 (B) Any other conditions imposed on the permit relating to post-closure

43 care of the site.

44

45 (c) Corrective action. Estimated total costs of required corrective action activities

46 for the entire corrective action period, as described in a corrective action

47 report pursuant to requirements of OAR 340-94-080(3) and 40 CFR §258.73.

48

49 (d) If a permittee is responsible for providing financial assurance for closure, post-

50 closure care and/or corrective action activities at more than one municipal solid

51 waste landfill, the amount of financial assurance required is equal to the sum

52 of all cost estimates for each activity at each facility.

1 (6) How Financial Assurance Is to Be Provided and Updated.

2  
3 (a) The permittee shall submit to the Department a copy of the first financial  
4 assurance mechanism prepared in association with a "worst-case" closure plan,  
5 a Final Engineered Site Closure Plan, a "Subtitle D" post-closure plan, a Final  
6 Engineered Post-closure Plan, and a corrective action report.

7  
8 (b) The permittee shall also place a copy of the applicable financial assurance  
9 plan(s) in the facility operating record on the schedule specified in section (3)  
10 of this rule.

11  
12 (c) The permittee shall certify to the Director at the time a financial assurance  
13 mechanism is submitted to the Department and when a financial assurance plan  
14 is placed in the facility operating record that the financial assurance mechanism  
15 meets all state and federal requirements. This date becomes the "annual  
16 review date" of the provision of financial assurance, unless a corporate  
17 guarantee is used, in which case the annual review date is 90 days after the  
18 end of the corporation's fiscal year.

19  
20 (d) Annual update. The permittee shall annually review and update the financial  
21 assurance during the operating life and post-closure care period, or until the  
22 corrective action is completed, as applicable.

23  
24 (A) The annual review shall include:

25  
26 (i) An adjustment to the cost estimate(s) for inflation and in the  
27 discount rate as specified in subsection (4)(a) of this rule;

28  
29 (ii) A review of the closure, post-closure care and corrective  
30 action (if required) plans and facility conditions to assess  
31 whether any changes have occurred which would increase or  
32 decrease the estimated maximum costs of closure, post-  
33 closure care or corrective action since the previous review;

34  
35 (iii) If a trust fund or other pay-in financial mechanism is being  
36 used, an accounting of amounts deposited and expenses drawn  
37 from the fund, as well as its current balance.

38  
39 (B) The financial assurance mechanism(s) shall be increased or may be  
40 reduced to take into consideration any adjustments in cost estimates  
41 identified in the annual review.

42  
43 (C) The annual update shall consist of a certification from the permittee  
44 submitted to the Department and placed in the facility operating  
45 record. The certification shall state that the financial assurance plan(s)  
46 and financial assurance mechanism(s) have been reviewed, updated  
47 and found adequate, and that the updated documents have been placed  
48 in the facility operating record. The annual update shall be no later  
49 than:

50  
51 (i) The facility's annual review date; or

52  
53 (ii) For a facility operating under a closure permit, by the date  
54 specified in OAR 340-94-100(3).

1 (7) Department Review of Financial Assurance and Third-Party Certification.

2  
3 (a) The Department may at any time select a permittee to submit financial  
4 assurance plan(s) and financial assurance mechanism(s) for Department review.  
5 Selection for review will not occur more frequently than once every five years,  
6 unless the Department has reasonable cause for more frequent selection. The  
7 Department may, however, review such plans and mechanisms in conjunction  
8 with a site inspection at any time.

9  
10 (b) A permittee who wants to provide "alternative financial assurance" pursuant to  
11 OAR 340-94-145(5)(g) shall submit its financial assurance plan and proposed  
12 financial assurance mechanism for Department review and approval on the  
13 schedule specified in section (3) of this rule. The submittal shall include  
14 certification from a qualified third party that the financial assurance mechanism  
15 meets all state and federal requirements for financial assurance including  
16 criteria in OAR 340-94-145(5)(g), and is reasonably designed to provide the  
17 required amount of financial assurance. The third-party certification shall be  
18 submitted in a format acceptable to the Department.

19  
20 (c) The Department will review the financial assurance and the third-party  
21 certification, if applicable, for compliance with applicable laws.

22  
23 ~~[(5) Form of Financial Assurance. The financial assurance may be in any form proposed by~~  
24 ~~the applicant if it is approved by the Department:—~~

25  
26 ~~(a) The Department will approve forms of financial assurance to cover the ongoing~~  
27 ~~closure activities occurring while the municipal solid waste landfill is still~~  
28 ~~receiving solid waste where the applicant can prove to the satisfaction of the~~  
29 ~~Department that all of the following conditions can be met:—~~

30  
31 ~~(A) That financial assurance moneys in excess of the amount approved by~~  
32 ~~the Department will not be set aside or collected by the disposal site~~  
33 ~~operator. The Department may approve an additional amount of~~  
34 ~~financial assurance during a review conducted in conjunction with a~~  
35 ~~subsequent application to amend or renew the disposal site permit or a~~  
36 ~~request by the owner or operator of a municipal solid waste landfill to~~  
37 ~~extend the useful life of the landfill. Nothing in this subsection shall~~  
38 ~~prohibit a site operator from setting aside an additional reserve from~~  
39 ~~funds other than those collected from rate payers specifically for~~  
40 ~~closure and post-closure and such a reserve shall not be part of any~~  
41 ~~fund or set aside required in the applicable financial assurance plan;~~

42  
43 ~~(B) That the use of financial assurance is restricted so that the financial~~  
44 ~~resources can only be used to guarantee that the following activities~~  
45 ~~will be performed or that the financial resources can only be used to~~  
46 ~~finance the following activities and that the financial resources cannot~~  
47 ~~be used for any other purpose:—~~

48 ~~(i) Close the municipal solid waste landfill according to the~~  
49 ~~approved closure plan;~~

50  
51 ~~(ii) Install, operate and maintain any required environmental~~  
52 ~~control systems;~~

1 ~~(iii) Monitor and provide security for the landfill site;~~

2  
3 ~~(iv) Comply with conditions of the closure permit.]~~

4  
5 ~~[(C) That, to the extent practicable, all excess moneys received and interest~~  
6 ~~earned on moneys shall be disposed of in a manner which shall provide~~  
7 ~~for:~~

8 ~~(i) A reduction of the rates a person within the area served by~~  
9 ~~the municipal solid waste landfill is charged for solid waste~~  
10 ~~collection service (as defined by ORS 459.005); or~~

11 ~~(ii) Enhancing present or future solid waste disposal facilities~~  
12 ~~within the area from which the excess moneys were received;~~  
13 ~~or~~

14  
15 ~~(iii) Where the disposal site is operated and exclusively used to~~  
16 ~~dispose of solid waste generated by a single business entity,~~  
17 ~~excess moneys and interest remaining in the financial~~  
18 ~~assurance reserve shall be released to that business entity at~~  
19 ~~the time that the permit is terminated.~~

20  
21 ~~(b) If the permittee fails to adequately perform the ongoing closure activities in~~  
22 ~~accordance with the closure plan and permit requirements, the permittee shall~~  
23 ~~provide an additional amount of financial assurance in a form meeting the~~  
24 ~~requirements of subsection (5)(c) of this rule within 30 days after service of a~~  
25 ~~Final Order assessing a civil penalty. The total amount of financial assurance~~  
26 ~~must be sufficient to cover all remaining closure and post closure activities;]~~

27  
28 ~~[(e) The Department will approve only the following forms of financial assurance for~~  
29 ~~the final closure and post closure activities which will occur after the municipal~~  
30 ~~solid waste landfill stops receiving solid waste:~~

31  
32 ~~(A) A closure trust fund established with an entity which has the authority to~~  
33 ~~act as a trustee and whose trust operations are regulated and examined~~  
34 ~~by a federal or state agency. The wording of the trust agreement must~~  
35 ~~be acceptable to the Department. The purpose of the closure trust fund~~  
36 ~~is to receive and manage any funds that may be paid by the permittee~~  
37 ~~and to disburse those funds only for closure or post closure maintenance~~  
38 ~~activities which are authorized by the Department. Within 60 days after~~  
39 ~~receiving itemized bills for closure activities, the Department will~~  
40 ~~determine whether the closure expenditures are in accordance with the~~  
41 ~~closure plan or otherwise justified and, if so, will send a written request~~  
42 ~~to the trustee to make reimbursements;]~~

43  
44 ~~[(B) A surety bond guaranteeing payment into a closure fund issued by a~~  
45 ~~surety company listed as acceptable in Circular 570 of the U.S.~~  
46 ~~Department of the Treasury. The wording of the surety bond must be~~  
47 ~~acceptable to the Department. A standby closure trust fund must also~~  
48 ~~be established by the permittee. The purpose of the standby closure~~  
49 ~~trust fund is to receive any funds that may be paid by the permittee or~~  
50 ~~surety company. The bond must guarantee that the permittee will either~~  
51 ~~fund the standby closure trust fund in an amount equal to the penal sum~~  
52 ~~of the bond before the site stops receiving waste or within 15 days after~~  
3 ~~an order to begin closure is issued by the Department or by a court of~~

1 ~~competent jurisdiction; or that the permittee will provide alternate~~  
2 ~~financial assurance acceptable to the Department within 90 days after~~  
3 ~~receipt of a notice of cancellation of the bond from the surety. The~~  
4 ~~surety shall become liable on the bond obligation if the permittee fails to~~  
5 ~~perform as guaranteed by the bond. The surety may not cancel the~~  
6 ~~bond until at least 120 days after the notice of cancellation has been~~  
7 ~~received by both the permittee and the Department. If the permittee has~~  
8 ~~not provided alternate financial assurance acceptable to the Department~~  
9 ~~within 90 days of the cancellation notice, the surety must pay the~~  
10 ~~amount of the bond into the standby closure trust account.}~~

11  
12 ~~{(C) A surety bond guaranteeing performance of closure issued by a surety~~  
13 ~~company listed as acceptable in Circular 570 of the U.S. Department of~~  
14 ~~the Treasury. The wording of the surety bond must be acceptable to the~~  
15 ~~Department. A standby closure trust fund must also be established by~~  
16 ~~the permittee. The purpose of the standby closure trust fund is to~~  
17 ~~receive any funds that may be paid by the surety company. The bond~~  
18 ~~must guarantee that the permittee will either perform final closure and~~  
19 ~~post closure maintenance or provide alternate financial assurance~~  
20 ~~acceptable to the Department within 90 days after receipt of a notice of~~  
21 ~~cancellation of the bond from the surety. The surety shall become liable~~  
22 ~~on the bond obligation if the permittee fails to perform as guaranteed by~~  
23 ~~the bond. The surety may not cancel the bond until at least 120 days~~  
24 ~~after the notice of cancellation has been received by both the permittee~~  
25 ~~and the Department. If the permittee has not provided alternate~~  
26 ~~financial assurance acceptable to the Department within 90 days of the~~  
27 ~~cancellation notice, the surety must pay the amount of the bond into the~~  
28 ~~standby closure trust account.}~~

29  
30 ~~{(D) An irrevocable letter of credit issued by an entity which has the~~  
31 ~~authority to issue letters of credit and whose letter of credit operations~~  
32 ~~are regulated and examined by a federal or state agency. The wording~~  
33 ~~of the letter of credit must be acceptable to the Department. A standby~~  
34 ~~closure trust fund must also be established by the permittee. The~~  
35 ~~purpose of the standby closure trust fund is to receive any funds~~  
36 ~~deposited by the issuing institution resulting from a draw on the letter of~~  
37 ~~credit. The letter of credit must be irrevocable and issued for a period~~  
38 ~~of at least one year unless the issuing institution notifies both the~~  
39 ~~permittee and the Department at least 120 days before the current~~  
40 ~~expiration date. If the permittee fails to perform closure and~~  
41 ~~post closure activities according to the closure plan and permit~~  
42 ~~requirements, or if the permittee fails to provide alternate financial~~  
43 ~~assurance acceptable to the Department within 90 days after notification~~  
44 ~~that the letter of credit will not be extended, the Department may draw~~  
45 ~~on the letter of credit.}~~

46  
47 ~~{(E) A closure insurance policy issued by an insurer who is licensed to~~  
48 ~~transact the business of insurance or is eligible as an excess or surplus~~  
49 ~~lines insurer in one or more states. The wording of the certificate of~~  
50 ~~insurance must be acceptable to the Department. The closure insurance~~  
51 ~~policy must guarantee that funds will be available to complete final~~  
52 ~~closure and post closure maintenance of the site. The policy must also~~  
3 ~~guarantee that the insurer will be responsible for paying out funds for~~



1 reimbursement of closure and post closure expenditures after notification  
2 by the Department that the expenditures are in accordance with the  
3 closure plan or otherwise justified. The policy must provide that the  
4 insurance is automatically renewable and that the insurer may not  
5 cancel, terminate or fail to renew the policy except for failure to pay the  
6 premium. If there is a failure to pay the premium, the insurer may not  
7 terminate the policy until at least 120 days after the notice of  
8 cancellation has been received by both the permittee and the  
9 Department. Termination of the policy may not occur and the policy  
10 must remain in full force and effect if: the Department determines that  
11 the land disposal site has been abandoned; or the Department has  
12 commenced a proceeding to modify the permit to require immediate  
13 closure; or closure has been ordered by the Department, Commission or  
14 a court of competent jurisdiction; or the permittee is named as debtor in  
15 a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S.  
16 Code; or the premium due is paid. The permittee is required to  
17 maintain the policy in full force and effect until the Department consents  
18 to termination of the policy when alternative financial assurance is  
19 provided or when the permit is terminated.}]

21 ~~{(F) Corporate guarantee. A private corporation meeting the financial test  
22 may provide a corporate guarantee that closure and post closure  
23 activities will be completed according to the closure plan and permit  
24 requirements. To qualify, a private corporation must meet the criteria  
25 of either subparagraphs (i) or (ii) of this paragraph:~~

26  
27 ~~(i) Financial Test. To pass the financial test, the permittee  
28 must have:~~

29  
30 ~~(I) Two of the following three ratios: A ratio of total  
31 liabilities to net worth less than 2.0; a ratio of the sum  
32 of net income plus depreciation, depletion, and  
33 amortization to total liabilities greater than 0.1; or a  
34 ratio of current assets to current liabilities greater than  
35 1.5;~~

36  
37 ~~(II) Net working capital and tangible net worth each at  
38 least six times the sum of the current closure and  
39 post closure cost estimates;~~

40  
41 ~~(III) Tangible net worth of at least \$10 million; and~~

42  
43 ~~(IV) Assets in the United States amounting to at least 90  
44 percent of its total assets or at least six times the sum  
45 of the current closure and post closure cost estimates.}]~~

46  
47 ~~{(ii) Alternative Financial Test. To pass the alternative financial  
48 test, the permittee must have:~~

49  
50 ~~(I) A current rating of AAA, AA, A, or BBB as issued by  
51 Standard and Poor's or Aaa, Aa, A, or Baa as issued  
52 by Moody's;~~

1 ~~(II) Tangible net worth at least six times the sum of the~~  
2 ~~current closure and post closure cost estimates;~~

3  
4 ~~(III) Tangible net worth of at least \$10 million; and~~

5  
6 ~~(IV) Assets in the United States amounting to at least 90~~  
7 ~~percent of its total assets or at least six times the sum~~  
8 ~~of the current closure and post closure cost estimates.}]~~

9  
10 ~~[(iii) The permittee shall demonstrate that it passes the financial~~  
11 ~~test at the time the financial assurance plan is filed and~~  
12 ~~reconfirm that annually 90 days after the end of the~~  
13 ~~corporation's fiscal year by submitting the following items to~~  
14 ~~the Department:~~

15  
16 ~~(I) A letter signed by the permittee's chief financial officer~~  
17 ~~that provides the information necessary to document~~  
18 ~~that the permittee passes the financial test; that~~  
19 ~~guarantees that the funds to finance closure and~~  
20 ~~post closure activities according to the closure or post~~  
21 ~~closure plan and permit requirements are available;~~  
22 ~~that guarantees that the closure and post closure~~  
23 ~~activities will be completed according to the closure~~  
24 ~~plan and permit requirements; that guarantees that the~~  
25 ~~standby closure trust fund will be fully funded within~~  
26 ~~30 days after either service of a Final Order assessing~~  
27 ~~a civil penalty from the Department for failure to~~  
28 ~~adequately perform closure or post closure activities~~  
29 ~~according to the closure plan and permit, or service of~~  
30 ~~a written notice from the Department that the permittee~~  
31 ~~no longer meets the criteria of the financial test; that~~  
32 ~~guarantees that the permittee's chief financial officer~~  
33 ~~will notify the Department within 15 days any time that~~  
34 ~~the permittee no longer meets the criteria of the~~  
35 ~~financial test or is named as debtor in a voluntary or~~  
36 ~~involuntary proceeding under Title 11 (Bankruptcy),~~  
37 ~~U.S. Code; and that acknowledges that the corporate~~  
38 ~~guarantee is a binding obligation on the corporation~~  
39 ~~and that the chief financial officer has the authority to~~  
40 ~~bind the corporation to the guarantee.}]~~

41  
42 ~~[(II) A copy of the independent certified public accountant's~~  
43 ~~report on examination of the permittee's financial~~  
44 ~~statements for the latest completed fiscal year;~~

45  
46 ~~(III) A special report from the permittee's independent~~  
47 ~~certified public accountant (CPA) stating that the CPA~~  
48 ~~has compared the data which the letter from the~~  
49 ~~permittee's chief financial officer specifies as having~~  
50 ~~been derived from the independently audited year end~~  
51 ~~financial statements for the latest fiscal year with the~~  
52 ~~amounts in such financial statement, and that no~~  
53 ~~matters came to the CPA's attention which caused the~~

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CPA to believe that the specified data should be adjusted;

(IV) ~~A trust agreement demonstrating that a standby closure trust fund has been established with an entity which has authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. The wording of the trust agreement must be acceptable to the Department.~~

~~{(iv) The Department may, based on a reasonable belief that the permittee no longer meets the criteria of the financial test, require reports of the financial condition at any time from the permittee in addition to the annual report. If the Department finds, on the basis of such reports or other information, that the permittee no longer meets the criteria of the financial test, the permittee shall fully fund the standby closure trust fund within 30 days after notification by the Department.}~~

~~(G) Alternative forms of financial assurance where the applicant can prove to the satisfaction of the Department that the level of security is equivalent to paragraphs (A) through (F) of this subsection and that the criteria of subsection (5)(a) of this rule are met.~~ [Note: 340-94-140(5) is being renumbered into a new rule, 340-94-145]

(8) ~~{(6)}~~ Accumulation ~~{and use}~~ of any financial assurance funds:

(a) ~~{The applicant shall set aside}~~ The financial assurance mechanisms for closure, post-closure care and corrective action shall ensure the funds will be available in a timely fashion when needed. The permittee shall pay moneys into a trust fund[s] in the amount and at the frequency specified in the financial assurance plan approved by the Department. ~~}~~ or obtain other financial assurance mechanisms as specified in the financial assurance plan, on the schedule specified in section (3) of this rule.

(A) Closure. The total amount of financial assurance required for closure shall be available in the form approved by the Department at the time that solid waste is no longer received at the site; specified in the financial assurance plan or any updates thereto, whenever final closure of a municipal solid waste landfill unit is scheduled to occur in the "worst case" closure plan or in the Final Engineered Site Closure Plan.

(B) Post-closure care. The total amount of financial assurance required for post-closure care shall be available in the form specified in the financial assurance plan or any updates thereto, whenever post-closure care is scheduled to begin for a municipal solid waste landfill unit in the "Subtitle D" post-closure plan or in the Final Engineered Post-closure Plan.

(C) Corrective action. The total amount of financial assurance required for corrective action shall be available in the form specified in the financial assurance plan or any updates thereto on the schedule specified in 40

1 CFR §258.74.

2  
3 ~~[(b) The financial assurance plan shall contain adequate accounting procedures to~~  
4 ~~insure that the disposal site operator does not collect or set aside funds in excess~~  
5 ~~of the amount approved by the Department or use the funds for any purpose~~  
6 ~~other than required by paragraph (5)(a)(B) of this rule.] [Renumbered to 340-~~  
7 ~~94-140(4)(f)]~~

8  
9 (b) ~~[(e)]~~The permittee is subject to audit by the Department (or Secretary of State)  
10 and shall allow the Department access to all records during normal business  
11 hours for the purpose of determining compliance with this rule and OAR 340-  
12 94-145;

13  
14 (c) ~~[(d)]~~If the Department determines that the permittee did not set aside the  
15 required amount of funds for financial assurance in the form and at the  
16 frequency required by the applicable ~~approved~~ financial assurance plan, or if  
17 the Department determines that the financial assurance funds were used for any  
18 purpose other than as required in section (1) ~~paragraph (5)(a)(B)~~ of this rule,  
19 the permittee shall, within 30 days after notification by the Department, deposit  
20 a sufficient amount of financial assurance in the form required by the applicable  
21 ~~approved~~ financial assurance plan along with an additional amount of financial  
22 assurance equal to the amount of interest that would have been earned, had the  
23 required amount of financial assurance been deposited on time or had it not been  
24 withdrawn for unauthorized use~~[-]~~;

25  
26 (d) ~~If financial assurance is provided under OAR 340-94-145(5)(a), (b) or (g), upon~~  
27 ~~successful closure and release from permit requirements by the Department, any~~  
28 ~~excess money in the financial assurance account must be used in a manner~~  
29 ~~consistent with subsection (4)(e) of this rule. [Renumbered from OAR 340-94-~~  
30 ~~150(7)]~~

31  
32 ~~[(Note: In addition to the requirements set forth in this rule, 40 CFR, §258.61 requires municipal~~  
33 ~~landfill owners and operators subject to 40 CFR, Part 258 to maintain financial assurance for~~  
34 ~~costs of closure, post-closure care and corrective action. The financial assurance costs must be~~  
35 ~~adjusted annually to compensate for inflation. Municipal solid waste landfill owners and~~  
36 ~~operators are subject to the requirements of Federal law.)]~~

37  
38 [Publications: The publication(s) referred to or incorporated by reference in this rule are  
39 available from the Department of Environmental Quality.]

40  
41 NEW RULE:

42 FINANCIAL ASSURANCE MECHANISMS

43  
44 340-94-145 [Renumbered from 340-94-140(5)]

45  
46 (5) Form of Financial Assurance. ~~[The financial assurance may be in any form proposed by the~~  
47 ~~applicant if it is approved by the Department:]~~

48  
49 (a) ~~The Department will approve forms of financial assurance to cover the ongoing~~  
50 ~~closure activities occurring while the municipal solid waste landfill is still~~  
51 ~~receiving solid waste where the applicant can prove to the satisfaction of the~~  
52

1 Department that all of the following conditions can be met:—  
2

3 ~~(A) — That financial assurance moneys in excess of the amount approved by~~  
4 ~~the Department will not be set aside or collected by the disposal site~~  
5 ~~operator. The Department may approve an additional amount of~~  
6 ~~financial assurance during a review conducted in conjunction with a~~  
7 ~~subsequent application to amend or renew the disposal site permit or a~~  
8 ~~request by the owner or operator of a municipal solid waste landfill to~~  
9 ~~extend the useful life of the landfill. Nothing in this subsection shall~~  
10 ~~prohibit a site operator from setting aside an additional reserve from~~  
11 ~~funds other than those collected from rate payers specifically for closure~~  
12 ~~and post closure and such a reserve shall not be part of any fund or set~~  
13 ~~aside required in the applicable financial assurance plan;}~~

14  
15 ~~{(B) — That the use of financial assurance is restricted so that the financial~~  
16 ~~resources can only be used to guarantee that the following activities will~~  
17 ~~be performed or that the financial resources can only be used to finance~~  
18 ~~the following activities and that the financial resources cannot be used~~  
19 ~~for any other purpose:—~~

20  
21 ~~(i) — Close the municipal solid waste landfill according to the~~  
22 ~~approved closure plan;~~

23  
24 ~~(ii) — Install, operate and maintain any required environmental~~  
25 ~~control systems;~~

26  
27 ~~(iii) — Monitor and provide security for the landfill site;~~

28  
29 ~~(iv) — Comply with conditions of the closure permit.~~

30  
31 ~~(C) — That, to the extent practicable, all excess moneys received and interest~~  
32 ~~earned on moneys shall be disposed of in a manner which shall provide~~  
33 ~~for:~~

34  
35 ~~(i) — A reduction of the rates a person within the area served by~~  
36 ~~the municipal solid waste landfill is charged for solid waste~~  
37 ~~collection service (as defined by ORS 459.005); or~~

38  
39 ~~(ii) — Enhancing present or future solid waste disposal facilities~~  
40 ~~within the area from which the excess moneys were received;~~  
41 ~~or~~

42  
43 ~~(iii) — Where the disposal site is operated and exclusively used to~~  
44 ~~dispose of solid waste generated by a single business entity,~~  
45 ~~excess moneys and interest remaining in the financial~~  
46 ~~assurance reserve shall be released to that business entity at~~  
47 ~~the time that the permit is terminated.~~

48  
49 ~~(b) — If the permittee fails to adequately perform the ongoing closure activities in~~  
50 ~~accordance with the closure plan and permit requirements, the permittee shall~~  
51 ~~provide an additional amount of financial assurance in a form meeting the~~  
52 ~~requirements of subsection (5)(c) of this rule within 30 days after service of a~~  
3 ~~Final Order assessing a civil penalty. The total amount of financial assurance~~

~~must be sufficient to cover all remaining closure and post closure activities;~~

(1) The financial assurance mechanism shall restrict the use of the financial assurance so that the financial resources may be used only to guarantee that closure, post-closure or corrective action activities will be performed, or that the financial resources can be used only to finance closure, post-closure or corrective action activities.

(2) The financial assurance mechanism shall provide that the Department or a party approved by the Department is the beneficiary of the financial assurance.

(3) A permittee may use one financial assurance mechanism for closure, post-closure and corrective action activities, but the amount of funds assured for each activity must be specified.

(4) The financial assurance mechanism shall be worded as specified by the Department, unless a permittee uses an alternative financial assurance mechanism pursuant to subsection (5)(g) of this rule. The Department retains the authority to approve the wording of an alternative financial assurance mechanism.

(5) ~~{(e) The Department will approve}~~ Allowable Financial Assurance Mechanisms. A permittee shall provide only the following forms of financial assurance for ~~{the final}~~ closure and post-closure activities ~~{which will occur after the municipal solid waste landfill stops receiving solid waste}~~:

(a) ~~{(4)}~~ A ~~{closure}~~ trust fund established with an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency and meeting criteria in 40 CFR §258.74(a). ~~{The wording of the trust agreement must be acceptable to the Department.}~~ The purpose of the ~~{closure}~~ trust fund is to receive and manage any funds that may be paid by the permittee and to disburse those funds only for closure, ~~{or}~~ post-closure maintenance or corrective action activities which are authorized by the Department. The permittee shall notify the Department, in writing, before any expenditure of trust fund moneys is made, describing and justifying the activities for which the expenditure is to be made. If the Department does not respond to the trustee within 30 days after receiving such notification, the expenditure is deemed authorized and the trustee may make the requested reimbursements; ~~{Within 60 days after receiving itemized bills for closure activities, the Department will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified and, if so, will send a written request to the trustee to make reimbursements.}~~

(b) ~~{(B)}~~ A surety bond guaranteeing payment into a standby closure or post-closure trust fund issued by a surety company listed as acceptable in Circular 570 of the U.S. Department of the Treasury. ~~{The wording of the surety bond must be acceptable to the Department.}~~ The ~~{A}~~ standby closure or post-closure trust fund must ~~{also}~~ be established by the permittee. The purpose of the standby ~~{closure}~~ trust fund is to receive any funds that may be paid by the permittee or surety company. The penal sum of the bond must be in an amount at least equal to the current closure or post-closure care cost estimate, as applicable. The bond must guarantee that the permittee will either fund the standby ~~{closure}~~ trust fund in an amount equal to the penal sum of the bond before the site stops receiving waste or within 15 days after an order to begin closure is issued by the Department or by a court of competent jurisdiction; or that the permittee will

1 provide alternate financial assurance acceptable to the Department within 90  
2 days after receipt of a notice of cancellation of the bond from the surety. The  
3 surety shall become liable on the bond obligation if the permittee fails to  
4 perform as guaranteed by the bond. The surety may not cancel the bond until at  
5 least 120 days after the notice of cancellation has been received by both the  
6 permittee and the Department. If the permittee has not provided alternate  
7 financial assurance acceptable to the Department within 90 days of the  
8 cancellation notice, the surety must pay the amount of the bond into the standby  
9 ~~{closure}~~ trust account;

10  
11 **(c)** ~~{(C)}~~ A surety bond guaranteeing performance of closure, post-closure or  
12 corrective action activities issued by a surety company listed as acceptable in  
13 Circular 570 of the U.S. Department of the Treasury. ~~{The wording of the~~  
14 ~~surety bond must be acceptable to the Department.}~~ A standby ~~{closure}~~ trust  
15 fund must also be established by the permittee. The purpose of the standby  
16 ~~{closure}~~ trust fund is to receive any funds that may be paid by the surety  
17 company. The bond must guarantee that the permittee will either perform final  
18 closure, ~~and~~ post-closure maintenance or corrective action activities, as  
19 applicable, or provide alternate financial assurance acceptable to the Department  
20 within 90 days after receipt of a notice of cancellation of the bond from the  
21 surety. The surety shall become liable on the bond obligation if the permittee  
22 fails to perform as guaranteed by the bond. The surety may not cancel the bond  
23 until at least 120 days after the notice of cancellation has been received by both  
24 the permittee and the Department. If the permittee has not provided alternate  
25 financial assurance acceptable to the Department within 90 days of the  
26 cancellation notice, the surety must pay the amount of the bond into the standby  
27 ~~{closure}~~ trust account;

28  
29 **(d)** ~~{(D)}~~ An irrevocable letter of credit issued by an entity which has the authority to  
30 issue letters of credit and whose letter-of-credit operations are regulated and  
31 examined by a federal or state agency. ~~{The wording of the letter of credit must~~  
32 ~~be acceptable to the Department.}~~ A standby ~~{closure}~~ trust fund must also be  
33 established by the permittee. The purpose of the standby ~~{closure}~~ trust fund is  
34 to receive any funds deposited by the issuing institution resulting from a draw  
35 on the letter of credit. The letter of credit must be irrevocable and issued for a  
36 period of at least one year and shall be automatically extended for at least one  
37 year on each successive expiration date unless the issuing institution notifies both  
38 the permittee and the Department at least 120 days before the current expiration  
39 date. If the permittee fails to perform closure and post-closure activities  
40 according to the closure plan and permit requirements, or to perform the  
41 selected remedy described in the corrective action report, or if the permittee  
42 fails to provide alternate financial assurance acceptable to the Department within  
43 90 days after notification that the letter of credit will not be extended, the  
44 Department may draw on the letter of credit;

45  
46 **(e)** ~~{(E)}~~ A closure or post-closure insurance policy issued by an insurer who is  
47 licensed to transact the business of insurance or is eligible as an excess or  
48 surplus lines insurer in one or more states. ~~{The wording of the certificate of~~  
49 ~~insurance must be acceptable to the Department.}~~ The ~~{closure}~~ insurance  
50 policy must guarantee that funds will be available to complete final closure and  
51 post-closure maintenance of the site. The policy must also guarantee that the  
52 insurer will be responsible for paying out funds for reimbursement of closure  
3 and post-closure expenditures ~~{after notification by the Department}~~ that ~~{the~~

1 ~~expenditures~~ are in accordance with the closure *or post-closure* plan or  
2 otherwise justified. The permittee shall notify the Department, in writing,  
3 before any expenditure of insurance policy moneys is made, describing and  
4 justifying the activities for which the expenditure is to be made. If the  
5 Department does not respond to the insurer within 30 days after receiving such  
6 notification, the expenditure is deemed authorized and the insurer may make the  
7 requested reimbursements. The policy must provide that the insurance is  
8 automatically renewable and that the insurer may not cancel, terminate or fail to  
9 renew the policy except for failure to pay the premium. If there is a failure to  
10 pay the premium, the insurer may not terminate the policy until at least 120  
11 days after the notice of cancellation has been received by both the permittee and  
12 the Department. Termination of the policy may not occur and the policy must  
13 remain in full force and effect if: the Department determines that the land  
14 disposal site has been abandoned; or the Department has commenced a  
15 proceeding to modify the permit to require immediate closure; or closure has  
16 been ordered by the Department, Commission or a court of competent  
17 jurisdiction; or the permittee is named as debtor in a voluntary or involuntary  
18 proceeding under Title 11 (Bankruptcy), U.S. Code; or the premium due is  
19 paid. The permittee is required to maintain the policy in full force and effect  
20 until the Department consents to termination of the policy when alternative  
21 financial assurance is provided or when the permit is terminated;

22  
23 **(f)** ~~(F)~~ Corporate guarantee. A private corporation meeting the financial test may  
24 provide a corporate guarantee that funds are available for closure, ~~and~~  
25 post-closure or corrective action activities, and that those activities will be  
26 completed according to the closure *or post-closure* plan, ~~and~~ permit  
27 requirements or selected remedy described in the corrective action report, as  
28 applicable. To qualify, a private corporation must meet the criteria of either  
29 paragraph(A) or (B) of this subsection: ~~subparagraphs (i) or (ii) of this~~  
30 ~~paragraph.~~

31  
32 **(A)** ~~(#)~~ Financial Test. To pass the financial test, the permittee must have:

33  
34 **(i)** ~~(I)~~ Two of the following three ratios: A ratio of total  
35 liabilities to tangible net worth less than 3.0~~2.0~~; a ratio of  
36 the sum of net income plus depreciation, depletion, and  
37 amortization to total liabilities greater than 0.1; or a ratio of  
38 current assets to current liabilities greater than 1.5;

39  
40 **(ii)** ~~(II)~~ Net working capital equal to at least four times and  
41 tangible net worth equal to each at least six times the sum  
42 of the current ~~closure and post-closure~~ cost estimates  
43 covered by the test;

44  
45 **(iii)** ~~(III)~~ Tangible net worth of at least \$10 million; and

46  
47 **(iv)** ~~(IV)~~ Assets in the United States amounting to at least ~~90~~  
48 percent of its total assets or at least six times the sum of  
49 the current ~~closure and post-closure~~ cost estimates covered  
50 by the test.

51  
52 **(B)** ~~(#)~~ Alternative Financial Test. To pass the alternative financial test,  
53 the permittee must have:



1 ~~(I) A current rating of AAA, AA, A, or BBB as issued by~~  
2 ~~Standard and Poor's or Aaa, Aa, A, or Baa as issued~~  
3 ~~by Moody's;~~

4  
5 ~~(II) Tangible net worth at least six times the sum of the~~  
6 ~~current closure and post closure cost estimates;~~

7  
8 ~~(III) Tangible net worth of at least \$10 million; and~~

9  
10 ~~(IV) Assets in the United States amounting to at least 90~~  
11 ~~percent of its total assets or at least six times the sum~~  
12 ~~of the current closure and post closure cost estimates.]~~

13  
14 (i) Tangible net worth of at least \$10 million; and

15  
16 (ii) Two of the following three ratios:

17  
18 (I) Times Interest Earned (earnings before interest and  
19 taxes] divided by interest) of 2.0 or higher;

20  
21 (II) Beaver's Ratio of 0.2 or higher (internally generated  
22 cash] divided by [total liabilities]). Internally  
23 generated cash is obtained from taxable income before  
24 net operating loss, plus credits for fuel tax and  
25 investment in regulated investment companies, plus  
26 depreciation plus amortization plus depletion, plus any  
27 income on the books not required to be reported for  
28 tax purposes if it is likely to be recurring, minus  
29 income tax expenses. Total liabilities includes all  
30 long- and short-term debt; or

31  
32 (III) Altman's Z-Score of 2.9 or higher.

33  
34 (C) ~~[(iii)]~~The permittee shall demonstrate that it passes the financial test at  
35 the time the financial assurance plan is filed and reconfirm that annually  
36 90 days after the end of the corporation's fiscal year by submitting the  
37 following items to the Department:

38  
39 (i) ~~[(A)]~~A letter signed by the permittee's chief financial officer  
40 that;

41  
42 (I) ~~[(A)]~~provides the information necessary to document  
43 that the permittee passes the financial test; ~~[that]~~

44  
45 (II) ~~[(B)]~~guarantees that the funds are available to finance  
46 closure, ~~[and]~~ post-closure or corrective action  
47 activities according to the closure or post-closure plan,  
48 ~~[and]~~ permit requirements or selected remedy  
49 described in the corrective action report, as applicable;  
50 ~~[are available; that]~~

51  
52 (III) ~~[(C)]~~guarantees that the closure, ~~[and]~~ post-closure or  
53 corrective action activities will be completed according

1 to the closure or post-closure plan, ~~and~~ permit  
2 requirements or selected remedy described in the  
3 corrective action report, as applicable; ~~that~~

4  
5 (IV) ~~G~~uarantees that the standby ~~closure~~ trust fund will  
6 be fully funded within 30 days after either service of a  
7 Final Order assessing a civil penalty from the  
8 Department for failure to adequately perform closure  
9 or post-closure activities according to the closure or  
10 post-closure plan and permit, or the selected remedy  
11 described in the corrective action report, as applicable,  
12 or service of a written notice from the Department  
13 that the permittee no longer meets the criteria of the  
14 financial test; ~~that~~

15  
16 (V) ~~G~~uarantees that the permittee's chief financial  
17 officer will notify the Department within 15 days any  
18 time that the permittee no longer meets the criteria of  
19 the financial test or is named as debtor in a voluntary  
20 or involuntary proceeding under Title 11  
21 (Bankruptcy), U.S. Code; and ~~that~~

22  
23 (VI) ~~A~~cknowledges that the corporate guarantee is a  
24 binding obligation on the corporation and that the  
25 chief financial officer has the authority to bind the  
26 corporation to the guarantee;

27  
28 (ii) ~~(ii)~~ A copy of the independent certified public accountant's  
29 (CPA) report on examination of the permittee's financial  
30 statements for the latest completed fiscal year;

31  
32 (iii) ~~(iii)~~ A special report from the permittee's independent  
33 CPA ~~certified public accountant (CPA)~~ stating that the  
34 CPA has compared the data which the letter from the  
35 permittee's chief financial officer specifies as having been  
36 derived from the independently audited year end financial  
37 statements for the latest fiscal year with the amounts in such  
38 financial statements, and that no matters came to the CPA's  
39 attention which caused the CPA to believe that the specified  
40 data should be adjusted;

41  
42 (iv) ~~(iv)~~ A trust agreement demonstrating that a standby  
43 ~~closure~~ trust fund has been established with an entity  
44 which has authority to act as a trustee and whose trust  
45 operations are regulated and examined by a federal or state  
46 agency. ~~The wording of the trust agreement must be~~  
47 acceptable to the Department; and

48  
49 (v) A list of any facilities in Oregon or elsewhere for which the  
50 permittee is using a similar financial means test to  
51 demonstrate financial assurance.

52  
53 (D) ~~(i)~~ The Department may, based on a reasonable belief that the

1 permittee no longer meets the criteria of the financial test, require  
2 reports of the financial condition at any time from the permittee in  
3 addition to the annual report. If the Department finds, on the basis of  
4 such reports or other information, that the permittee no longer meets  
5 the criteria of the financial test, the permittee shall fully fund the  
6 standby ~~closure~~ trust fund within 30 days after notification by the  
7 Department.  
8

9 (g) ~~[(G)] Alternative Financial Assurance.~~ Alternative forms of financial assurance,  
10 such as a state-approved trust fund or a pledge of revenue, may be proposed by  
11 the permittee, subject to the review and approval of the Director. The applicant  
12 must be able to ~~[where the applicant can]~~ prove to the satisfaction of the  
13 Department that the level of security is equivalent to subsections (a) through (f)  
14 of this section, ~~[paragraphs (A) through (F) of this subsection and]~~ that the  
15 criteria of OAR 340-94-140(4)(e) and sections (1) through (3) ~~[subsection (5)(a)]~~  
16 of this rule and the performance standards in 40 CFR §258.74(l) are met~~[-]~~,  
17 except that the pay-in period of a state-approved trust fund for closure or post-  
18 closure care may be over the remaining life of the municipal solid waste landfill  
19 unit. Submittal of an alternative financial assurance mechanism to the  
20 Department for review and approval shall include third-party certification as  
21 specified in OAR 340-94-140(7).  
22

23 (6) Allowable Financial Assurance Mechanisms for Corrective Action. A permittee shall  
24 provide one of the following forms of financial assurance for corrective action: a trust  
25 fund, a surety bond guaranteeing performance of corrective action, an irrevocable letter  
26 of credit, a corporate guarantee, or alternative forms of financial assurance, pursuant to  
27 subsections (5)(a), (c), (d), (f) or (g) of this rule, respectively. Unless specifically  
28 required by a mutual agreement and order pursuant to ORS 465.325, the surcharge  
29 provisions of ORS 459.311 shall not be used to meet the financial assurance  
30 requirements of this rule for financial assurance for corrective action.  
31  
32  
33

34 ~~[FINANCIAL ASSURANCE CRITERIA: REGIONAL LANDFILLS~~

35 ~~340-94-150-~~

36  
37  
38 ~~If a municipal solid waste landfill is subject to 40 CFR, Part 258 as provided in 40 CFR, §258.1, the~~  
39 ~~owner or operator shall comply with financial assurance criteria in 40 CFR, Part 258, Subpart G. All~~  
40 ~~permittees of regional disposal sites shall also comply with this rule:~~  
41

42 ~~(1) (a) Prior to first receiving waste, the applicant for a new regional disposal site shall~~  
43 ~~submit to and have approved by the Department, a financial assurance plan.~~  
44 ~~The applicant shall allow at least 90 days for Department review of the~~  
45 ~~submitted plan. For purposes of this rule "new regional disposal site" is a~~  
46 ~~regional disposal site which has received no waste prior to January 1, 1988;~~  
47

48 ~~(b) Regional disposal sites existing on January 1, 1988 must submit to the~~  
49 ~~Department a financial assurance plan with their application for renewal of the~~  
50 ~~existing solid waste disposal permit at least three months prior to permit~~  
51 ~~expiration;~~  
52

53 ~~(c) The financial assurance plan must be in accordance with OAR 340-94-140(1)(a),~~

1 ~~(b) and (c).]~~

2  
3 ~~[(2) The total amount of financial assurance to be provided shall be the greater of:—~~

4  
5 ~~(a) The sum of closure and post closure estimated costs as approved by the~~  
6 ~~Department; or~~

7  
8 ~~(b) \$1,000,000.~~

9  
10 ~~(3) (a) The Department will approve only forms of financial assurance which are listed~~  
11 ~~in OAR 340-94-140(3)(c) (A) through (G);~~

12  
13 ~~(b) If the financial assurance plan provides for accumulation of the total amount~~  
14 ~~over a period of time, the time shall not exceed five years from startup or~~  
15 ~~renewal of the permit.~~

16  
17 ~~(4) The financial assurance plan must be evaluated by the applicant at least once each five~~  
18 ~~years or sooner if there is a significant change in the operational plan for the regional~~  
19 ~~landfill. The applicant must provide to the Department financial assurance in an amount~~  
20 ~~sufficient for the revised financial assurance plan.]~~

21  
22 ~~[(5) Financial assurance shall provide that the Department may use a portion or all of the~~  
23 ~~financial assurance to cover study/repair and remedial action to address pollution of air~~  
24 ~~or water off the landfill site provided that:—~~

25  
26 ~~(a) The permittee has been properly notified of the problem requiring remedial~~  
27 ~~action and given a time period based on the severity of the discharge for~~  
28 ~~correction;~~

29  
30 ~~(b) The permittee fails to respond to the notice;~~

31  
32 ~~(c) It can be demonstrated that the permittee has exhausted other sources of~~  
33 ~~revenue.—~~

34  
35 ~~(6) If the Department requires use of the financial assurance for remedial action, the~~  
36 ~~permittee shall submit a plan within three months to re-establish the fund.~~

37  
38 ~~(7) If a financial assurance is provided under OAR 340-94-140(3)(c)(A), (B) or (G) upon~~  
39 ~~successful closure and release from permit requirements by the Department, any excess~~  
40 ~~money in the financial assurance account must be used in a manner consistent with OAR~~  
41 ~~340-94-140(3)(a)(C).] [Renumbered to OAR 340-94-140(8)(e) and OAR 340-95-~~  
42 ~~090(8)(e)]~~

43  
44 ~~[(8) The permittee is subject to audit by the Department and shall allow the Department~~  
45 ~~access to all records relating to closure plan and other financial records if financial~~  
46 ~~assurance consists of the requirements of OAR 340-94-140(3)(c)(A), (B) or (G).~~

47  
48 ~~(Note: In addition to the requirements set forth in this rule, 40 CFR, §258.61 requires municipal~~  
49 ~~landfill owners and operators subject to 40 CFR, Part 258 to maintain financial assurance for~~  
50 ~~costs of closure, post closure care and corrective action. The financial assurance costs must be~~  
51 ~~adjusted annually to compensate for inflation. Municipal solid waste landfill owners and~~  
52 ~~operators are subject to the requirements of Federal law.}]~~

1  
2  
3 OAR 340 Division 95: LAND DISPOSAL SITES  
4 OTHER THAN MUNICIPAL SOLID WASTE LANDFILLS  
5  
6

7 CLOSURE AND POST-CLOSURE CARE: CLOSURE PERMITS  
8

9 340-95-050 [Renumbered from 340-61-028; incorporates part of 340-61-020]  
10

- 11 (1) [Renumbered from 340-61-020(7):] Closure Permit:  
12  
13 (a) At least five years prior to anticipated *final* closure of a non-municipal land  
14 disposal site, the person holding the disposal site permit shall apply to renew  
15 the permit to cover the period of time remaining for site operations, closure of  
16 the site, and all or part of the time that active post-closure site maintenance is  
17 required by the Department~~[-]~~. *This last permit issued before final closure of  
18 the landfill is scheduled to occur shall be called a "closure permit;"*  
19  
20 (b) The person who holds or last held the non-municipal land disposal site permit,  
21 or, if that person fails to comply, then the person owning or controlling a non-  
22 municipal land disposal site that is closed and no longer receiving solid waste  
23 after January 1, 1980, must continue or renew the disposal site permit after the  
24 site is closed for the duration of the period in which the Department continues  
25 to actively supervise the site, even though solid waste is no longer received at  
26 the site.  
27  
28 (2) [Renumbered from 340-61-028] Applications for closure permits must include but are  
29 not limited to:  
30  
31 (a) A ~~{closure plan}~~ *Final Engineered Site Closure Plan* prepared in accordance  
32 with OAR 340-95-060~~[-]~~. *In lieu of requiring the Final Engineered Site  
33 Closure Plan as a part of the application for a closure permit, the Department  
34 may specify a date in the closure permit for submission of the Final  
35 Engineered Site Closure Plan;*  
36  
37 (b) ~~A Final Engineered Post-closure Plan prepared in accordance with OAR 340-~~  
38 ~~95-065. In lieu of requiring the Final Engineered Site Closure Plan as a part~~  
39 ~~of the application for a closure permit, the Department may specify a date in~~  
40 ~~the closure permit for submission of the Final Engineered Site Closure Plan;~~  
41  
42 (b) ~~A financial assurance plan prepared in accordance with OAR 340-95-090~~  
43 ~~unless exempted by the Department pursuant to section (3) of this rule;}~~  
44  
45 (c) If the permittee does not own and control the property, *a demonstration*~~{the~~  
46 ~~permittee shall demonstrate}~~ to the Department that the permittee has access to  
47 the non-municipal land disposal site property after closure to monitor and  
48 maintain the site and operate any environmental control facilities;  
49  
50 (d) If any person other than the permittee assumes any responsibility for any  
51 closure or post-closure activities, that responsibility shall be evidenced by a  
52 written contract between the permittee and each person assuming any  
53 responsibility.

1 ~~{(3) The Department may exempt from the financial assurance requirements any non-~~  
2 ~~municipal land disposal site including but not limited to demolition waste sites and~~  
3 ~~industrial waste sites. To be eligible for this exemption, the applicant shall demonstrate~~  
4 ~~to the satisfaction of the Department that the site meets all of the following criteria and~~  
5 ~~that the site is likely to continue to meet all of these criteria until the site is closed in a~~  
6 ~~manner approved by the Department:~~

7  
8 (a) ~~The non-municipal land disposal site poses no significant threat of adverse~~  
9 ~~impact on groundwater or surface water;~~

10  
11 (b) ~~The non-municipal land disposal site poses no significant threat of adverse~~  
12 ~~impact on public health or safety;~~

13  
14 (c) ~~No system requiring active operation and maintenance is necessary for~~  
15 ~~controlling or stopping discharges to the environment;~~

16  
17 (d) ~~The area of the non-municipal land disposal site that has been used for waste~~  
18 ~~disposal and has not yet been properly closed in a manner acceptable to the~~  
19 ~~Department is less than and remains less than two acres or complies with a~~  
20 ~~closure schedule approved by the Department.]~~

21  
22 ~~{(4) In determining if the applicant has demonstrated that a non-municipal land disposal site~~  
23 ~~meets the financial assurance exemption criteria, the Department will consider existing~~  
24 ~~available information including, but not limited to, geology, soils, hydrology, waste type~~  
25 ~~and volume, proximity to and uses of adjacent properties, history of site operation and~~  
26 ~~construction, previous compliance inspection reports, existing monitoring data, the~~  
27 ~~proposed method of closure and the information submitted by the applicant. The~~  
28 ~~Department may request additional information if needed.—~~

29  
30 (5) ~~An exemption from the financial assurance requirement granted by the Department will~~  
31 ~~remain valid only so long as the non-municipal land disposal site continues to meet the~~  
32 ~~exemption criteria in section (3) of this rule. If the site fails to continue to meet the~~  
33 ~~exemption criteria, the Department may modify the closure permit to require financial~~  
34 ~~assurance.] [340-95-050(3)-(5) renumbered to 340-95-090(2)]~~

35  
36 (3) ~~{(6)}~~ While a closure permit is in effect, the permittee shall submit a report to the  
37 Department within 90 days of the end of the permittee's fiscal year or as otherwise  
38 required in writing by the Department, which contains but is not limited to:

39  
40 (a) An evaluation of the approved closure or post-closure plan as applicable  
41 discussing current status, unanticipated occurrences, revised closure date  
42 projections, necessary changes, etc.;

43  
44 (b) A copy of the annual update of financial assurance as required by OAR 340-  
45 95-090(6)(d). If the financial mechanism used is a trust fund, the permittee  
46 shall include at: An evaluation of the ~~{approved}~~ financial assurance plan  
47 documenting an accounting of amounts deposited and expenses drawn from the  
48 fund, as well as its current balance. This evaluation must also assess the  
49 adequacy of the financial assurance and justify any ~~{requests for}~~ changes in the  
50 ~~{approved}~~ plan;

51  
52 (c) Other information requested by the Department to determine compliance with  
3 the rules of the Department.

1 (4) ~~[(7)]~~The Department shall terminate closure permits for non-municipal land disposal  
2 sites not later than 30 years after the site is closed unless the Department finds there is  
3 a need to protect against a significant hazard or risk to public health or safety or the  
4 environment.

5  
6 (5) ~~[(8)]~~Any time after a non-municipal land disposal site is closed, the permit holder may  
7 apply for a termination of the permit, a release from one or more of the permit  
8 requirements or termination of any applicable permit fee. Before the Department grants  
9 a termination or release under this section, the permittee must demonstrate and the  
10 Department must find that human health and the environment will be protected and  
11 there is no longer a need for:

12 (a) Active supervision of the site;

13 (b) Maintenance of the site; or

14 (c) Maintenance or operation of any system or facility on the site.

15  
16  
17  
18  
19 ~~[(9)]~~ ~~The Department or an authorized governmental agency may enter a non-municipal land~~  
20 ~~disposal site property at reasonable times to inspect and monitor the site as authorized~~  
21 ~~by ORS 459.285.~~ [Renumbered to 340-93-050(5)(e)]

22  
23 (6) ~~[(10)]~~ The closure permit remains in effect and is a binding obligation of the permittee  
24 until the Department terminates the permit according to section (4) or (5) ~~[(7) or (8)]~~ of  
25 this rule or upon issuance of a new closure permit for the site to another person  
26 following receipt of a complete and acceptable application.

27  
28  
29 **CLOSURE AND POST-CLOSURE CARE: CLOSURE PLANS**

30  
31 **340-95-060 [Renumbered from 340-61-033]**

32  
33 To comply with the financial assurance requirements of OAR 340-95-090(1)(a):

34  
35 (1) Two types of written closure plans shall be prepared.

36  
37 (a) The two types of closure plan are:

38  
39 (A) A conceptual "worst-case" closure plan, for closing the site at its  
40 maximum capacity. The plan shall contain sufficient detail to allow a  
41 reasonable estimate of the cost of closing the non-municipal land  
42 disposal site as required by OAR 340-95-090(1)(a); and subsequently

43  
44 (B) A Final Engineered Site Closure Plan, as required by OAR 340-95-  
45 050(2)(a), which shall replace the conceptual "worst-case" closure  
46 plan.

47  
48 (b) Schedule for preparation of closure plans.

49  
50 (A) The conceptual "worst-case" closure plan shall be prepared and placed  
51 in the facility operations office or other location approved by the  
52 Department, and the Director shall be notified of that action no later  
3 than April 9, 1995 or by the initial receipt of waste, whichever is later;

1 (B) The Final Engineered Site Closure Plan shall be prepared and  
2 submitted to the Department five years before the anticipated final  
3 closure date, or at a date specified in the permittee's closure permit  
4 pursuant to OAR 340-95-050(2)(a).  
5

6 (3) Requirements for closure plans. ~~{(1)}~~ A closure plan ~~{must}~~ shall specify the  
7 procedures necessary to completely close the non-municipal land disposal site at the end  
8 of its intended operating life. ~~{The plan must also identify the post closure activities~~  
9 ~~which will be carried on to properly monitor and maintain the closed non-municipal~~  
10 ~~land disposal site. At a minimum, the plan shall include:}~~  
11

12 (a) Requirements for the conceptual "worst-case" closure plan shall consist of at  
13 least the following:  
14

15 (A) A description of the steps necessary to close all non-municipal land  
16 disposal units at any point during their active life;  
17

18 (B) A description of the final cover system that is designed to minimize  
19 infiltration and erosion;  
20

21 (C) An estimate of the largest area of the non-municipal land disposal unit  
22 ever requiring a final cover; and  
23

24 (D) An estimate of the maximum inventory of wastes ever on-site over the  
25 active life of the facility.  
26

27 (b) Requirements for the Final Engineered Site Closure Plan. In addition to the  
28 requirements for the conceptual "worst-case" closure plan, the Final  
29 Engineered Site Closure Plan shall consist of at least the following elements:  
30

31 (A) ~~{(a)}~~ Detailed plans and specifications consistent with the applicable  
32 requirements of OAR 340-93-140 and 340-95-030(2), unless an  
33 exemption is granted as provided in OAR 340-93-070(4);  
34

35 NOTE: If some of this information has been previously submitted,  
36 the permittee shall review and update it to reflect current conditions  
37 and any proposed changes in closure ~~{or post-closure}~~ activities.  
38

39 (B) ~~{(b)}~~ A description of how and when the non-municipal land disposal  
40 site will be closed. If a landfill, the description shall, to the extent  
41 practicable, show how the landfill will be closed as filling progresses  
42 to minimize the area remaining to be closed at the time that the site  
43 stops receiving waste. A time schedule for completion of closure  
44 shall be included;  
45

46 ~~{(c)} Details of how leachate discharges will be minimized and controlled and~~  
47 ~~treated if necessary;~~  
48

49 ~~{(d)} Details of any non-municipal land disposal site gas control facilities, their~~  
50 ~~operation and frequency of monitoring;}~~  
51

52 (C) ~~{(e)}~~ Details of final closure. If a landfill, ~~{the}~~ details of final cover  
3 including soil texture, depth and slope;



1 (D) ~~{(f)}~~ Details of surface water drainage diversion; and

2  
3 ~~{(g)}~~ ~~A schedule of monitoring the site after closure;~~

4  
5 ~~{(h)}~~ ~~A projected frequency of anticipated inspection and maintenance activities at~~  
6 ~~the site after closure, including but not limited to repairing, recovering and~~  
7 ~~regrading settlement areas, cleaning out surface water diversion ditches, and~~  
8 ~~re-establishing vegetation;~~

9  
10 (E) ~~{(i)}~~ Other information requested by the Department necessary to  
11 determine whether the non-municipal land disposal site will comply  
12 with all applicable rules of the Department.

13  
14 (4) ~~{(2) Approval of Closure Plan.}~~ Department approval. The Final Engineered Site  
15 Closure Plan is subject to written approval by the Department. After approval by the  
16 Department, the permittee shall implement the Final Engineered Site C~~e~~l~~o~~s~~u~~r~~e~~ ~~{(p)}~~Plan  
17 within the approved time schedule.

18  
19 (5) ~~{(3)}~~ Amendment of Plan. The approved Final Engineered Site C~~e~~l~~o~~s~~u~~r~~e~~ ~~{(p)}~~Plan  
20 may be amended at any time ~~{during the active life of the non-municipal land disposal~~  
21 ~~site or during the post-closure care period}~~ as follows:

22  
23 (a) The permittee must amend the plan whenever changes in operating plans or  
24 facility design, or changes in OAR Chapter 340 Divisions 93 through 97, or  
25 events which occur during the active life of the landfill ~~{or during the~~  
26 ~~post-closure care period,}~~ significantly affect the plan. The permittee must  
27 also amend the plan whenever there is a change in the expected year of  
28 closure. The permittee must submit the necessary plan amendments to the  
29 Department for approval within 60 days after such changes or as otherwise  
30 required by the Department;

31  
32 (b) The permittee may request to amend the plan to alter the closure  
33 requirements, ~~to alter the post-closure care requirements, or to extend or~~  
34 ~~reduce the post-closure care period}~~ based on cause. The request must include  
35 evidence demonstrating to the satisfaction of the Department that:

36  
37 (A) The nature of the non-municipal land disposal site makes the closure  
38 ~~{or post-closure care}~~ requirements unnecessary; or

39  
40 ~~{(B)}~~ ~~The nature of the non-municipal land disposal site supports reduction~~  
41 ~~of the post-closure care period; or}~~

42  
43 (B) ~~{(C)}~~ The requested ~~{extension in the post-closure care period or}~~  
44 alteration of closure ~~{or post-closure care}~~ requirements is necessary  
45 to prevent threat of adverse impact on public health, safety or the  
46 environment.

47  
48 (c) The Department may amend a permit to require the permittee to modify the  
49 plan if it is necessary to prevent the threat of adverse impact on public health,  
50 safety or the environment. Also, the Department may ~~{extend or reduce the~~  
51 ~~post-closure care period or}~~ alter the closure ~~{or post-closure care}~~  
52 requirements based on cause.

1  
2 **CLOSURE AND POST-CLOSURE CARE: POST-CLOSURE PLANS**

3  
4 **340-95-065**

5  
6 **To comply with the financial assurance requirements of OAR 340-95-090(1)(b):**

7  
8 **(1) Two types of written post-closure plans shall be prepared:**

9  
10 **(a) A "conceptual" post-closure plan; and subsequently**

11  
12 **(b) A Final Engineered Post-closure Plan as required by OAR 340-95-050(2)(b).**  
13 **When prepared, this shall include all requirements of and replace the**  
14 **"conceptual" post-closure plan.**

15  
16 **(2) Schedule for preparation of post-closure plans.**

17  
18 **(a) The "conceptual" post-closure plan shall be placed in the facility operations**  
19 **office or other location approved by the Department and the Director shall be**  
20 **notified of that action no later than April 9, 1995 or by the initial receipt of**  
21 **waste, whichever is later;**

22  
23 **(b) The Final Engineered Post-closure Plan shall be prepared in conjunction with**  
24 **and submitted to the Department together with the Final Engineered Site**  
25 **Closure Plan required by OAR 340-95-050(2)(b).**

26  
27 **(3) Requirements for post-closure plans. Post-closure plans shall identify the post-closure**  
28 **activities which will be carried on to properly monitor and maintain the closed non-**  
29 **municipal land disposal site.**

30  
31 **(a) Requirements for the "conceptual" post-closure plan shall consist of at least the**  
32 **following:**

33  
34 **(A) Maintaining the integrity and effectiveness of any final cover;**

35  
36 **(B) Maintaining and operating the leachate collection system, if required**  
37 **pursuant to OAR 340-95-020(5);**

38  
39 **(C) Monitoring the groundwater, if required pursuant to OAR 340-95-040;**

40  
41 **(D) Maintaining and operating the gas monitoring system if required**  
42 **pursuant to OAR 340-95-020(9);**

43  
44 **(E) Monitoring and providing security for the landfill site; and**

45  
46 **(E) Description of the planned uses of the property during the post-closure**  
47 **care period.**

48  
49 **(b) Requirements for the Final Engineered Post-closure Plan. In addition to the**  
50 **requirements for the "conceptual" post-closure plan, the Final Engineered Post-**  
51 **closure Plan shall consist of at least the following elements:**

52  
53 **(A) Detailed plans and specifications consistent with the applicable**  
54 **requirements of OAR 340-93-140 and 340-95-030(2), unless an**

1 exemption is granted as provided in OAR 340-93-070(4);

2  
3 NOTE: If some of this information has been previously submitted,  
4 the permittee shall review and update it to reflect current conditions  
5 and any proposed changes in closure or post-closure activities.  
6

7 (B) Details of how leachate discharges will be minimized and controlled  
8 and treated if necessary;  
9

10 (C) Details of any landfill gas control facilities, their operation and  
11 frequency of monitoring;  
12

13 (D) A schedule of monitoring the site after closure;  
14

15 (E) A projected frequency of anticipated inspection and maintenance  
16 activities at the site after closure, including but not limited to  
17 repairing, recovering and regrading settlement areas, cleaning out  
18 surface water diversion ditches, and re-establishing vegetation; and  
19

20 (F) Any other information requested by the Department necessary to  
21 determine whether the disposal site will comply with all applicable  
22 rules of the Department.  
23

24 (c) Department approval. The Final Engineered Post-closure Plan is subject to  
25 written approval by the Department. After approval by the Department, the  
26 permittee shall implement the Final Engineered Post-closure Plan within the  
27 approved time schedule.  
28

29 (d) Amendment. The approved Final Engineered Post-closure Plan may be  
30 amended at any time as follows:  
31

32 (A) The permittee must amend the Plan whenever changes in operating  
33 plans or facility design, or changes in OAR Chapter 340 Divisions 93  
34 through 97, or events which occur during the active life of the landfill  
35 or during the post-closure care period, significantly affect the Plan.  
36 The permittee must submit the necessary plan amendments to the  
37 Department for approval within 60 days after such changes or as  
38 otherwise required by the Department;  
39

40 (B) The permittee may request to amend the Plan to alter the post-closure  
41 care requirements, or to extend or reduce the post-closure care period  
42 based on cause. The request must include evidence demonstrating to  
43 the satisfaction of the Department that:  
44

45 (i) The nature of the landfill makes the post-closure care  
46 requirements unnecessary; or  
47

48 (ii) The nature of the landfill supports reduction of the  
49 post-closure care period; or  
50

51 (iii) The requested extension in the post-closure care period or  
52 alteration of post-closure care requirements is necessary to  
53 prevent threat of adverse impact on public health, safety or  
54 the environment.

1                    (C)    The Department may amend a permit to require the permittee to  
2                    modify the Plan if it is necessary to prevent the threat of adverse  
3                    impact on public health, safety or the environment. Also, the  
4                    Department may extend or reduce the post-closure care period or alter  
5                    the post-closure care requirements based on cause.  
6  
7

8                    **CLOSURE REQUIREMENTS**  
9

10                   **340-95-070 [Renumbered from 340-61-042]**  
11

12                   Each permittee of a non-municipal land disposal site that closes after January 1, 1980 shall comply with  
13                   this rule.  
14

- 15                   (1)                When solid waste is no longer received at a non-municipal land disposal site, the person  
16                   who holds or last held the permit issued under ORS 459.205 or, if the person who  
17                   holds or last held the permit fails to comply with this section, the person owning or  
18                   controlling the property on which the disposal site is located, shall close and maintain  
19                   the site according to the requirements of ORS Chapter 459, all applicable rules adopted  
20                   by the Commission under ORS 459.045 and all requirements imposed by the  
21                   Department as a condition to renewing or issuing a non-municipal land disposal site  
22                   permit.  
23  
24                   (2)                Unless otherwise approved or required in writing by the Department, no person shall  
25                   permanently close or abandon a non-municipal land disposal site, except in the  
26                   following manner:  
27  
28                                  (a)                All areas containing solid waste not already closed in a manner approved by  
29                   the Department shall be covered with at least three feet of compacted soil of a  
30                   type approved by the Department graded to a minimum two percent and  
31                   maximum 30 percent slope unless the Department authorizes a lesser depth or  
32                   an alternative final cover design. In applying this standard, the Department  
33                   will consider the potential for adverse impact from the disposal site on public  
34                   health, safety or the environment, and the ability for the permittee to generate  
35                   the funds necessary to comply with this standard before the disposal site  
36                   closes. A permittee may request that the Department approve a lesser depth of  
37                   cover material or an alternative final cover design based on the type of waste,  
38                   climate, geological setting, or degree of environmental impact;  
39  
40                                  (b)                Final cover material shall be applied to each portion of a landfill within 60  
41                   days after said portion reaches approved maximum fill elevation, except in the  
42                   event of inclement weather, in which case final cover shall be applied as soon  
43                   as practicable;  
44  
45                                  (c)                The finished surface of the closed areas shall consist of soils of a type or types  
46                   consistent with the planned future use and approved by the Department.  
47                   Unless otherwise approved by the Department, a vegetative cover of native  
48                   grasses shall be promptly established over the finished surface of the closed  
49                   site;  
50  
51                                  (d)                All surface water must be diverted around the area of the non-municipal land  
52                   disposal site used for waste disposal or in some other way prevented from  
53                   contacting the waste material;

- 1 (e) All systems required by the Department to control or contain discharges to the  
2 environment must be completed and operational.  
3  
4 (3) Closure of non-municipal land disposal sites shall be in accordance with the detailed  
5 Final Engineered Site Closure Plan[s] approved in writing by the Department  
6 pursuant to OAR 340-95-060.  
7  
8 (4) Closure approval:  
9  
10 (a) When closure is completed, the permittee shall submit a written request to the  
11 Department for approval of the closure;  
12  
13 (b) Within 30 days of receipt of a written request for closure approval, the  
14 Department shall inspect the facility to verify that closure has been effected in  
15 accordance with the approved closure plan and the provisions of OAR Chapter  
16 340 Divisions 93 and 95;  
17  
18 (c) If the Department determines that closure has been properly completed, the  
19 Department shall approve the closure in writing. Closure shall not be  
20 considered complete until such approval has been made. The date of approval  
21 notice shall be the date of commencement of the post-closure period.  
22  
23  
24

25 **POST-CLOSURE CARE REQUIREMENTS**

26 **340-95-080 [Renumbered from 340-61-043]**

- 27  
28  
29 (1) Post-closure requirements:  
30  
31 (a) Upon completion or closure of any non-municipal land disposal site where  
32 waste remains on-site, a detailed description of the site including a plat should  
33 be filed with the appropriate county land recording authority by the permittee.  
34 The description should include the general types and location of wastes  
35 deposited, depth of waste and other information of probable interest to future  
36 land owners;  
37  
38 (b) During the post-closure care period, the permittee must, at a minimum:  
39  
40 (A) Maintain the approved final contours and drainage system of the site;  
41  
42 (B) Consistent with final use, ensure that a healthy vegetative cover is  
43 established and maintained over the site;  
44  
45 (C) Operate and maintain each leachate and gas collection, removal and  
46 treatment system present at the site;  
47  
48 (D) Operate and maintain each groundwater and surface water monitoring  
49 system present at the site;  
50  
51 (E) Comply with all conditions of the closure permit issued by the  
52 Department.  
53

- 1 (2) Post-closure care period. Post-closure care must continue for 30 years after the date of  
2 completion of closure of any non-municipal land disposal site where waste remains on-  
3 site, unless otherwise approved or required by the Department according to OAR 340-  
4 95-050(4) and (5). ~~(7) and (8).~~  
5  
6  
7

8 **FINANCIAL ASSURANCE CRITERIA**

9  
10 **340-95-090 [Renumbered from 340-61-034]**

- 11  
12 (1) Financial Assurance Required. The owner or operator of a non-municipal land disposal  
13 site shall maintain a financial assurance plan with detailed written cost estimates of the  
14 amount of financial assurance that is necessary and shall provide evidence of financial  
15 assurance for the costs of:  
16

- 17 (a) Closure of the non-municipal land disposal site;  
18  
19 (b) Post-closure maintenance of the non-municipal land disposal site; and  
20  
21 (c) Any corrective action required by the Department to be taken at the non-  
22 municipal land disposal site, pursuant to OAR 340-95-040(3).  
23

- 24 (2) Exemptions. The Department may exempt from the financial assurance requirements  
25 any non-municipal land disposal site including but not limited to demolition waste sites  
26 and industrial waste sites.  
27

- 28 (a) Exemption criteria. To be eligible for this exemption, the applicant shall  
29 demonstrate to the satisfaction of the Department that the site meets all of the  
30 following criteria and that the site is likely to continue to meet all of these  
31 criteria until the site is closed in a manner approved by the Department:  
32

33 (A) The non-municipal land disposal site poses no significant threat of  
34 adverse impact on groundwater or surface water;  
35

36 (B) The non-municipal land disposal site poses no significant threat of  
37 adverse impact on public health or safety;  
38

39 (C) No system requiring active operation and maintenance is necessary for  
40 controlling or stopping discharges to the environment;  
41

42 (D) The area of the non-municipal land disposal site that has been used for  
43 waste disposal and has not yet been properly closed in a manner  
44 acceptable to the Department is less than and remains less than two  
45 acres or complies with a closure schedule approved by the  
46 Department.  
47

- 48 (b) In determining if the applicant has demonstrated that a non-municipal land  
49 disposal site meets the financial assurance exemption criteria, the Department  
50 will consider existing available information including, but not limited to,  
51 geology, soils, hydrology, waste type and volume, proximity to and uses of  
52 adjacent properties, history of site operation and construction, previous  
3 compliance inspection reports, existing monitoring data, the proposed method

1 of closure and the information submitted by the applicant. The Department  
2 may request additional information if needed.

3  
4 (c) An exemption from the financial assurance requirement granted by the  
5 Department will remain valid only so long as the non-municipal land disposal  
6 site continues to meet the exemption criteria in subsection (2)(a) of this rule.  
7 If the site fails to continue to meet the exemption criteria, the Department may  
8 modify the closure permit to require financial assurance. [Renumbered from  
9 340-95-050(3)-(5)]

10  
11 (3) ~~[(2)]~~ Schedule for provision of financial assurance.

12  
13 (a) For costs associated with the conceptual "worst-case" closure plan and the  
14 conceptual post-closure plan prepared pursuant to OAR 340-95-060(1)(a)(A)  
15 and OAR 340-95-065(1)(a), respectively: Evidence of the required financial  
16 assurance for closure and post-closure maintenance of the non-municipal land  
17 disposal site ~~[as determined in the financial assurance plan required by OAR~~  
18 ~~340-95-050(2)(b)]~~ shall be provided ~~[to the Department]~~ on the following  
19 schedule:

20  
21 (A) For a new non-municipal land disposal site: no later than the time the  
22 solid waste permit is issued by the Department and prior to first  
23 receiving waste; or

24  
25 (B) For a non-municipal land disposal site operating under a solid waste  
26 permit on November 4, 1993: by April 9, 1995~~[or at the time a~~  
27 ~~financial assurance plan is required by OAR 340-95-050(2)(b),~~  
28 ~~whichever is sooner].~~

29  
30 (b) For costs associated with the Final Engineered Site Closure Plan and the Final  
31 Engineered Post-closure Plan prepared pursuant to OAR 340-95-060(1)(a)(B)  
32 and OAR 340-95-065(1)(b) respectively: Evidence of the required financial  
33 assurance for closure and post-closure maintenance of the land disposal site  
34 shall be provided at the same time those two Plans are due to the Department.

35  
36 (c) ~~[(b)]~~ Evidence of financial assurance for corrective action shall be provided ~~[to~~  
37 ~~the Department]~~ before beginning corrective action.

38  
39 (d) Continuous financial assurance shall be maintained for the facility until the  
40 permittee or other person owning or controlling the site is no longer required  
41 to demonstrate financial responsibility for closure, post-closure care or  
42 corrective action (if required).

43  
44 (4) ~~[(3)]~~ Financial assurance plans. The financial assurance plan is a vehicle for  
45 determining the amount of financial assurance necessary and demonstrating that  
46 financial assurance is being provided. A financial assurance plan ~~[required by OAR~~  
47 340-95-050(2)(b)] shall include but not be limited to the following, as applicable:

48  
49 (a) Cost Estimates. A detailed written estimate of the third-party costs in current  
50 dollars (as calculated using a discount rate equal to the current yield of a 5-  
51 year U.S. Treasury Note as published in the Federal Reserve's H.15 (519)  
52 Selected Interest Rates for the week in which the calculation is done) of:

- 1 (A) Closing the non-municipal land disposal site;  
2  
3 (B) Providing post-closure care, including i installing, operating and  
4 maintaining any environmental control system required on the non-  
5 municipal land disposal site;  
6  
7 (C) Performing required corrective action activities; and  
8  
9 ~~[(C) Monitoring and providing security for the non-municipal land disposal~~  
10 ~~site; and]~~  
11  
12 (D) Complying with any other requirement the Department may impose as  
13 a condition of ~~[renewing the permit.]~~ issuing a closure permit, closing  
14 the site, maintaining a closed facility, or implementing corrective  
15 action.

16 (b) The source of the cost estimates;

- 17  
18  
19 (c) ~~[(b)]~~ A detailed description of the form of the financial assurance and a copy  
20 of the financial assurance mechanism;  
21  
22 (d) ~~[(e)]~~ A method and schedule for providing for or accumulating any required  
23 amount of funds which may be necessary to meet the financial assurance  
24 requirement;  
25  
26 (e) ~~[(d)]~~ A proposal with provisions satisfactory to the Department for disposing of  
27 any excess moneys received or interest earned on moneys received for  
28 financial assurance, if applicable.

29  
30 (A) To the extent practicable and to the extent allowed by any franchise  
31 agreement, the applicant's provisions for disposing of the excess  
32 moneys received or interest earned on moneys shall provide for:

- 33  
34 (i) ~~[(4)]~~ A reduction of the rates a person within the area served  
35 by the non-municipal land disposal site is charged for solid  
36 waste collection service as defined by ORS 459.005; or  
37  
38 (ii) ~~[(B)]~~ Enhancing present or future solid waste disposal  
39 facilities within the area from which the excess moneys were  
40 received.

41  
42 (B) If the non-municipal land disposal site is owned and operated by a  
43 private entity not regulated by a unit of local government, excess  
44 moneys and interest remaining in any financial assurance reserve shall  
45 be released to that business entity after post-closure care has been  
46 completed and the permittee is released from permit requirements by  
47 the Department.

48  
49 (f) The financial assurance plan shall contain adequate accounting procedures to  
50 insure that the permittee does not collect or set aside funds in excess of the  
51 amount specified in the financial assurance plan or any updates thereto or use  
52 the funds for any purpose other than required by paragraph(8)(a) of this rule;  
53 [Renumbered from 340-95-090(8)(b)]



1 (g) The certification required by subsection (6)(c) of this rule; and

2  
3 (h) The annual updates required by subsection (6)(d) of this rule.

4  
5 (5) ~~[(4)]~~ Amount of Financial Assurance Required. ~~[The amount of financial assurance~~  
6 ~~required shall be established based upon the estimated closure and post-closure care~~  
7 ~~costs included in the approved closure plan. This required amount may be adjusted as~~  
8 ~~the plan is amended.] The amount of financial assurance required shall be established~~  
9 ~~as follows:~~

10  
11 (a) Closure. Detailed cost estimates for closure shall be based on the conceptual  
12 "worst-case" closure plan or the final Engineered Site Closure Plan, as  
13 applicable. Cost estimates for the Final Engineered Site Closure plan shall  
14 take into consideration at least the following:

15  
16 ~~[(a) In reviewing the adequacy of the amount of financial assurance proposed by the~~  
17 ~~applicant, the Department shall consider the following:]~~

18 (A) Amount and type of solid waste deposited in the site;

19 (B) Amount and type of buffer from adjacent land and from drinking  
20 water sources;

21 (C) Amount, type, availability and cost of required cover;

22 (D) Seeding, grading, erosion control and surface water diversion  
23 required;

24 (E) Planned future use of the disposal site property;

25 ~~[(F) Type, duration of use, initial cost and maintenance cost of any active~~  
26 ~~system necessary for controlling or stopping discharges:]~~

27 (F) ~~[(G)]~~ The portion of the site property closed before final closure of  
28 the entire site; and

29 (G) ~~[(H)]~~ Any other conditions imposed on the permit relating to closure  
30 ~~[or post-closure]~~ of the site[.].

31 ~~[(I) The financial capability of the applicant.]~~

32  
33  
34 ~~[(b) After reviewing the proposed amount of financial assurance, the Department~~  
35 ~~may either:~~

36 ~~[(A) Approve the amount proposed by the applicant; or~~

37 ~~[(B) Disapprove the amount and require the applicant to submit a revised~~  
38 ~~amount consistent with the factors considered by the Department.]~~

39  
40  
41  
42 (b) Post-closure care. Detailed cost estimates for post-closure care shall be based  
43 on the conceptual post-closure plan or the Final Engineered Post-closure Plan,  
44 as applicable. Cost estimates for the Final Engineered Post-closure Plan shall  
45 also take into consideration at least the following:

1 (A) Type, duration of use, initial cost and maintenance cost of any active  
2 system necessary for controlling or stopping discharges; and

3  
4 (B) Any other conditions imposed on the permit relating to post-closure  
5 care of the site.

6  
7 (c) Corrective action. Estimated total costs of required corrective action activities  
8 for the entire corrective action period, as described in a corrective action  
9 report pursuant to requirements of OAR 340-95-040(3).

10  
11 (d) If a permittee is responsible for providing financial assurance for closure, post-  
12 closure care and/or corrective action activities at more than one non-municipal  
13 land disposal site, the amount of financial assurance required is equal to the  
14 sum of all cost estimates for each activity at each facility.

15  
16 (6) How Financial Assurance Is to Be Provided and Updated.

17  
18 (a) The permittee shall submit to the Department a copy of the first financial  
19 assurance mechanism prepared in association with a conceptual "worst-case"  
20 closure plan, a Final Engineered Site Closure Plan, a conceptual post-closure  
21 plan, a Final Engineered Post-closure Plan, and a corrective action report.

22  
23 (b) The permittee shall also place a copy of the applicable financial assurance  
24 plan(s) in the facility operations office or another location approved by the  
25 Department on the schedule specified in Section (3) of this rule.

26  
27 (c) The permittee shall certify to the Director at the time a financial assurance plan  
28 is placed in the facility operations office or other approved location that the  
29 financial assurance mechanism meets all state requirements. This date  
30 becomes the "annual review date" of the provision of financial assurance,  
31 unless a corporate guarantee is used, in which case the annual review date is  
32 90 days after the end of the corporation's fiscal year.

33  
34 (d) Annual update. The permittee shall annually review and update the financial  
35 assurance during the operating life and post-closure care period, or until the  
36 corrective action is completed, as applicable.

37  
38 (A) The annual review shall include:

39  
40 (i) An adjustment to the cost estimate(s) for inflation and in the  
41 discount rate as specified in subsection (4)(a) of this rule;

42  
43 (ii) A review of the closure, post-closure and corrective action (if  
44 required) plans and facility conditions to assess whether any  
45 changes have occurred which would increase or decrease the  
46 estimated maximum costs of closure, post-closure care or  
47 corrective action since the previous review;

48  
49 (iii) If a trust fund or other pay-in financial mechanism is being  
50 used, an accounting of amounts deposited and expenses drawn  
51 from the fund, as well as its current balance.

52  
53 (B) The financial assurance mechanism(s) shall be increased or may be  
54 reduced to take into consideration any adjustments in cost estimates

1 identified in the annual review.

2  
3 (C) The annual update shall consist of a certification from the permittee  
4 submitted to the Department and placed in the facility operations  
5 office or other approved location. The certification shall state that  
6 the financial assurance plans(s) and financial assurance mechanism(s)  
7 have been reviewed, updated and found adequate, and that the updated  
8 documents have been placed at the facility operations office or other  
9 approved location. The annual update shall be no later than:

10  
11 (i) The facility's annual review date; or

12  
13 (ii) For a facility operating under a closure permit, by the date  
14 specified in OAR 340-95-050(3).

15  
16 (7) Department Review of Financial Assurance and Third-Party Certification.

17  
18 (a) The Department may at any time select a permittee to submit financial  
19 assurance plan(s) and financial assurance mechanism(s) for Department review.  
20 Selection for review will not occur more frequently than once every five years,  
21 unless the Department has reasonable cause for more frequent selection. The  
22 Department may, however, review such plans and mechanisms in conjunction  
23 with a site inspection at any time.

24  
25 (b) A permittee who wants to provide "alternative financial assurance" pursuant to  
26 OAR 340-95-095(5)(g) shall submit its financial assurance plan and proposed  
27 financial assurance mechanism for Department review and approval on the  
28 schedule specified in section (3) of this rule. The submittal shall include  
29 certification from a qualified third party that the financial assurance mechanism  
30 meets all state requirements for financial assurance, and is reasonably designed  
31 to provide the required amount of financial assurance. The third-party  
32 certification shall be submitted in a format acceptable to the Department.

33  
34 (c) The Department will review the financial assurance and the third-party  
35 certification, if applicable, for compliance with state laws.

36  
37 ~~[(5) Form of Financial Assurance. The financial assurance may be in any form proposed by~~  
38 ~~the applicant if it is approved by the Department:~~

39  
40 ~~(a) The Department will approve forms of financial assurance to cover the ongoing~~  
41 ~~closure activities occurring while the non-municipal land disposal site is still~~  
42 ~~receiving solid waste where the applicant can prove to the satisfaction of the~~  
43 ~~Department that all of the following conditions can be met:~~

44  
45 ~~(A) That financial assurance moneys in excess of the amount approved by~~  
46 ~~the Department will not be set aside or collected by the disposal site~~  
47 ~~operator. The Department may approve an additional amount of~~  
48 ~~financial assurance during a review conducted in conjunction with a~~  
49 ~~subsequent application to amend or renew the non-municipal land~~  
50 ~~disposal site permit or a request by the owner or operator of a~~  
51 ~~disposal site to extend the useful life of the site. Nothing in this~~  
52 ~~subsection shall prohibit a site operator from setting aside an~~  
3 ~~additional reserve from funds other than those collected from rate~~

1 ~~payers specifically for closure and post closure and such a reserve~~  
2 ~~shall not be part of any fund or set aside required in the applicable~~  
3 ~~financial assurance plan.}~~

4  
5 ~~[(B) That the use of financial assurance is restricted so that the financial~~  
6 ~~resources can only be used to guarantee that the following activities~~  
7 ~~will be performed or that the financial resources can only be used to~~  
8 ~~finance the following activities and that the financial resources cannot~~  
9 ~~be used for any other purpose.:~~

10 ~~(i) Close the non municipal land disposal site according to the~~  
11 ~~approved closure plan;~~

12 ~~(ii) Install, operate and maintain any required environmental~~  
13 ~~control systems;~~

14  
15 ~~(iii) Monitor and provide security for the non municipal land~~  
16 ~~disposal site;~~

17  
18 ~~(iv) Comply with conditions of the closure permit.]~~

19  
20 ~~[(C) That, to the extent practicable, all excess moneys received and interest~~  
21 ~~earned on moneys shall be disposed of in a manner which shall provide~~  
22 ~~for:~~

23  
24 ~~(i) A reduction of the rates a person within the area served by~~  
25 ~~the non municipal land disposal site is charged for solid~~  
26 ~~waste collection service (as defined by ORS 459.005); or~~

27  
28 ~~(ii) Enhancing present or future solid waste disposal facilities~~  
29 ~~within the area from which the excess moneys were received;~~  
30 ~~or~~

31  
32 ~~(iii) Where the non municipal land disposal site is operated and~~  
33 ~~exclusively used to dispose of solid waste generated by a~~  
34 ~~single business entity, excess moneys and interest remaining~~  
35 ~~in the financial assurance reserve shall be released to that~~  
36 ~~business entity at the time that the permit is terminated.]~~

37  
38 ~~[(b) If the permittee fails to adequately perform the ongoing closure activities in~~  
39 ~~accordance with the closure plan and permit requirements, the permittee shall~~  
40 ~~provide an additional amount of financial assurance in a form meeting the~~  
41 ~~requirements of subsection (5)(c) of this rule within 30 days after service of a~~  
42 ~~Final Order assessing a civil penalty. The total amount of financial assurance~~  
43 ~~must be sufficient to cover all remaining closure and post closure activities;~~

44  
45 ~~(c) The Department will approve only the following forms of financial assurance for~~  
46 ~~the final closure and post closure activities which will occur after the non-~~  
47 ~~municipal land disposal site stops receiving solid waste:~~

48  
49 ~~(A) A closure trust fund established with an entity which has the authority to~~  
50 ~~act as a trustee and whose trust operations are regulated and examined~~  
51 ~~by a federal or state agency. The wording of the trust agreement must~~  
52 ~~be acceptable to the Department. The purpose of the closure trust fund~~  
3 ~~is to receive and manage any funds that may be paid by the permittee~~

1 ~~and to disburse those funds only for closure or post closure maintenance~~  
2 ~~activities which are authorized by the Department. Within 60 days after~~  
3 ~~receiving itemized bills for closure activities, the Department will~~  
4 ~~determine whether the closure expenditures are in accordance with the~~  
5 ~~closure plan or otherwise justified and, if so, will send a written request~~  
6 ~~to the trustee to make reimbursements.}~~  
7

8 ~~{(B) — A surety bond guaranteeing payment into a closure trust fund issued by~~  
9 ~~a surety company listed as acceptable in Circular 570 of the U.S.~~  
10 ~~Department of the Treasury. The wording of the surety bond must be~~  
11 ~~acceptable to the Department. A standby closure trust fund must also~~  
12 ~~be established by the permittee. The purpose of the standby closure~~  
13 ~~trust fund is to receive any funds that may be paid by the permittee or~~  
14 ~~surety company. The bond must guarantee that the permittee will either~~  
15 ~~fund the standby closure trust fund in an amount equal to the penal sum~~  
16 ~~of the bond before the site stops receiving waste or within 15 days after~~  
17 ~~an order to begin closure is issued by the Department or by a court of~~  
18 ~~competent jurisdiction; or that the permittee will provide alternate~~  
19 ~~financial assurance acceptable to the Department within 90 days after~~  
20 ~~receipt of a notice of cancellation of the bond from the surety. The~~  
21 ~~surety shall become liable on the bond obligation if the permittee fails to~~  
22 ~~perform as guaranteed by the bond. The surety may not cancel the~~  
23 ~~bond until at least 120 days after the notice of cancellation has been~~  
24 ~~received by both the permittee and the Department. If the permittee has~~  
25 ~~not provided alternate financial assurance acceptable to the Department~~  
26 ~~within 90 days of the cancellation notice, the surety must pay the~~  
27 ~~amount of the bond into the standby closure trust account.}~~  
28

29 ~~{(C) — A surety bond guaranteeing performance of closure issued by a surety~~  
30 ~~company listed as acceptable in Circular 570 of the U.S. Department of~~  
31 ~~the Treasury. The wording of the surety bond must be acceptable to the~~  
32 ~~Department. A standby closure trust fund must also be established by~~  
33 ~~the permittee. The purpose of the standby closure trust fund is to~~  
34 ~~receive any funds that may be paid by the surety company. The bond~~  
35 ~~must guarantee that the permittee will either perform final closure and~~  
36 ~~post closure maintenance or provide alternate financial assurance~~  
37 ~~acceptable to the Department within 90 days after receipt of a notice of~~  
38 ~~cancellation of the bond from the surety. The surety shall become liable~~  
39 ~~on the bond obligation if the permittee fails to perform as guaranteed by~~  
40 ~~the bond. The surety may not cancel the bond until at least 120 days~~  
41 ~~after the notice of cancellation has been received by both the permittee~~  
42 ~~and the Department. If the permittee has not provided alternate~~  
43 ~~financial assurance acceptable to the Department within 90 days of the~~  
44 ~~cancellation notice, the surety must pay the amount of the bond into the~~  
45 ~~standby closure trust account.}~~  
46

47 ~~{(D) — An irrevocable letter of credit issued by an entity which has the~~  
48 ~~authority to issue letters of credit and whose letter of credit operations~~  
49 ~~are regulated and examined by a federal or state agency. The wording~~  
50 ~~of the letter of credit must be acceptable to the Department. A standby~~  
51 ~~closure trust fund must also be established by the permittee. The~~  
52 ~~purpose of the standby closure trust fund is to receive any funds~~  
3 ~~deposited by the issuing institution resulting from a draw on the letter of~~

1 ~~credit. The letter of credit must be irrevocable and issued for a period~~  
2 ~~of at least one year unless the issuing institution notifies both the~~  
3 ~~permittee and the Department at least 120 days before the current~~  
4 ~~expiration date. If the permittee fails to perform closure and~~  
5 ~~post closure activities according to the closure plan and permit~~  
6 ~~requirements, or if the permittee fails to provide alternate financial~~  
7 ~~assurance acceptable to the Department within 90 days after notification~~  
8 ~~that the letter of credit will not be extended, the Department may draw~~  
9 ~~on the letter of credit.;~~

10  
11 ~~{(E) A closure insurance policy issued by an insurer who is licensed to~~  
12 ~~transact the business of insurance or is eligible as an excess or surplus~~  
13 ~~lines insurer in one or more states. The wording of the certificate of~~  
14 ~~insurance must be acceptable to the Department. The closure insurance~~  
15 ~~policy must guarantee that funds will be available to complete final~~  
16 ~~closure and post closure maintenance of the site. The policy must also~~  
17 ~~guarantee that the insurer will be responsible for paying out funds for~~  
18 ~~reimbursement of closure and post closure expenditures after notification~~  
19 ~~by the Department that the expenditures are in accordance with the~~  
20 ~~closure plan or otherwise justified. The policy must provide that the~~  
21 ~~insurance is automatically renewable and that the insurer may not~~  
22 ~~cancel, terminate or fail to renew the policy except for failure to pay the~~  
23 ~~premium. If there is a failure to pay the premium, the insurer may not~~  
24 ~~terminate the policy until at least 120 days after the notice of~~  
25 ~~cancellation has been received by both the permittee and the~~  
26 ~~Department. Termination of the policy may not occur and the policy~~  
27 ~~must remain in full force and effect if: the Department determines that~~  
28 ~~the land disposal site has been abandoned; or the Department has~~  
29 ~~commenced a proceeding to modify the permit to require immediate~~  
30 ~~closure; or closure has been ordered by the Department, Commission or~~  
31 ~~a court of competent jurisdiction; or the permittee is named as debtor in~~  
32 ~~a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S.~~  
33 ~~Code; or the premium due is paid. The permittee is required to~~  
34 ~~maintain the policy in full force and effect until the Department consents~~  
35 ~~to termination of the policy when alternative financial assurance is~~  
36 ~~provided or when the permit is terminated.;~~

37  
38 ~~{(F) Corporate guarantee. A private corporation meeting the financial test~~  
39 ~~may provide a corporate guarantee that closure and post closure~~  
40 ~~activities will be completed according to the closure plan and permit~~  
41 ~~requirements. To qualify, a private corporation must meet the criteria~~  
42 ~~of either subparagraph (i) or (ii) of this paragraph:~~

43  
44 ~~(i) Financial Test. To pass the financial test, the permittee~~  
45 ~~must have:~~

46  
47 ~~(1) Two of the following three ratios: A ratio of total~~  
48 ~~liabilities to net worth less than 2.0; a ratio of the sum~~  
49 ~~of net income plus depreciation, depletion, and~~  
50 ~~amortization to total liabilities greater than 0.1; or a~~  
51 ~~ratio of current assets to current liabilities greater than~~  
52 ~~1.5;~~  
53

1 ~~(II) Net working capital and tangible net worth each at~~  
2 ~~least six times the sum of the current closure and~~  
3 ~~post closure cost estimates;~~

4  
5 ~~(III) Tangible net worth of at least \$10 million; and~~

6  
7 ~~(IV) Assets in the United States amounting to at least 90~~  
8 ~~percent of its total assets or at least six times the sum~~  
9 ~~of the current closure and post closure cost estimates.]~~

10  
11 ~~[(ii) Alternative Financial Test. To pass the alternative financial~~  
12 ~~test, the permittee must have:~~

13  
14 ~~(I) A current rating of AAA, AA, A, or BBB as issued by~~  
15 ~~Standard and Poor's or Aaa, Aa, A, or Baa as issued~~  
16 ~~by Moody's;~~

17  
18 ~~(II) Tangible net worth at least six times the sum of the~~  
19 ~~current closure and post closure cost estimates;~~

20  
21 ~~(III) Tangible net worth of at least \$10 million; and~~

22  
23 ~~(IV) Assets in the United States amounting to at least 90~~  
24 ~~percent of its total assets or at least six times the sum~~  
25 ~~of the current closure and post closure cost estimates.]~~

26  
27 ~~[(iii) The permittee shall demonstrate that it passes the financial~~  
28 ~~test at the time the financial assurance plan is filed and~~  
29 ~~reconfirm that annually 90 days after the end of the~~  
30 ~~corporation's fiscal year by submitting the following items to~~  
31 ~~the Department:~~

32  
33 ~~(I) A letter signed by the permittee's chief financial officer~~  
34 ~~that provides the information necessary to document~~  
35 ~~that the permittee passes the financial test; that~~  
36 ~~guarantees that the funds to finance closure and~~  
37 ~~post closure activities according to the closure plan~~  
38 ~~and permit requirements are available; that guarantees~~  
39 ~~that the closure and post closure activities will be~~  
40 ~~completed according to the closure plan and permit~~  
41 ~~requirements; that guarantees that the standby closure~~  
42 ~~trust fund will be fully funded within 30 days after~~  
43 ~~either service of a Final Order assessing a civil~~  
44 ~~penalty from the Department for failure to adequately~~  
45 ~~perform closure or post closure activities according to~~  
46 ~~the closure plan and permit, or service of a written~~  
47 ~~notice from the Department that the permittee no~~  
48 ~~longer meets the criteria of the financial test; that~~  
49 ~~guarantees that the permittee's chief financial officer~~  
50 ~~will notify the Department within 15 days any time that~~  
51 ~~the permittee no longer meets the criteria of the~~  
52 ~~financial test or is named as debtor in a voluntary or~~  
3 ~~involuntary proceeding under Title 11 (Bankruptcy);~~

1 ~~U.S. Code; and that acknowledges that the corporate~~  
2 ~~guarantee is a binding obligation on the corporation~~  
3 ~~and that the chief financial officer has the authority to~~  
4 ~~bind the corporation to the guarantee;]~~

5  
6 ~~{(II) A copy of the independent certified public accountant's~~  
7 ~~report on examination of the permittee's financial~~  
8 ~~statements for the latest completed fiscal year;~~

9  
10 ~~{(III) A special report from the permittee's independent~~  
11 ~~certified public accountant (CPA) stating that the CPA~~  
12 ~~has compared the data which the letter from the~~  
13 ~~permittee's chief financial officer specifies as having~~  
14 ~~been derived from the independently audited year-end~~  
15 ~~financial statements for the latest fiscal year with the~~  
16 ~~amounts in such financial statement, and that no~~  
17 ~~matters came to the CPA's attention which caused the~~  
18 ~~CPA to believe that the specified data should be~~  
19 ~~adjusted;~~

20  
21 ~~{(IV) A trust agreement demonstrating that a standby closure~~  
22 ~~trust fund has been established with an entity which~~  
23 ~~has authority to act as a trustee and whose trust~~  
24 ~~operations are regulated and examined by a federal or~~  
25 ~~state agency. The wording of the trust agreement must~~  
26 ~~be acceptable to the Department.]~~

27  
28 ~~{(iv) The Department may, based on a reasonable belief that the~~  
29 ~~permittee no longer meets the criteria of the financial test,~~  
30 ~~require reports of the financial condition at any time from~~  
31 ~~the permittee in addition to the annual report. If the~~  
32 ~~Department finds, on the basis of such reports or other~~  
33 ~~information, that the permittee no longer meets the criteria~~  
34 ~~of the financial test, the permittee shall fully fund the~~  
35 ~~standby closure trust fund within 30 days after notification~~  
36 ~~by the Department.—~~

37  
38 ~~(G) Alternative forms of financial assurance where the applicant can prove~~  
39 ~~to the satisfaction of the Department that the level of security is~~  
40 ~~equivalent to paragraphs (A) through (F) of this subsection and that the~~  
41 ~~criteria of subsection (5)(a) of this rule are met.] [Note: 340-95-090(5)~~  
42 ~~is being renumbered into a new rule, 340-95-095]~~

43  
44 **(8)** ~~{(6)}~~Accumulation ~~[and use]~~ of any financial assurance funds:

45  
46 (a) ~~{The applicant shall set aside}~~The financial assurance mechanisms for closure,  
47 post-closure care and corrective action shall ensure the funds will be available in  
48 a timely fashion when needed. The permittee shall pay moneys into a trust  
49 fund[s] in the amount and at the frequency specified in the financial assurance  
50 plan[ approved by the Department.] or obtain other financial assurance  
51 mechanisms as specified in the financial assurance plan, on the schedule  
52 specified in section (3) of this rule.  
53



1 (A) Closure. The total amount of financial assurance required for closure  
2 shall be available in the form ~~{approved by the Department at the time~~  
3 ~~that solid waste is no longer received at the site;}~~ specified in the  
4 financial assurance plan or any updates thereto, whenever final closure  
5 of a non-municipal land disposal site unit is scheduled to occur in the  
6 conceptual "worst case" closure plan or in the Final Engineered Site  
7 Closure Plan.

8  
9 (B) Post-closure care. The total amount of financial assurance required for  
10 post-closure care shall be available in the form specified in the financial  
11 assurance plan or any updates thereto, whenever post-closure care is  
12 scheduled to begin for a non-municipal land disposal site unit in the  
13 conceptual post-closure plan or in the Final Engineered Post-closure  
14 Plan.

15  
16 (C) Corrective action. The total amount of financial assurance required for  
17 corrective action shall be available in the form specified in the financial  
18 assurance plan or any updates thereto on the schedule specified in the  
19 corrective action selected pursuant to OAR 340 Division 40.

20  
21 ~~{(b) The financial assurance plan shall contain adequate accounting procedures to~~  
22 ~~insure that the disposal site operator does not collect or set aside funds in excess~~  
23 ~~of the amount approved by the Department or use the funds for any purpose~~  
24 ~~other than required by paragraph (5)(a)(B) of this rule;}~~ [Renumbered to 340-  
25 95-090(4)(f)]

26  
27 (b) ~~{(e)}~~ The permittee is subject to audit by the Department (or Secretary of State)  
28 and shall allow the Department access to all records during normal business  
29 hours for the purpose of determining compliance with this rule and OAR 340-  
30 95-095;

31  
32 (c) ~~{(d)}~~ If the Department determines that the permittee did not set aside the  
33 required amount of funds for financial assurance in the form and at the  
34 frequency required by the applicable ~~{approved}~~ financial assurance plan, or if  
35 the Department determines that the financial assurance funds were used for any  
36 purpose other than as required in section (1) ~~{paragraph (5)(a)(B)}~~ of this rule,  
37 the permittee shall, within 30 days after notification by the Department, deposit  
38 a sufficient amount of financial assurance in the form required by the applicable  
39 ~~{approved}~~ financial assurance plan along with an additional amount of financial  
40 assurance equal to the amount of interest that would have been earned, had the  
41 required amount of financial assurance been deposited on time or had it not been  
42 withdrawn for unauthorized use~~[-];~~

43  
44 (d) If financial assurance is provided under OAR 340-95-095(5)(a), (b) or (g), upon  
45 successful closure and release from permit requirements by the Department, any  
46 excess money in the financial assurance account must be used in a manner  
47 consistent with subsection (4)(e) of this rule. [Renumbered from OAR 340-94-  
48 150(7)]

49  
50 [Publications: The publication(s) referred to or incorporated by reference in this rule are  
51 available from the Department of Environmental Quality.]  
52

1 NEW RULE:

2  
3 FINANCIAL ASSURANCE MECHANISMS

4  
5 340-95-095 [Renumbered from 340-95-090(5)]

6  
7 ~~{(5)}~~ Form of Financial Assurance. ~~{The financial assurance may be in any form proposed by the~~  
8 ~~applicant if it is approved by the Department:~~

9  
10 ~~(a) The Department will approve forms of financial assurance to cover the ongoing~~  
11 ~~closure activities occurring while the non-municipal land disposal site is still~~  
12 ~~receiving solid waste where the applicant can prove to the satisfaction of the~~  
13 ~~Department that all of the following conditions can be met:—~~

14  
15 ~~(A) That financial assurance moneys in excess of the amount approved by~~  
16 ~~the Department will not be set aside or collected by the disposal site~~  
17 ~~operator. The Department may approve an additional amount of~~  
18 ~~financial assurance during a review conducted in conjunction with a~~  
19 ~~subsequent application to amend or renew the non-municipal land~~  
20 ~~disposal site permit or a request by the owner or operator of a disposal~~  
21 ~~site to extend the useful life of the site. Nothing in this subsection shall~~  
22 ~~prohibit a site operator from setting aside an additional reserve from~~  
23 ~~funds other than those collected from rate payers specifically for closure~~  
24 ~~and post-closure and such a reserve shall not be part of any fund or set~~  
25 ~~aside required in the applicable financial assurance plan;}~~

26  
27 ~~{(B) That the use of financial assurance is restricted so that the financial~~  
28 ~~resources can only be used to guarantee that the following activities will~~  
29 ~~be performed or that the financial resources can only be used to finance~~  
30 ~~the following activities and that the financial resources cannot be used~~  
31 ~~for any other purpose:—~~

32  
33 ~~(i) Close the non-municipal land disposal site according to the~~  
34 ~~approved closure plan;~~

35  
36 ~~(ii) Install, operate and maintain any required environmental~~  
37 ~~control systems;~~

38  
39 ~~(iii) Monitor and provide security for the non-municipal land~~  
40 ~~disposal site;~~

41  
42 ~~(iv) Comply with conditions of the closure permit.~~

43  
44 ~~(C) That, to the extent practicable, all excess moneys received and interest~~  
45 ~~earned on moneys shall be disposed of in a manner which shall provide~~  
46 ~~for:~~

47  
48 ~~(i) A reduction of the rates a person within the area served by~~  
49 ~~the non-municipal land disposal site is charged for solid~~  
50 ~~waste collection service (as defined by ORS 459.005); or~~

51  
52 ~~(ii) Enhancing present or future solid waste disposal facilities~~  
~~within the area from which the excess moneys were received;~~

or

~~(iii) Where the non-municipal land disposal site is operated and exclusively used to dispose of solid waste generated by a single business entity, excess moneys and interest remaining in the financial assurance reserve shall be released to that business entity at the time that the permit is terminated.~~

~~(b) If the permittee fails to adequately perform the ongoing closure activities in accordance with the closure plan and permit requirements, the permittee shall provide an additional amount of financial assurance in a form meeting the requirements of subsection (5)(c) of this rule within 30 days after service of a Final Order assessing a civil penalty. The total amount of financial assurance must be sufficient to cover all remaining closure and post-closure activities;~~

(1) The financial assurance mechanism shall restrict the use of the financial assurance so that the financial resources may be used only to guarantee that closure, post-closure or corrective action activities will be performed, or that the financial resources can be used only to finance closure, post-closure or corrective action activities.

(2) The financial assurance mechanism shall provide that the Department or a party approved by the Department is the beneficiary of the financial assurance.

(3) A permittee may use one financial assurance mechanism for closure, post-closure and corrective action activities, but the amount of funds assured for each activity must be specified.

(4) The financial assurance mechanism shall be worded as specified by the Department, unless a permittee uses an alternative financial assurance mechanism pursuant to subsection (5)(g) of this rule. The Department retains the authority to approve the wording of an alternative financial assurance mechanism.

(5) ~~[(e) The Department will approve]~~ Allowable Financial Assurance Mechanisms. A permittee shall provide only the following forms of financial assurance for ~~[the final] closure and post-closure activities [which will occur after the non-municipal land disposal site stops receiving solid waste]:~~

(a) ~~[(4)]~~ A ~~[closure]~~ trust fund established with an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a federal or state agency. ~~[The wording of the trust agreement must be acceptable to the Department.]~~ The purpose of the ~~[closure]~~ trust fund is to receive and manage any funds that may be paid by the permittee and to disburse those funds only for closure, ~~[or]~~ post-closure maintenance or corrective action activities which are authorized by the Department. The permittee shall notify the Department, in writing, before any expenditure of trust fund moneys is made, describing and justifying the activities for which the expenditure is to be made. If the Department does not respond to the trustee within 30 days after receiving such notification, the expenditure is deemed authorized and the trustee may make the requested reimbursements; ~~[Within 60 days after receiving itemized bills for closure activities, the Department will determine whether the closure expenditures are in accordance with the closure plan or otherwise justified and, if so, will send a written request to the trustee to make reimbursements;]~~

1           **(b)**    ~~[(B)]~~ A surety bond guaranteeing payment into a standby closure or post-closure  
2 trust fund issued by a surety company listed as acceptable in Circular 570 of the  
3 U.S. Department of the Treasury. ~~[(The wording of the surety bond must be~~  
4 ~~acceptable to the Department.)]~~ ~~The~~<sup>[A]</sup> standby closure or post-closure trust  
5 fund must ~~also~~ be established by the permittee. The purpose of the standby~~{~~  
6 ~~closure}~~ trust fund is to receive any funds that may be paid by the permittee or  
7 surety company. The penal sum of the bond must be in an amount at least equal  
8 to the current closure or post-closure care cost estimate, as applicable. The  
9 bond must guarantee that the permittee will either fund the standby ~~{closure}~~  
10 trust fund in an amount equal to the penal sum of the bond before the site stops  
11 receiving waste or within 15 days after an order to begin closure is issued by the  
12 Department or by a court of competent jurisdiction; or that the permittee will  
13 provide alternate financial assurance acceptable to the Department within 90  
14 days after receipt of a notice of cancellation of the bond from the surety. The  
15 surety shall become liable on the bond obligation if the permittee fails to  
16 perform as guaranteed by the bond. The surety may not cancel the bond until at  
17 least 120 days after the notice of cancellation has been received by both the  
18 permittee and the Department. If the permittee has not provided alternate  
19 financial assurance acceptable to the Department within 90 days of the  
20 cancellation notice, the surety must pay the amount of the bond into the  
21 standby~~{closure}~~ trust account;

22  
23           **(c)**    ~~[(C)]~~ A surety bond guaranteeing performance of closure, post-closure or  
24 corrective action activities issued by a surety company listed as acceptable in  
25 Circular 570 of the U.S. Department of the Treasury. ~~[(The wording of the~~  
26 ~~surety bond must be acceptable to the Department.)]~~ A standby ~~{closure}~~ trust  
27 fund must also be established by the permittee. The purpose of the standby  
28 ~~{closure}~~ trust fund is to receive any funds that may be paid by the surety  
29 company. The bond must guarantee that the permittee will either perform final  
30 closure, ~~and~~ post-closure maintenance or corrective action activities, as  
31 applicable, or provide alternate financial assurance acceptable to the Department  
32 within 90 days after receipt of a notice of cancellation of the bond from the  
33 surety. The surety shall become liable on the bond obligation if the permittee  
34 fails to perform as guaranteed by the bond. The surety may not cancel the bond  
35 until at least 120 days after the notice of cancellation has been received by both  
36 the permittee and the Department. If the permittee has not provided alternate  
37 financial assurance acceptable to the Department within 90 days of the  
38 cancellation notice, the surety must pay the amount of the bond into the standby  
39 ~~{closure}~~ trust account;

40  
41           **(d)**    ~~[(D)]~~ An irrevocable letter of credit issued by an entity which has the authority to  
42 issue letters of credit and whose letter-of-credit operations are regulated and  
43 examined by a federal or state agency. ~~[(The wording of the letter of credit must~~  
44 ~~be acceptable to the Department.)]~~ A standby ~~{closure}~~ trust fund must also be  
45 established by the permittee. The purpose of the standby ~~{closure}~~ trust fund is  
46 to receive any funds deposited by the issuing institution resulting from a draw  
47 on the letter of credit. The letter of credit must be irrevocable and issued for a  
48 period of at least one year and shall be automatically extended for at least one  
49 year on each successive expiration date unless the issuing institution notifies both  
50 the permittee and the Department at least 120 days before the current expiration  
51 date. If the permittee fails to perform closure and post-closure activities  
52 according to the closure plan and permit requirements, or to perform the  
selected remedy described in the corrective action report, or if the permittee

1 fails to provide alternate financial assurance acceptable to the Department within  
2 90 days after notification that the letter of credit will not be extended, the  
3 Department may draw on the letter of credit;

4  
5 (e) ~~[(E)]~~ A closure or post-closure insurance policy issued by an insurer who is  
6 licensed to transact the business of insurance or is eligible as an excess or  
7 surplus lines insurer in one or more states. ~~[(The wording of the certificate of~~  
8 ~~insurance must be acceptable to the Department.)]~~ The ~~[closure]~~ insurance  
9 policy must guarantee that funds will be available to complete final closure and  
10 post-closure maintenance of the site. The policy must also guarantee that the  
11 insurer will be responsible for paying out funds for reimbursement of closure  
12 and post-closure expenditures ~~[after notification by the Department]~~ that ~~[the~~  
13 ~~expenditures]~~ are in accordance with the closure or post-closure plan or  
14 otherwise justified. The permittee shall notify the Department, in writing,  
15 before any expenditure of insurance policy moneys is made, describing and  
16 justifying the activities for which the expenditure is to be made. If the  
17 Department does not respond to the insurer within 30 days after receiving such  
18 notification, the expenditure is deemed authorized and the insurer may make the  
19 requested reimbursements. The policy must provide that the insurance is  
20 automatically renewable and that the insurer may not cancel, terminate or fail to  
21 renew the policy except for failure to pay the premium. If there is a failure to  
22 pay the premium, the insurer may not terminate the policy until at least 120  
23 days after the notice of cancellation has been received by both the permittee and  
24 the Department. Termination of the policy may not occur and the policy must  
25 remain in full force and effect if: the Department determines that the land  
26 disposal site has been abandoned; or the Department has commenced a  
27 proceeding to modify the permit to require immediate closure; or closure has  
28 been ordered by the Department, Commission or a court of competent  
29 jurisdiction; or the permittee is named as debtor in a voluntary or involuntary  
30 proceeding under Title 11 (Bankruptcy), U.S. Code; or the premium due is  
31 paid. The permittee is required to maintain the policy in full force and effect  
32 until the Department consents to termination of the policy when alternative  
33 financial assurance is provided or when the permit is terminated;

34  
35 (f) ~~[(F)]~~ Corporate guarantee. A private corporation meeting the financial test may  
36 provide a corporate guarantee that funds are available for closure, ~~[and]~~  
37 post-closure or corrective action activities, and that those activities will be  
38 completed according to the closure or post-closure plan, ~~[and]~~ permit  
39 requirements or the selected remedy described in the corrective action report, as  
40 applicable. To qualify, a private corporation must meet the criteria of either  
41 paragraph(A) or (B) of this subsection: [subparagraph (i) or (ii) of this  
42 paragraph.]

43  
44 (A) ~~[(A)]~~ Financial Test. To pass the financial test, the permittee must have:

45  
46 (i) ~~[(i)]~~ Two of the following three ratios: A ratio of total  
47 liabilities to tangible net worth less than 3.0[2.0]; a ratio of  
48 the sum of net income plus depreciation, depletion, and  
49 amortization to total liabilities greater than 0.1; or a ratio of  
50 current assets to current liabilities greater than 1.5;

51  
52 (ii) ~~[(ii)]~~ Net working capital equal to at least four times and  
tangible net worth equal to each at least six times the sum

of the current ~~{closure and post closure}~~cost estimates covered by the test;

**(iii)** ~~{(iii)}~~Tangible net worth of at least \$10 million; and

**(iv)** ~~{(iv)}~~Assets in the United States amounting to at least ~~{90 percent of its total assets or at least}~~ six times the sum of the current ~~{closure and post closure}~~cost estimates covered by the test.

**(B)** ~~{(ii)}~~Alternative Financial Test. To pass the alternative financial test, the permittee must have:

~~{(I)} A current rating of AAA, AA, A, or BBB as issued by Standard and Poor's or Aaa, Aa, A, or Baa as issued by Moody's;~~

~~{(II)} Tangible net worth at least six times the sum of the current closure and post closure cost estimates;~~

~~{(III)} Tangible net worth of at least \$10 million; and~~

~~{(IV)} Assets in the United States amounting to at least 90 percent of its total assets or at least six times the sum of the current closure and post closure cost estimates.}~~

**(i)** Tangible net worth of at least \$10 million; and

**(ii)** Two of the following three ratios:

**(I)** Times Interest Earned (earnings before interest and taxes] divided by interest) of 2.0 or higher;

**(II)** Beaver's Ratio of 0.2 or higher (internally generated cash] divided by [total liabilities]). Internally generated cash is obtained from taxable income before net operating loss, plus credits for fuel tax and investment in regulated investment companies, plus depreciation plus amortization plus depletion, plus any income on the books not required to be reported for tax purposes if it is likely to be recurring, minus income tax expenses. Total liabilities includes all long- and short-term debt; or

**(III)** Altman's Z-Score of 2.9 or higher.

**(C)** ~~{(ii)}~~The permittee shall demonstrate that it passes the financial test at the time the financial assurance plan is filed and reconfirm that annually 90 days after the end of the corporation's fiscal year by submitting the following items to the Department:

**(i)** ~~{(i)}~~A letter signed by the permittee's chief financial officer that provides the information necessary to document that the

1 permittee passes the financial test; that guarantees that the  
2 funds are available to finance closure, ~~and~~ post-closure or  
3 corrective action activities according to the closure or post-  
4 closure plan, ~~and~~ permit requirements or the selected  
5 remedy described in the corrective action report, as  
6 applicable; ~~are available;~~ that guarantees that the  
7 closure, ~~and~~ post-closure or corrective action activities will  
8 be completed according to the closure or post-closure  
9 plan, ~~and~~ permit requirements or selected remedy in the  
10 corrective action report, as applicable; that guarantees that  
11 the standby ~~closure~~ trust fund will be fully funded within  
12 30 days after either service of a Final Order assessing a  
13 civil penalty from the Department for failure to adequately  
14 perform closure or post-closure activities according to the  
15 closure or post-closure plan and permit, or selected remedy  
16 in the corrective action report, as applicable, or service of a  
17 written notice from the Department that the permittee no  
18 longer meets the criteria of the financial test; that guarantees  
19 that the permittee's chief financial officer will notify the  
20 Department within 15 days any time that the permittee no  
21 longer meets the criteria of the financial test or is named as  
22 debtor in a voluntary or involuntary proceeding under Title  
23 11 (Bankruptcy), U.S. Code; and that acknowledges that the  
24 corporate guarantee is a binding obligation on the  
25 corporation and that the chief financial officer has the  
26 authority to bind the corporation to the guarantee;

27  
28 (ii) ~~(ii)~~ A copy of the independent certified public accountant's  
29 (CPA) report on examination of the permittee's financial  
30 statements for the latest completed fiscal year;

31  
32 (iii) ~~(iii)~~ A special report from the permittee's independent  
33 CPA ~~certified public accountant (CPA)~~ stating that the CPA  
34 has compared the data which the letter from the permittee's  
35 chief financial officer specifies as having been derived from  
36 the independently audited year end financial statements for  
37 the latest fiscal year with the amounts in such financial  
38 statements, and that no matters came to the CPA's attention  
39 which caused the CPA to believe that the specified data  
40 should be adjusted;

41  
42 (iv) ~~(iv)~~ A trust agreement demonstrating that a standby  
43 ~~closure~~ trust fund has been established with an entity  
44 which has authority to act as a trustee and whose trust  
45 operations are regulated and examined by a federal or state  
46 agency. ~~The wording of the trust agreement must be~~  
47 acceptable to the Department.; and

48  
49 (v) A list of any facilities in Oregon or elsewhere for which the  
50 permittee is using a similar financial means test to  
51 demonstrate financial assurance.

52 (D) ~~(iv)~~ The Department may, based on a reasonable belief that the

1 permittee no longer meets the criteria of the financial test, require  
2 reports of the financial condition at any time from the permittee in  
3 addition to the annual report. If the Department finds, on the basis of  
4 such reports or other information, that the permittee no longer meets  
5 the criteria of the financial test, the permittee shall fully fund the  
6 standby ~~closure~~ trust fund within 30 days after notification by the  
7 Department.  
8

9 **(g) ~~[(G)]Alternative Financial Assurance.~~** Alternative forms of financial assurance  
10 may be proposed by the permittee, subject to the review and approval of the  
11 Director. The applicant must be able to ~~where the applicant can~~ prove to the  
12 satisfaction of the Department that the level of security is equivalent to  
13 subsections (a) through (f) of this section ~~paragraphs (A) through (F) of this~~  
14 subsection and that the criteria of OAR 340-95-090(4)(e) and sections (1)  
15 through (3) ~~subsection (5)(a)~~ of this rule are met. Submittal of an alternative  
16 financial assurance mechanism to the Department for review and approval shall  
17 include third-party certification as specified in OAR 340-95-90(7).  
18

19 **(6) Allowable Financial Assurance Mechanisms for Corrective Action.** A permittee shall  
20 provide one of the following forms of financial assurance for corrective action: a trust  
21 fund, a surety bond guaranteeing performance of corrective action, an irrevocable letter  
22 of credit, a corporate guarantee, or alternative forms of financial assurance, pursuant to  
23 subsections (5)(a), (c), (d), (f) or (g) of this rule, respectively. Unless specifically  
24 required by a mutual agreement and order pursuant to ORS 465.325, the surcharge  
25 provisions of ORS 459.311 shall not be used to meet the financial assurance  
26 requirements of this rule for financial assurance for corrective action.  
27

28  
29  
30  
31 [Note: the following "APPENDIX" contains all new material. To enhance readability it is not presented  
32 in redline format.]  
33

## 34 A P P E N D I X

35  
36  
37 The following standard forms are given to meet the requirements in OAR 340-94-145(4) and 340-95-  
38 095(4) that the financial assurance mechanism be worded as specified by the Department. The  
39 references to Oregon Administrative Rules (OAR) as given pertain to OAR 340 Division 94 for  
40 municipal solid waste landfills; OAR references in brackets and *italics* [ ] are to be used instead for  
41 financial assurance provided under OAR 340 Division 95, non-municipal solid waste land disposal sites.  
42 Otherwise instructions in brackets are to be replaced with the relevant information and the brackets  
43 deleted.  
44

### 45 I. Trust Fund

46 (A trust fund, as specified in OAR 340-94-145(5)(a) or OAR 340-95-095(5)(a) must be worded as  
47 follows, except that instructions in brackets are to be replaced with the relevant information and the  
48 brackets deleted:)  
49

50 Trust Agreement, the "Agreement," entered into as of [date] by and between Permittee [name,  
51 address and corporate status of Permittee], (herein "Grantor") and [name of corporate trustee], [insert,  
52



1 "incorporated in the State of \_\_\_\_" or "a national bank"], (herein "Trustee").  
2

3 Whereas, the Oregon Department of Environmental Quality, "DEQ," an agency of the State of  
4 Oregon, has established certain regulations in OAR 340 Divisions 93 and 94 [95] applicable to the  
5 Grantor, requiring that an owner or operator of a solid waste land disposal site or groups of sites must  
6 demonstrate financial responsibility for all costs of properly closing the site and providing post-closure  
7 care according to the closure or post-closure plan and solid waste permit requirements, and for corrective  
8 action according to a remedial action option developed and selected pursuant to OAR 340 Division 40;  
9 and

10  
11 Whereas, the Grantor has elected to establish a trust to assure all or part of such financial  
12 responsibility for the facilities identified herein; and

13  
14 Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be  
15 the trustee under this agreement, and the Trustee is willing to act as trustee; and

16  
17 Whereas Trustee is authorized to perform the duties of a trustee under the laws of the state of  
18 Oregon.

19  
20 Now, therefore, the Grantor and the Trustee agree as follows:

21  
22 Section 1. Definitions. As used in this Agreement:

23  
24 (a) The term "Grantor" means the Permittee who enters into this Agreement and any successors  
25 or assigns of the Grantor.

26  
27 (b) The term "Trustee" means the Trustee who enters into this Agreement and any successor  
28 Trustee.

29  
30 Section 2. Identification of Facilities. This agreement pertains to the facilities identified on  
31 Schedule A which is attached hereto and by this reference incorporated herein [on Schedule A, for each  
32 facility list the DEQ Solid Waste Permit number, name, and address of the facility(ies) and the current  
33 closure, post-closure and/or corrective action cost estimates, or portions thereof, for which financial  
34 assurance is demonstrated by this Agreement].

35  
36 Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a trust fund,  
37 hereinafter the "Fund," for the benefit of the State of Oregon acting by and through its Department of  
38 Environmental Quality. The Grantor and Trustee intend that no third party have access to the Fund  
39 except as herein provided.

40 The Fund is established initially as consisting of the property, which is acceptable to the Trustee,  
41 described in Schedule B which is attached hereto and by this reference incorporated herein. Such  
42 property and any other property subsequently transferred to the Trustee is referred to as the Fund,  
43 together with all earnings and profits thereon, less any payments or distributions made by the Trustee  
44 pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided.  
45 The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy  
46 of, nor any duty to collect from the Grantor, any payments necessary to discharge any liabilities of the  
47 Grantor established by DEQ.

48  
49 Section 4. Payment. The Trustee shall satisfy a claim by making payments from the Fund only  
50 upon receipt of the following document:

51  
52 (a) Certification from the Grantor that the claim should be paid. The certification must be  
worded as follows:

1 Certification of Valid Claim  
2

3 The undersigned, as Grantor, hereby certifies that the claim arising from operating, closing,  
4 providing post-closure care or required corrective action at Grantor's solid waste land disposal site(s)  
5 should be paid in the amount of \$ \_\_\_\_\_.  
6

7 [Signature]

8  
9 Grantor

10  
11 Grantor shall provide the DEQ Director a copy of the certification in paragraph (a) of this section  
12 concurrently with the submittal thereof to Trustee. Trustee shall not pay the claim until 30 days have  
13 elapsed since the date of the Certification of Valid Claim and the DEQ Director shall not have objected  
14 in writing to the payment within this period.  
15

16 Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall  
17 consist of cash or securities acceptable to the Trustee.  
18

19 Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income,  
20 in accordance with general investment policies and guidelines which the Grantor may communicate in  
21 writing to the Trustee from time to time, subject, however, to the provisions of this section. In investing,  
22 reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties with  
23 respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and  
24 diligence under the circumstance then prevailing which persons of prudence, acting in a like capacity and  
25 familiar with such matters, would use in the conduct of an enterprise of a like character and with like  
26 aims; except that:

27  
28 (i) Securities or other obligations of the Grantor, or any other owner or operator of the facilities,  
29 or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C.  
30 80a-2.(a), shall not be acquired or held unless they are securities or other obligations of the Federal or a  
31 State government;  
32

33 (ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the  
34 extent insured by an agency of the Federal or State government; and  
35

36 (iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a  
37 reasonable time and without liability for the payment of interest thereon.  
38

39 Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:

40  
41 (a) To transfer from time to time any or all of the assets of the Fund to any common  
42 commingled, or collective trust fund created by the Trustee in which the fund is eligible to participate,  
43 subject to all of the provisions thereof, to be commingled with the assets of other trusts participating  
44 therein; and  
45

46 (b) To purchase shares in any investment company registered under the Investment Company Act  
47 of 1940, 15 U.S.C. 81a-1 et seq., including one which may be created, managed, underwritten, or to  
48 which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may  
49 vote such shares in its discretion.  
50

51 Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions  
52 conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly  
53 authorized and empowered:  
54

1 (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public  
2 or private sale. No person dealing with the Trustee shall be bound to see to the application of the  
3 purchase money or to inquire into the validity or expediency of any such sale or other disposition;  
4

5 (b) To make, execute, acknowledge, and deliver any and all documents of transfer and  
6 conveyance and any and all other instruments that may be necessary or appropriate to carry out the  
7 powers herein granted;  
8

9 (c) To register any securities held in the Fund in its own name or in the name of a nominee and  
10 to hold any security in bearer form or in book entry, or to combine certificates representing such  
11 securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to  
12 deposit or arrange for the deposit of such securities in a qualified central depository even though, when  
13 so deposited, such securities may be merged and held in bulk in the name of the nominee of such  
14 depository with other securities deposited therein by another person, or to deposit or arrange for the  
15 deposit of any securities issued by the United States Government, or any agency or instrumentality  
16 thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show  
17 that all such securities are part of the Fund;  
18

19 (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates  
20 issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated  
21 with the Trustee, to the extent insured by an agency of the Federal or State government; and  
22

23 (e) To compromise or otherwise adjust all claims in favor of or against the Fund.  
24

25 Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in  
26 respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund.  
27 All other expenses incurred by the Trustee in connection with the administration of this Trust, including  
28 fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid  
29 directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from  
30 the Fund.  
31

32 Section 10. Annual Valuations. The Trustee shall annually, at least 30 days prior to the  
33 anniversary date of establishment of the Fund, furnish to the Grantor and to the DEQ Director a  
34 statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value  
35 as of no more than 60 days prior to the anniversary date of establishment of the Fund. The failure of the  
36 Grantor to object in writing to the Trustee within 90 days after the statement has been furnished to the  
37 Grantor and the DEQ Director shall constitute a conclusively binding assent by the Grantor barring the  
38 Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the  
39 statement.  
40

41 Section 11. Advice of Counsel. The Trustee may from time to time consult with counsel, who  
42 may be counsel to the Grantor with respect to any question arising as to the construction of this  
43 Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent  
44 permitted by law, in acting upon the advice of counsel.  
45

46 Section 12. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for  
47 its services as agreed upon in writing from time to time with the Grantor.  
48

49 Section 13. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee,  
50 but such resignation or replacement shall not be effective until the Grantor has appointed a successor  
51 trustee and this successor accepts the appointment. The successor trustee shall have the same powers and  
52 duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the  
53 appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and  
54 properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of

1 the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the  
2 appointment of a successor trustee or for instructions. The successor trustee shall specify the date on  
3 which it assumes administration of the trust in a writing sent to the Grantor, the DEQ Director, and the  
4 present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred  
5 by the Trustee as a result of any of the acts contemplated by this section shall be paid as provided in  
6 Section 9.  
7

8 Section 14. Instructions to the Trustee. All orders, requests, and instructions by the Grantor to  
9 the Trustee shall be in writing, signed by such persons as are designated in the attached Schedule C or  
10 such other designees as the Grantor may designate by amendments to Schedule C. The Trustee shall be  
11 fully protected in acting without inquiry in accordance with the Grantor's orders, requests, and  
12 instructions. All orders, requests, and instructions by the DEQ Director to the Trustee shall be in  
13 writing, signed by the DEQ Director or his/her designees, and the Trustee shall act and shall be fully  
14 protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the  
15 right to assume, in the absence of written notice to the contrary, that no event constituting a change or a  
16 termination of the authority of any person to act on behalf of the Grantor or DEQ hereunder has  
17 occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions  
18 from the Grantor and/or DEQ, except as provided for herein.  
19

20 Section 15. Notice of Nonpayment. If a payment is made under Section 4 of this trust, the  
21 Trustee shall notify the Grantor of such payment and the amount(s) thereof within five (5) working days.  
22 The Grantor shall, on or before the anniversary date of the establishment of the Fund following such  
23 notice, either make payments to the Trustee in amounts sufficient to cause the trust to return to its value  
24 immediately prior to the payment of claims under Section 4, or shall provide written proof to the Trustee  
25 that other financial assurance for liability coverage has been obtained equalling the amount necessary to  
26 return the trust to its value prior to the payment of claims. If the Grantor does not either make payments  
27 to the Trustee or provide the Trustee with such proof, the Trustee shall within 10 working days after the  
28 anniversary date of the establishment of the Fund provide a written notice of nonpayment to the DEQ  
29 Director.  
30

31 Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in  
32 writing executed by the Grantor, the Trustee, and the DEQ Director, or by the Trustee and the DEQ  
33 Director if the Grantor ceases to exist.  
34

35 Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this  
36 Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated  
37 at the written agreement of the Grantor, the Trustee, and the DEQ Director, or by the Trustee and the  
38 DEQ Director, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust  
39 property, less final trust administration expenses, shall be delivered to the Grantor.  
40

41 The DEQ Director will agree to termination of the Trust when the permittee substitutes alternate  
42 financial assurance as specified in this section.  
43

44 Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any  
45 nature in connection with any act or omission, made in good faith, in the administration of this Trust, or  
46 in carrying out any directions by the Grantor or the DEQ Director issued in accordance with this  
47 Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust  
48 Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason  
49 of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in  
50 the event the Grantor fails to provide such defense.  
51

52 Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced  
53 according to the laws of the State of Oregon.  
54

1 Section 20. Interpretation. As used in this Agreement, words in the singular include the plural  
2 and words in the plural include the singular. The descriptive headings for each section of this Agreement  
3 shall not affect the interpretation or the legal efficacy of this Agreement.  
4

5 In Witness Whereof the parties have caused this Agreement to be executed by their respective  
6 officers duly authorized and attested as of the date first above written.  
7

8  
9  
10 [Signature of Grantor]

11  
12 [Title]

13  
14 Attest:

15  
16 [Title]

17  
18  
19 [Signature of Trustee]

20  
21 Attest:

22  
23 [Title]

24  
25  
26 **II. Payment Bond**

27  
28 (A payment bond, as specified in OAR 340-94-145(5)(b) and OAR 340-95-095(5)(b) must be  
29 worded as follows, except that instructions in brackets are to be replaced with the relevant information  
30 and the brackets deleted:)

31  
32 Date bond executed:

33  
34 Effective date:

35  
36 Principal: [Permittee's name, address and corporate status]

37  
38 State of incorporation:

39  
40 Surety(ies): [name(s) and business address(es)]

41  
42 DEQ Solid Waste Permit number, name, address, and current cost estimate(s) for closure and/or post-  
43 closure care for each facility guaranteed by this bond according to the closure or post-closure plan and  
44 solid waste permit requirements [indicate closure and post-closure amounts separately]:

45  
46 Total penal sum of bond (must equal sum of closure and post closure amounts, if both are covered by  
47 this bond): \$

48  
49 Surety's bond number:

50  
51 Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly  
52 bound to the State of Oregon Department of Environmental Quality  
(hereinafter called DEQ), in the above penal sum for the payment of which we bind ourselves, our heirs,

1 executors, administrators, successors, and assigns jointly and severally; provided that, where the  
2 Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly  
3 and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for  
4 all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of  
5 such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated,  
6 the limit of liability shall be the full amount of the penal sum.  
7

8       Whereas said Principal is required, under Oregon Revised Statutes Chapter 459, to have a permit  
9 in order to own or operate each solid waste land disposal site identified above; and  
10

11       Whereas said Principal is required to provide financial assurance for all costs of properly closing  
12 each site and providing post-closure care in accordance with the closure or post-closure plan and solid  
13 waste permit requirements as a condition of the required permit; and  
14

15       Whereas said Principal shall establish a standby trust fund as is required when a surety bond is  
16 used to provide such financial assurance;  
17

18       Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully,  
19 before the beginning of the final closure (the beginning of the final closure occurs when the facility or a  
20 land disposal site unit at the facility stops receiving waste) of each facility identified above, fund the  
21 standby trust fund in the amounts identified above for the facility,  
22

23       Or, if the Principal shall fund the standby trust fund in such amount(s) within 15 days after a  
24 final order to begin closure is issued by the DEQ Director or by a court of competent jurisdiction,  
25

26       Or, if the Principal shall obtain and provide alternate financial assurance as specified by Divisions  
27 94 and 95 of Oregon Administrative Rules Chapter 340, within 90 days after the date notice of  
28 cancellation is received by both the Principal and the DEQ Director from the Surety(ies), then this  
29 obligation shall be null and void, otherwise it is to remain in full force and effect.  
30

31       The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to  
32 fulfill the conditions described above. Upon notification by the DEQ Director that the Principal has  
33 failed to perform as guaranteed by this bond, the Surety(ies) shall place funds in the amount guaranteed  
34 for the facility(ies) into the standby trust fund as directed by the DEQ Director.  
35

36       The liability of the Surety(ies) shall not be discharged by any payment or succession of payments  
37 hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of  
38 the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said  
39 penal sum.  
40

41       The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the  
42 Principal and to the DEQ Director, provided, however, that cancellation shall not occur during the 120  
43 days beginning on the date of receipt of the notice of cancellation by both the Principal and the DEQ  
44 Director, as evidenced by the return receipts.  
45

46       The Principal may terminate this bond by sending written notice to the Surety(ies), provided,  
47 however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization  
48 for termination of the bond by the DEQ Director.  
49

50       Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it  
51 guarantees a new closure and/or post-closure amount to correspond to the annual adjustment to the cost  
52 estimates required by OAR 340-94-140(6)(d) [OAR 340-95-090(6)(d)], provided that the penal sum does  
53 not increase by more than 20 percent in any one year.

1 In Witness Whereof, The Principal and Surety(ies) have executed this Payment Bond on the date  
2 set forth above.

3  
4 The persons whose signatures appear below hereby certify that they are authorized to execute this  
5 surety bond on behalf of the Principal and Surety(ies)

6  
7 Principal

8  
9 [Signature(s)]

10  
11 [Name(s)]

12  
13 [Title(s)]

14  
15 Corporate Surety(ies)

16  
17 [Name and address]

18  
19 State of incorporation:

20  
21 Liability limit: \$

22  
23 [Signature(s)]

24  
25 [Name(s) and title(s)]

26  
27 [For every co-surety, provide signature(s) and other information in the same manner as for Surety  
28 above.]

29  
30 Bond premium: \$

31 =====

32 [Add Notary Block]

33 =====

34  
35  
36 **III. Performance Bond**

37  
38 (A performance bond, as specified in OAR 340-94-145(5)(c) or OAR 340-95-095(5)(c), must be  
39 worded as follows, except that instructions in brackets are to be replaced with the relevant information  
40 and the brackets deleted:)

41  
42 Date bond executed:

43  
44 Effective date:

45  
46 Principal: [Permittee's name, address and corporate status]

47  
48 State of incorporation:

49  
50 Surety(ies): [name(s) and business address(es)]

51  
52 DEQ Solid Waste Permit number, name, address, and current cost estimate(s) for closure, post-closure  
and/or corrective action for each facility guaranteed by this bond according to the closure or post-closure

1 plan, solid waste permit requirements, and for corrective action according to the remedial action option  
2 developed and selected pursuant to OAR 340 Division 40 [indicate closure, post-closure and corrective  
3 action amounts separately]:  
4

5 Total penal sum of bond: \$  
6

7 Surety's bond number:  
8

9 Know All Persons By These Presents, That we, the Principal and Surety(ies) hereto are firmly  
10 bound to the State of Oregon Department of Environmental Quality  
11 (hereinafter called DEQ), in the above penal sum for the payment of which we bind ourselves, our heirs,  
12 executors, administrators, successors, and assigns jointly and severally; provided that, where the  
13 Surety(ies) are corporations acting as co-sureties, we, the Sureties, bind ourselves in such sum "jointly  
14 and severally" only for the purpose of allowing a joint action or actions against any or all of us, and for  
15 all other purposes each Surety binds itself, jointly and severally with the Principal, for the payment of  
16 such sum only as is set forth opposite the name of such Surety, but if no limit of liability is indicated,  
17 the limit of liability shall be the full amount of the penal sum.  
18

19 Whereas said Principal is required, under Oregon Revised Statutes Chapter 459 to have a solid  
20 waste permit in order to own or operate each solid waste land disposal site identified above; and  
21

22 Whereas said Principal is required to provide financial assurance for all costs of properly closing  
23 each site and providing post-closure care in accordance with the closure or post-closure plan, solid waste  
24 permit requirements, and for corrective action according to a remedial action option developed and  
25 selected pursuant to OAR 340 Division 40; and  
26

27 Whereas said Principal shall establish a standby trust fund as is required when a surety bond is  
28 used to provide such financial assurance;  
29

30 Now, Therefore, the conditions of this obligation are such that if the Principal shall faithfully  
31 perform closure, whenever required to do so, of each facility for which this bond guarantees closure, in  
32 accordance with the closure plan and other requirements of the permit as such plan and permit may be  
33 amended, pursuant to all applicable laws, statutes, rules, and regulations, as such laws, statutes, rules,  
34 and regulations may be amended,  
35

36 And, if the Principal shall faithfully perform post-closure care at each facility for which this bond  
37 guarantees post-closure care, in accordance with the post-closure plan and other requirements of the  
38 permit, as such plan and permit may be amended, pursuant to all applicable laws, statutes, rules, and  
39 regulations, as such laws, statutes, rules, and regulations may be amended,  
40

41 And, if the Principal shall faithfully carry out corrective action according to a remedial action  
42 option developed and selected pursuant to OAR 340 Division 40  
43 for each site for which this bond guarantees corrective action according to the remedial action option and  
44 all other applicable laws, statutes, rules, and regulations, as such laws, statutes, rules, and regulations  
45 may be amended,  
46

47 Or, if the Principal shall obtain and provide alternate financial assurance as specified in OAR  
48 340-94-140 and -145 [OAR 340-95-090 and -095], within 90 days after the date notice of cancellation is  
49 received by both the Principal and the DEQ Director from the Surety(ies), then this obligation shall be  
50 null and void, otherwise it is to remain in full force and effect.  
51

52 The Surety(ies) shall become liable on this bond obligation only when the Principal has failed to  
fulfill the conditions described above.



1           Upon notification by the DEQ Director that the Principal has been found in violation of the  
2 closure requirements of OAR 340 Division 94 [Division 95], for a site for which this bond guarantees  
3 performance of closure, the Surety(ies) shall either perform closure in accordance with the closure plan  
4 and other solid waste permit requirements or place the closure amount guaranteed for the site into the  
5 standby trust fund as directed by the DEQ Director.  
6

7           Upon notification by the DEQ Director that the Principal has been found in violation of the post-  
8 closure requirements of OAR 340 Division 94 [Division 95] for a site for which this bond guarantees  
9 performance of post-closure care, the Surety(ies) shall either perform post-closure care in accordance  
10 with the post-closure plan and other solid waste permit requirements or place the post-closure amount  
11 guaranteed for the site into the standby trust fund as directed by the DEQ Director.  
12

13           Upon notification by the DEQ Director that the Principal has been found in violation of corrective  
14 action as specified in the remedial action option developed and selected pursuant to OAR 340 Divisions  
15 94 [95] and 40 for a site for which this bond guarantees performance of corrective action, the Surety(ies)  
16 shall either perform corrective action in accordance with the remedial action option or place the  
17 corrective action amount guaranteed for the site into the standby trust fund as directed by the DEQ  
18 Director.  
19

20           Upon notification by an DEQ Director that the Principal has failed to obtain and provide alternate  
21 financial assurance as specified in OAR 340 Division 94 [95], during the 90 days following receipt by  
22 both the Principal and the DEQ Director of a notice of cancellation of the bond, the Surety(ies) shall  
23 place funds in the amount guaranteed for the facility(ies) into the standby trust fund as directed by the  
24 DEQ Director.  
25

26           The surety(ies) hereby waive(s) notification of amendments to closure and post-closure plans,  
27 permits, remedial action option reports, applicable laws, statutes, rules, and regulations and agrees that  
28 no such amendment shall in any way alleviate its (their) obligation on this bond.  
29

30           The liability of the Surety(ies) shall not be discharged by any payment or succession of payments  
31 hereunder, unless and until such payment or payments shall amount in the aggregate to the penal sum of  
32 the bond, but in no event shall the obligation of the Surety(ies) hereunder exceed the amount of said  
33 penal sum.  
34

35           The Surety(ies) may cancel the bond by sending notice of cancellation by certified mail to the  
36 owner or operator and to the DEQ Director, provided, however, that cancellation shall not occur during  
37 the 120 days beginning on the date of receipt of the notice of cancellation by both the Principal and the  
38 DEQ Director as evidenced by the return receipts. If Principal has not provided alternate financial  
39 assurance within 90 days of the notice of cancellation, Surety(ies) shall pay the amount of the penal sum  
40 into the standby trust account.  
41

42           The principal may terminate this bond by sending written notice to the Surety(ies), provided,  
43 however, that no such notice shall become effective until the Surety(ies) receive(s) written authorization  
44 for termination of the bond by the DEQ Director.  
45

46           Principal and Surety(ies) hereby agree to adjust the penal sum of the bond yearly so that it  
47 guarantees a new closure, post-closure and/or corrective action amount to correspond to the annual  
48 adjustment to the cost estimates required by OAR 340-94-140(6)(d) [OAR 340-95-090(6)(d)], provided  
49 that the penal sum does not increase by more than 20 percent in any one year.  
50

51           In Witness Whereof, The Principal and Surety(ies) have executed this Performance Bond and  
52 have affixed their seals on the date set forth above.

1 The persons whose signatures appear below hereby certify that they are authorized to execute this  
2 surety bond on behalf of the Principal and Surety(ies)

3  
4 Principal

5  
6 [Signature(s)]

7  
8 [Name(s)]

9  
10 [Title(s)]

11  
12 Corporate Surety(ies)

13  
14 [Name and address]

15  
16 State of incorporation:

17  
18 Liability limit: \$

19  
20 [Signature(s)]

21  
22 [Name(s) and title(s)]

23  
24 [For every co-surety, provide signature(s) and other information in the same manner as for Surety  
25 above.]

26  
27 Bond premium: \$

28 =====

29 [Add Notary Block]

30 =====

31  
32  
33 **IV. Irrevocable Standby Letter of Credit**

34  
35 (An irrevocable letter of credit, as specified in OAR 340-94-145(5)(d) and OAR 340-95-  
36 095(5)(d), must be worded as follows, except that instructions in brackets are to be replaced with the  
37 relevant information and the brackets deleted:)

38  
39 Director

40  
41 Oregon Department of Environmental Quality

42  
43 Dear Director:

44  
45 We hereby establish our Irrevocable Standby Letter of Credit No. \_\_\_\_ in your favor, at the request and  
46 for the account of [permittee's name and address] up to the aggregate amount of [in words] U.S. dollars  
47 \$ \_\_\_\_, available upon presentation by you of

48  
49 (1) your sight draft, bearing reference to this letter of credit No. \_\_\_\_, and

50  
51 (2) your signed statement reading as follows: "I certify that the amount of the draft is payable  
52 pursuant to regulations issued under authority of Oregon Administrative Rules 340 Divisions 93, 94 [95]  
and 40, as amended."

1 This letter of credit is effective as of [date] and shall expire on [date at least 1 year later], but  
2 such expiration date shall be automatically extended for a period of [at least 1 year] on [date] and on  
3 each successive expiration date, unless, at least 120 days before the current expiration date, we notify  
4 both you and [permittee's name] by certified mail that we have decided not to extend this letter of credit  
5 beyond the current expiration date. In the event you are so notified, any unused portion of the credit  
6 shall be available upon presentation of your sight draft for 90 days after the date of receipt by both you  
7 and [permittee's name], as shown on the signed return receipts.

8  
9 Whenever this letter of credit is drawn on under and in compliance with the terms of this credit,  
10 we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft  
11 directly into the standby trust fund of [permittee's name] in accordance with your instructions.

12  
13 In the event that this letter of credit is issued with another mechanism for financial assurance  
14 coverage, this letter of credit shall be considered primary [or "excess" if applicable] coverage.

15  
16 [Signature(s) and title(s) of official(s) of issuing institution] [Date]

17  
18 This credit is subject to [insert "the most recent edition of the Uniform Customs and Practice for  
19 Documentary Credits, published by the International Chamber of Commerce," or "the Uniform  
20 Commercial Code"].

21  
22  
23 **V. Insurance Policy**

24  
25 (A certificate of insurance, as specified in OAR 340-94-145(5)(e) or OAR 340-95-095(5)(e) must  
26 be worded as follows, except that instructions in brackets are to be replaced with the relevant  
27 information and the brackets deleted:)

28  
29 Certificate of Insurance for Closure or Post-Closure Care

30  
31 Name and Address of Insurer

32  
33 (herein called the "Insurer");

34  
35 Name and Address of Permittee

36  
37 (herein called the "Insured");

38  
39 Facilities Covered: [List for each facility: The DEQ Solid Waste Permit number, name, address, and the  
40 amount of insurance for closure and/or the amount for post-closure care (these amounts for all facilities  
41 covered must total the face amount shown below).]

42  
43 Face Amount:

44  
45 Policy Number:

46  
47 Effective Date:

48  
49 The Insurer hereby certifies that it has issued to the Insured the policy of insurance identified  
50 above, naming as beneficiary the State of Oregon by and through its Department of Environmental  
51 Quality, to provide financial assurance for [insert "closure" or "closure and post-closure care" or "post-  
52 closure care"] for the facilities identified above. Proceeds from this policy of insurance shall be used  
only to finance closure and/or post-closure activities that are in accordance with the closure or post-

1 closure plan or otherwise justified. The Insurer further warrants that such policy conforms in all  
2 respects with the requirements of OAR 34-94-140 and -145 [OAR 340-95-090 and -095] as applicable  
3 and as such administrative rule was constituted on the date shown immediately below. It is agreed that  
4 any provision of the policy inconsistent with such regulations is hereby amended to eliminate such  
5 inconsistency.  
6

7 The Insurer certifies that it is licensed to transact the business of insurance or is eligible as an  
8 excess or surplus lines insurer in the state of Oregon.  
9

10 Whenever requested by the Director of the Oregon Department of Environmental Quality, the  
11 Insurer agrees to furnish to the DEQ Director a duplicate original of the policy listed above, including all  
12 endorsements thereon.  
13

14 [Authorized signature for Insurer]

15 [Name of person signing]

16 [Title of person signing]

17 =====

18 [Add Notary Block]

19 =====

20 [Date]  
21  
22  
23  
24

## 25 VI. Corporate Financial Test

26 (A corporate financial guarantee, as specified in OAR 340-94-145(5)(f) or OAR 340-95-095(5)(f)  
27 must be worded as follows, except that instructions in brackets are to be replaced with the relevant  
28 information and the brackets deleted:)  
29  
30

31 Letter From Chief Financial Officer and Corporate Guarantee

32 [Address to Director of the Oregon Department of Environmental Quality.]  
33  
34

35 I am the chief financial officer of [name and address of Permittee]. This letter is in support of  
36 this firm's use of the financial test in OAR 340-94-145(5)(f) [OAR 340-95-095(5)(f)] to demonstrate  
37 financial assurance for closure or post-closure care or for corrective action pursuant to OAR 340  
38 Division 94 [Division 95]. The data used in meeting the financial test have been derived from the  
39 independently audited year-end financial statements for [Permittee] for the latest fiscal year.  
40

41 [Wherever appropriate provide the required information on the permitted facilities and associated  
42 costs. For each facility include its DEQ Solid Waste Permit number, name, address, and current  
43 closure, post-closure and/or corrective action cost estimates. Identify each cost estimate as to whether it  
44 is for closure or post-closure care or for required corrective action.]  
45

46 1. This firm is the owner or operator of the following facilities for which financial assurance for  
47 closure or post-closure care is demonstrated through the financial test specified in OAR 340-94-145(5)(f),  
48 paragraph (A) or (B) [OAR 340-95-095(5)(f), paragraph (A) or (B)]. The current closure and/or post-  
49 closure and/or corrective action cost estimates covered by the test for each facility are identified on  
50 Schedule A which is attached hereto and by this reference incorporated herein [on Schedule A, for each  
51 facility list the DEQ Solid Waste Permit number, name, and address of the facility(ies) and their current  
52 closure, post-closure and/or corrective action cost estimates, or portions thereof, for which financial  
assurance is demonstrated by this test.]

1 2. This letter constitutes the guarantee specified in OAR 340-94-145(5)(f)(A) or (B) [OAR 340-  
2 95-095(5)(f) (A) or (B)]. By this letter the firm guarantees the completion of the closure, post-closure or  
3 corrective action activities according to the closure or post-closure plan, solid waste permit requirements  
4 and/or selected remedy described in the corrective action report, in facilities owned or operated by  
5 Permittee and its subsidiaries. Permittee meets the financial criteria set forth in the [Alternative]  
6 Financial Test.

7  
8 3. [Permittee] hereby establishes a standby trust fund, hereafter the "Fund," for the benefit of  
9 the State of Oregon acting by and through its Department of Environmental Quality (DEQ). This letter  
10 guarantees that the Fund will be fully funded within 30 days after either service of a Final Order  
11 assessing a civil penalty from the Department for failure to adequately perform closure or post-closure  
12 activities according to the closure or post-closure plan and permit, or the selected remedy described in  
13 the corrective action report, as applicable, or service of a written notice from the Department that the  
14 permittee no longer meets the criteria of the financial test.

15  
16 4. As chief financial officer I possess the requisite authority to bind this firm to the  
17 guarantee and acknowledge that this corporate guarantee is an ongoing, continuing and binding obligation  
18 of the firm. I will notify DEQ within 15 days any time that the permittee no longer meets the criteria of  
19 the financial test or is named as debtor in a voluntary or involuntary proceeding under Title 11  
20 (Bankruptcy), U. S. Code.

21  
22 5. The fiscal year of this firm ends on [month, day]. Attached are (a) a copy of the  
23 independent certified public accountant (CPA)'s report on examination of the permittee's financial  
24 statements for the latest completed fiscal year and (b) a report from permittee's independent CPA stating  
25 that the CPA has compared the data which this letter specifies as having been derived from the  
26 independently audited year-end financial statements for the latest fiscal year with the amounts in such  
27 financial statement and that no matters came to the CPA's attention which caused the CPA to believe that  
28 the specified data should be adjusted.

29  
30 [If Permittee is meeting the criteria for the Financial Test, complete items 1. through 10. If  
31 Permittee is meeting the criteria for the Alternative Financial Test, complete items 1. through  
32 24.]

33  
34 1. Sum of current cost estimates for closure, post-closure care or corrective action covered by  
35 this test [total of all cost elements], pursuant to Schedule A. \$ \_\_\_\_

36  
37 2. Total liabilities [if any portion of the closure, post-closure care or corrective action cost  
38 estimates is included in total liabilities, the amount of that portion may be deducted from this line and  
39 added to lines 3 and 9] \$ \_\_\_\_

40  
41 3. Tangible net worth \$ \_\_\_\_

42  
43 4. Current assets \$ \_\_\_\_

44  
45 5. Current liabilities \$ \_\_\_\_

46  
47 6. Net working capital [line 5 minus line 4] \$ \_\_\_\_

48  
49 7. Net income \$ \_\_\_\_

50  
51 8. The sum of depreciation plus depletion plus amortization \$ \_\_\_\_

52  
9. Total assets. \$ \_\_\_\_

- 1 10. Total assets in U.S. \$\_\_\_\_  
2  
3 11. Retained earnings. \$\_\_\_\_  
4  
5 12. Earnings before interest and taxes. \$\_\_\_\_  
6  
7 13. Interest. \$\_\_\_\_  
8  
9 14. Net sales. \$\_\_\_\_  
10  
11 15. Federal income tax credits (fuel tax, investment in regulated investment  
12 companies).\$\_\_\_\_  
13  
14 16. Federal income tax. \$\_\_\_\_  
15  
16 17. Recurring book income not subject to income tax. \$\_\_\_\_  
17  
18 18. Internally generated cash. (line 8 plus line 12 plus line 15 plus line 17 minus line 13  
19 minus line 16. \$\_\_\_\_  
20  
21 19. Liquid Asset Ratio. [line 6 divided by line 9].\_\_\_\_  
22  
23 20. Earned Surplus Ratio. [line 11 divided by line 9].\_\_\_\_  
24  
25 21. Productivity. [line 12 divided by line 9].\_\_\_\_  
26  
27 22. Equity Ratio. [line 3 divided by line 2].\_\_\_\_  
28  
29 23. Efficiency. [line 14 divided by line 9].\_\_\_\_  
30  
31 24. Altman's Z. sum of [0.717 times line 19] plus [0.847 times line 20] plus [3.07 times  
32 line 21] plus [4.2 times line 22] plus [0.998 times line 23].\_\_\_\_  
33

34 FINANCIAL TEST

35  
36 To meet the criteria of this financial test a Permittee must be able to answer yes to at least two of  
37 the three parts of A. and to all parts of B., C. and D.

- 38  
39 A.i. Is line 2 divided by line 3 less than 3.0? (Yes/No)  
40 A.ii. Is [line 7 plus line 8] divided by line 2 greater than 0.1? (Yes/No)  
41 A.iii. Is line 4 divided by line 5 greater than 1.5? (Yes/No)  
42 B.i. Is line 6 divided by line 1 at least 4.0? (Yes/No)  
43 B.ii. Is line 3 divided by line 1 at least 6.0? (Yes/No)  
44 C. Is line 3 at least \$10 million? (Yes/No)  
45 D. Is line 10 divided by line 1 at least 6.0? (Yes/No)  
46

47 ALTERNATIVE FINANCIAL TEST

48  
49 To meet the criteria of this alternative financial test a Permittee must be able to answer yes to  
50 part A. and to two of the three parts of B.

- 51  
52 A. Is line 3 at least \$10 million? (Yes/No)  
53 B.i. Is line 12 divided by line 13 at least 2.0? (Yes/No)  
54 B.ii. Is line 18 divided by line 2 at least 0.2? (Yes/No)

1 B.iii. Is line 24 at least 2.9? (Yes/No)

2  
3 I hereby certify that all representations contained in this letter are, to the best of my knowledge, true,  
4 complete and accurate. This letter constitutes a binding and continuing obligation of [Permittee] and is  
5 enforceable in accordance with its terms.  
6

7 [Signature] \_\_\_\_\_

8  
9 [Name] \_\_\_\_\_

10  
11 [Title] \_\_\_\_\_

12  
13 [Date] \_\_\_\_\_

14 =====

15 [Add Notary Block]

16 =====

17  
18  
19 **VII. Standby Trust Agreement**

20  
21 (A standby trust agreement, as specified in OAR 340-94-145(5)(b), (c), (d), and (f)  
22 and OAR 340-95-095(5)(b), (c), (d) and (f) must be worded as follows, except that instructions in  
23 brackets are to be replaced with the relevant information and the brackets deleted:)

24  
25 Trust Agreement, the "Agreement," entered into as of [date] by and between Permittee [name,  
26 address and corporate status of Permittee], (herein "Grantor") and [name of corporate trustee], [insert,  
27 "incorporated in the State of \_\_\_\_ " or "a national bank"], the "trustee."

28  
29 Whereas the Oregon Department of Environmental Quality (herein "DEQ"), an agency of the  
30 State of Oregon has established certain regulations applicable to the Grantor, requiring that an owner or  
31 operator of a solid waste land disposal site or group of sites must demonstrate financial responsibility for  
32 all costs of properly closing the site and providing post-closure maintenance according to the closure or  
33 post-closure plan, solid waste permit requirements and for corrective action according to a remedial  
34 action option developed and selected pursuant to OAR 340 Division 40; and

35  
36 Whereas, the Grantor has elected to establish a standby trust into which the proceeds from a  
37 [insert "payment bond," "performance bond," "letter of credit" or "corporate guarantee"], described in  
38 Schedule B attached hereto and by this reference incorporated herein, may be deposited to assure all or  
39 part of such financial responsibility for the facilities identified herein; and

40  
41 Whereas, the Grantor, acting through its duly authorized officers, has selected the Trustee to be  
42 the trustee under this agreement, and the Trustee is willing to act as trustee; and

43  
44 Whereas Trustee is authorized to perform the duties of a trustee under the laws of the state of  
45 Oregon.

46  
47 Now, therefore, the Grantor and the Trustee agree as follows:

48  
49 Section 1. Definitions. As used in this Agreement:

50  
51 (a) The term "Grantor" means the Permittee who enters into this Agreement and any successors  
52 or assigns of the Grantor.  
53 }

1 (b) The term "Trustee" means the Trustee who enters into this Agreement and any successor  
2 Trustee.  
3

4 Section 2. Identification of Facilities. This agreement pertains to the facilities identified on  
5 Schedule A which is attached hereto and by this reference incorporated herein, [on Schedule A, for each  
6 facility list the DEQ Solid Waste Permit number, name, and address of the facility(ies) and the current  
7 closure, post-closure and/or corrective action cost estimates, or portions thereof, for which financial  
8 assurance is demonstrated by this Agreement].  
9

10 Section 3. Establishment of Fund. The Grantor and the Trustee hereby establish a standby trust  
11 fund, hereafter the "Fund," for the benefit of the State of Oregon acting by and through its Department  
12 of Environmental Quality (DEQ). The Grantor and Trustee intend that no third party have access to the  
13 Fund except as herein provided.  
14

15 The Fund is established initially as consisting of the proceeds of the [insert "payment bond,"  
16 "performance bond," "letter of credit" or "corporate guarantee"] deposited into the Fund. Such proceeds  
17 and any other property subsequently transferred to the Trustee is referred to as the Fund, together with  
18 all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this  
19 Agreement. The Fund shall be held by the Trustee, IN TRUST, as hereinafter provided. The Trustee  
20 shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any  
21 duty to collect from the Grantor, any payments necessary to discharge any liabilities of the Grantor  
22 established by DEQ.  
23

24 Section 4. Payment. The Trustee shall satisfy a claim by drawing on the property described in  
25 Schedule B, and by making payments from the Fund only upon receipt of the following document:  
26

27 (a) Certification from the Grantor that the claim should be paid. The certification must be  
28 worded as follows:  
29

30 Certification of Valid Claim  
31

32 The undersigned, as Grantor, hereby certifies that the claim arising from operating, closing,  
33 providing post-closure care or required corrective action at Grantor's solid waste land disposal site(s)  
34 should be paid in the amount of \$ \_\_\_\_\_.  
35

36 [Signature] \_\_\_\_\_  
37

38 Grantor \_\_\_\_\_  
39

40 Grantor shall provide the DEQ Director a copy of the certification in paragraph (a) of this section  
41 concurrently with the submittal thereof to Trustee. Trustee shall not pay the claim until 30 days have  
42 elapsed since the date of the Certification of Valid Claim and the DEQ Director shall not have objected  
43 in writing to the payment within this period.  
44

45 Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall  
46 consist of the proceeds from the [insert "payment bond," "performance bond," "letter of credit" or  
47 "corporate guarantee"] drawn upon by the Trustee in accordance with the requirements of OAR 340-94-  
48 145(5) [OAR 340-95-095(5)].  
49

50 Section 6. Trustee Management. The Trustee shall invest and reinvest the principal and income,  
51 in accordance with general investment policies and guidelines which the Grantor may communicate in  
52 writing to the Trustee from time to time, subject, however, to the provisions of this Section. In  
53 investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge his duties  
54 )



1 with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence,  
2 and diligence under the circumstances then prevailing which persons of prudence, acting in a like  
3 capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and  
4 with like aims; except that:  
5

6 (i) Securities or other obligations of the Grantor, or any other owner or operator of the sites, or  
7 any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-  
8 2(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a  
9 State government;

10 (ii) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the  
11 extent insured by an agency of the Federal or a State government; and  
12

13 (iii) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a  
14 reasonable time and without liability for the payment of interest thereon.  
15

16 Section 7. Commingling and Investment. The Trustee is expressly authorized in its discretion:  
17

18 (a) To transfer from time to time any or all of the assets of the Fund to any common,  
19 commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate,  
20 subject to all of the provisions thereof, to be commingled with the assets of other trusts participating  
21 therein; and  
22

23 (b) To purchase shares in any investment company registered under the Investment Company Act  
24 of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to  
25 which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may  
26 vote such shares in its discretion.  
27

28 Section 8. Express Powers of Trustee. Without in any way limiting the powers and discretions  
29 conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly  
30 authorized and empowered:  
31

32 (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public  
33 or private sale. No person dealing with the Trustee shall be bound to see to the application of the  
34 purchase money or to inquire into the validity or expediency of any such sale or other disposition;  
35

36 (b) To make, execute, acknowledge, and deliver any and all documents of transfer and  
37 conveyance and any and all other instruments that may be necessary or appropriate to carry out the  
38 powers herein granted;  
39

40 (c) To register any securities held in the Fund in its own name or in the name of a nominee and  
41 to hold any security in bearer form or in book entry, or to combine certificates representing such  
42 securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to  
43 deposit or arrange for the deposit of such securities in a qualified central depository even though, when  
44 so deposited, such securities may be merged and held in bulk in the name of the nominee of such  
45 depository with other securities deposited therein by another person, or to deposit or arrange for the  
46 deposit of any securities issued by the United States Government, or any agency or instrumentality  
47 thereof, with a Federal Reserve Bank, but the books and records of the Trustee shall at all times show  
48 that all such securities are part of the Fund;  
49

50 (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates  
51 issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated  
52 with the Trustee, to the extent insured by an agency of the Federal or State government; and  
53  
54

1 (e) To compromise or otherwise adjust all claims in favor of or against the Fund.  
2

3 Section 9. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in  
4 respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund.  
5 All other expenses incurred by the Trustee in connection with the administration of this Trust, including  
6 fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid  
7 directly by the Grantor, and all other proper charges and disbursements to the Trustee shall be paid from  
8 the Fund.  
9

10 Section 10. Advice of Counsel. The Trustee may from time to time consult with counsel, who  
11 may be counsel to the Grantor, with respect to any question arising as to the construction of this  
12 Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent  
13 permitted by law, in acting upon the advice of counsel.  
14

15 Section 11. Trustee Compensation. The Trustee shall be entitled to reasonable compensation for  
16 its services as agreed upon in writing from time to time with the Grantor.  
17

18 Section 12. Successor Trustee. The Trustee may resign or the Grantor may replace the Trustee,  
19 but such resignation or replacement shall not be effective until the Grantor has appointed a successor  
20 trustee and this successor accepts the appointment. The successor trustee shall have the same powers and  
21 duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the  
22 appointment; the Trustee shall assign, transfer, and pay over to the successor trustee the funds and  
23 properties then constituting the Fund. If for any reason the Grantor cannot or does not act in the event of  
24 the resignation of the Trustee, the Trustee may apply to a court of competent jurisdiction for the  
25 appointment of a successor trustee or for instructions. The successor trustee shall specify the date on  
26 which it assumes administration of the trust in a writing sent to the Grantor, the DEQ Director and the  
27 present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred  
28 by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in  
29 Section 9.  
30

31 Section 13. Instructions to the Trustee. All orders, requests, certifications of valid claims, and  
32 instructions to the Trustee shall be in writing, signed by such persons as are designated in the attached  
33 Schedule C or such other designees as the Grantor may designate by amendments to Schedule C. The  
34 Trustee shall be fully protected in acting without inquiry in accordance with the Grantor's orders,  
35 requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to  
36 the contrary, that no event constituting a change or a termination of the authority of any person to act on  
37 behalf of the Grantor or the DEQ Director hereunder has occurred. The Trustee shall have no duty to act  
38 in the absence of such orders, requests, and instructions from the Grantor and/or DEQ, except as  
39 provided for herein.  
40

41 Section 14. Amendment of Agreement. This Agreement may be amended by an instrument in  
42 writing executed by the Grantor, the Trustee, and the DEQ Director, or by the Trustee and the DEQ  
43 Director if the Grantor ceases to exist.  
44

45 Section 15. Irrevocability and Termination. Subject to the right of the parties to amend this  
46 Agreement as provided in Section 14, this Trust shall be irrevocable and shall continue until terminated  
47 at the written agreement of the Grantor, the Trustee, and the DEQ Director, or by the Trustee and the  
48 DEQ Director, if the Grantor ceases to exist. Upon termination of the Trust, all remaining trust  
49 property, less final trust administration expenses, shall be paid to the Grantor.  
50

51 The Director will agree to termination of the Trust when the permittee substitutes alternative  
52 financial assurance as specified in this section.  
53

54 Section 16. Immunity and indemnification. The Trustee shall not incur personal liability of any

1 nature in connection with any act or omission, made in good faith, in the administration of this Trust, or  
2 in carrying out any directions by the Grantor and the DEQ Director issued in accordance with this  
3 Agreement. The Trustee shall be indemnified and saved harmless by the Grantor or from the Trust  
4 Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason  
5 of any act or conduct in its official capacity, including all expenses reasonable incurred in its defense in  
6 the event the Grantor fails to provide such defense.  
7

8 Section 17. Choice of Law. This Agreement shall be administered, construed, and enforced  
9 according to the laws of the State of Oregon.  
10

11 Section 18. Interpretation. As used in this Agreement, words in the singular include the plural  
12 and words in the plural include the singular. The descriptive headings for each Section of this Agreement  
13 shall not affect the interpretation of the legal efficacy of this Agreement.  
14

15 In Witness Whereof the parties have caused this Agreement to be executed by their respective  
16 officers duly authorized and attested as of the date first above written.  
17

18  
19 [Signature of Grantor]

20  
21 [Title]

22  
23 Attest:

24  
25 [Title]

26  
27  
28  
29 [Signature of Trustee]

30  
31 Attest:

32  
33 [Title]

34  
35  
36  
37  
38 (This form of notary block to be attached wherever notarization is needed:)  
39

40 State of OREGON ) On this \_\_\_ day of \_\_\_\_\_, 199\_, personally  
41 )ss. appeared before me \_\_\_\_\_ who  
42 County of \_\_\_\_\_ ) stated that (s)he is the \_\_\_\_\_ of  
43 \_\_\_\_\_, a corporation, and that the instrument  
44 was signed in behalf of the said corporation by  
45 authority of its board of directors and acknowledged  
46 said instrument to be its voluntary act and deed.  
47 Before me: \_\_\_\_\_  
48 \_\_\_\_\_ Notary public for Oregon.  
49 My commission expires \_\_\_\_\_.  
50  
51  
52

**ATTACHMENT B-1**

**NOTICE OF PROPOSED RULEMAKING HEARING**

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

Department of Environmental Quality

Waste Management and Cleanup Division

**OAR Chapter 340**

<b>DATE:</b>	<b>TIME:</b>	<b>LOCATION:</b>
October 4, 1994	10 a.m.	Conference Room Oregon Department of Transportation 63055 N Highway 97 Bend, Oregon
October 5, 1994	2 p.m.	Conference Room 3A Department of Environmental Quality 811 S.W. 6th Portland, Oregon
October 5, 1994	10 a.m.	Northern Wasco PUD 401 Court Street The Dalles, Oregon
October 6, 1994	6:30 p.m.	Jackson County Courthouse Auditorium 10 S. Oakdale Medford, Oregon
October 6, 1994	7 p.m.	DEQ Offices 1102 Lincoln St., Suite 210 Eugene, Oregon

**HEARINGS OFFICER(s):** Don Bramhall, E. Patricia Vernon, Wayne Thomas, Charlie Hensley, Bob Barrows

**STATUTORY AUTHORITY:** ORS 459.045; ORS 459.209; ORS 459.248; ORS 459.270; ORS 459.272; ORS 468.020

**ADOPT:** OAR 340-94-115; 340-94-145 [renumbered from OAR 340-94-140(5)]; 340-95-065; 340-95-095 [renumbered from OAR 340-95-090(5)]

**AMEND:** OAR 340-93-050, OAR 340-94 and OAR 340-95

**REPEAL:** OAR 340-94-150

- 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 proposed rules would implement changes in the provision of financial assurance for closure, post-closure care and corrective action for municipal solid waste landfills and non-municipal land disposal sites, as required by 1993 Legislation. The rules integrate state requirements with federal "Subtitle D" regulations for municipal solid waste landfills. They would set criteria and procedures for provision of financial assurance, including establishing wording for financial assurance mechanisms. They would require permittees to prepare two kinds of closure and post-closure plans (a "conceptual" plan and a subsequent, more detailed, engineering design plan) in order to estimate costs of closure and post-closure maintenance.

**LAST DATE FOR COMMENT:** October 12, 1994

**DATE PROPOSED TO BE EFFECTIVE:** Upon adoption by the Environmental Quality Commission and subsequent filing with the Secretary of State.

**AGENCY RULES COORDINATOR:**

Chris Rich, (503) 229-6775

**AGENCY CONTACT FOR THIS PROPOSAL:**

Deanna Mueller-Crispin

**ADDRESS:**

Waste Management and Cleanup Division

811 S. W. 6th Avenue

Portland, Oregon 97204

**TELEPHONE:**

(503) 229-5808

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

\_\_\_\_\_  
Date

secstnot.fa

Oregon Department of Environmental Quality

## A CHANCE TO COMMENT ON...

Solid Waste Rule Amendments:

Criteria for Financial Assurance for Closure and Post-Closure Care

Date Issued:	August 29, 1994
Public Hearings:	October 4, 1994 October 5, 1994 (2 hearings) October 6, 1994 (2 hearings)
Comments Due:	October 12, 1994

**WHO IS  
AFFECTED:**

Owners and operators of municipal solid waste landfills; owners and operators of non-municipal solid waste land disposal sites (including construction and demolition landfills, woodwaste landfills, industrial landfills, sludge disposal sites, etc.); local governments owning or operating solid waste land disposal sites.

**WHAT IS  
PROPOSED:**

The proposed rules would establish criteria and procedures for provision of financial assurance for closure, post-closure care and corrective action by permittees of solid waste land disposal sites.

**WHAT ARE THE  
HIGHLIGHTS:**

The proposed rule would:

1. Require permittees to prepare two kinds of closure and post-closure plans (a "conceptual" plan, and a subsequent, more detailed, engineered plan) in order to estimate costs of closure and post-closure maintenance.
2. Require permittees to submit their **initial** financial assurance mechanism(s) to the Department (by April 9, 1995 for most affected sites).
3. Require a permittee who provides any non-standard (or "alternative") type of financial assurance to submit certification from a qualified third party that the financial assurance mechanism meets all state and federal regulations.



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.

Attachment B-2, Page 1

4. Require an annual update for the cost estimates for closure and post-closure care, and annual notification to the Department that this update had been completed.

**HOW TO  
COMMENT:**

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

Conference Room  
Oregon Department of Transportation  
63055 North Highway 97  
Bend, Oregon  
October 4, 1994  
10 a.m.

Hearing Room 3A  
DEQ Headquarters  
811 SW 6th  
Portland, Oregon  
October 5, 1994  
2 p.m.

Northern Wasco PUD  
401 Court Street  
The Dalles, Oregon  
October 5, 1994  
10 a.m.

Jackson County Courthouse Auditorium  
10 S. Oakdale  
Medford, Oregon  
October 6, 1994  
6:30 p.m.

DEQ Offices  
1102 Lincoln St., Suite 210  
Eugene, Oregon  
October 6, 1994  
7 p.m.

Written comments must be received by 5:00 p.m. on October 12, 1994 at the following address:

Department of Environmental Quality  
Waste Management and Cleanup Division  
811 S. W. 6th Avenue  
Portland, Oregon, 97204  
Attn: Deanna Mueller-Crispin

A staff report is attached with supporting documents including a copy of the Proposed Rule and proposed wording for financial assurance mechanisms. Additional copies of the staff report or the Proposed Rule may be obtained from the Department by calling Dale Chipman of the Waste Management and Cleanup Division at 229-5965 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.

The buildings where the hearings will be held are wheelchair accessible. If you need special assistance to participate in a hearing, please contact DEQ at (503) 229-5965 or TDD 229-6993.

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## ATTACHMENT B-3

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Solid Waste Land Disposal Sites: Criteria for  
Financial Assurance for Closure and Post-Closure Care

### 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 459.045, ORS 459.209, ORS 459.248, ORS 459.270, ORS 459.272, ORS 468.020

2. Need for the Rule

This rule implements changes required by 1993 Senate Bill 1012, which changed requirements for provision of financial assurance by solid waste land disposal site permittees. The rule also integrates federal financial assurance criteria in 40 CFR Part 258 ("Subtitle D") for municipal solid waste landfills with the state requirements. The rule spells out procedures and criteria for how financial assurance for landfill closure, post-closure care and corrective action (if needed) is to be provided. Solid waste permittees will be required to prepare two kinds of closure and post-closure plans on which to base cost estimates of closure and post-closure care for land disposal sites; the rule sets dates for their submittal. It includes required wording of the financial assurance mechanisms.

3. Principal Documents Relied Upon in this Rulemaking

OAR Chapter 340 Divisions 93, 94 and 95  
ORS Chapter 459  
40 CFR Part 258  
40 CFR Part 264

1993 Senate Bill 1012  
Meeting notes, DEQ Solid Waste Financial Assurance Work Group  
California Code of Regulations, Title 14, Article 3.5

4. Advisory Committee Involvement

The Department's Solid Waste Advisory Committee (SWAC) reviewed earlier drafts of this proposed rule in 1993 as they considered a rule package with other necessary solid waste rule changes stemming from 1993 Legislation. The SWAC recommended that the financial assurance part of the rule be given further consideration. The Department convened a special Work Group on Financial Assurance to better define and address the issues involving provision of financial assurance. This Work Group met in February and March 1994, and were requested to comment on a redrafted rule in June. The proposed rule was again brought before the full SWAC in August 1994.

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## **ATTACHMENT B-4**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Solid Waste: Criteria for Financial Assurance  
for Closure and Post-Closure Care

### **Fiscal and Economic Impact Statement**

#### **Introduction**

The following elements of this rulemaking proposal would have fiscal and economic impacts:

1. Financial assurance for land disposal site closure (at the time a solid waste permit is issued for a new facility, or by a date certain for existing facilities -- April 9, 1995 for most facilities).
2. Financial assurance for post-closure care of land disposal sites (same timing as above).
3. Financial assurance for corrective action for known releases.
4. Preparation of a conceptual "worst-case" closure plan and a "conceptual" post-closure plan for non-municipal land disposal sites by April 9, 1995.
5. If a permittee elects to provide an "alternative" form of financial assurance (requiring review and approval of the Department), requirement for the financial assurance mechanism to be certified by a qualified third party as meeting all applicable state and federal regulations.
6. For municipal solid waste landfills: If a trust fund is used as the financial mechanism for closure or post-closure care: allowing the pay-in period to run until the anticipated closure date of the landfill unit (rather than only until the permit expiration date).
7. Allowing use of a discount rate in calculating estimated "current costs" for closure and post-closure care.

Following is a discussion of the fiscal impact of the above.

Note: There are federal and state financial assurance requirements for municipal solid waste landfills, and state requirements for all land disposal sites. Except in a few instances which will be noted, the proposed rules do not create fiscal impacts for municipal landfills, as they just implement financial assurance requirements already established in federal regulations (40 CFR Part 258, or "Subtitle D"). The current proposed rule would establish procedures and set criteria for provision of the required financial assurance for municipal solid waste landfills. 1993 Senate Bill 1012 created additional financial assurance requirements for *non-municipal land disposal sites*. A previous rule adoption by the Environmental Quality Commission established a delay in implementation dates for financial assurance (adopted on April 22, 1994). See Fiscal and Economic Impact Statement of that rulemaking for general impacts associated with SB 1012.

The Department estimates that there are 25 or 26 municipal solid waste landfills in Oregon which will remain open and be subject to the financial assurance requirements. Of those, 14 are privately operated (some of which already have financial assurance). The others are operated by local government units, which may be able to use special provisions in rules anticipated to be promulgated by the Environmental Protection Agency (EPA) in January, 1995 (Local Government Financial Test). These rules are expected to provide a performance option for financial assurance for the local government, at considerable cost savings.

Non-municipal land disposal sites subject to the financial assurance requirements include the following: five construction and demolition landfills; about 44 woodwaste landfills; four pulp and paper landfills; nine "other" industrial landfills; and about 16 sludge disposal or landspreading sites. The Department has specifically exempted some of these sites from financial assurance requirements. Others will need to comply.

1. Financial assurance for closure. The amount of financial assurance to be provided must cover third-party costs of closure. Federal regulations for municipal solid waste landfills (40 CFR Part 258, or "Subtitle D") require that the cost estimates be for closure at the time when it would be the most expensive.

The Department may exempt non-municipal land disposal sites from the closure and post-closure financial assurance requirements if the site poses no significant threat of adverse impact on ground- or surface water, or to public health.

Site closure includes constructing final cover and revegetating the surface. The cost of closing a land disposal site depends on the type of site and how large it is. The Department estimates that an average cost for site closure for municipal solid waste landfills is about \$110,000 per acre, with a range of \$85,000 to \$175,000/acre. In general, municipal landfills cover 10 acres or more.

In general, closure costs for non-municipal land disposal sites will be less than for municipal landfills since stringent federal requirements do not apply. Most non-municipal sites (e.g. woodwaste landfills) will have only a soil cover. Closure costs for such a site might be as little as \$1,000 an acre. An industrial facility might require a synthetic cap; in that case, the closure costs would be similar to those of municipal landfills (above). Woodwaste landfills average about five acres (with a range of two to 10 or more); pulp and paper landfills are somewhat larger, averaging about 10 acres.

The cost of the financial assurance mechanism depends on which mechanism is chosen. A trust fund requires annual payments so that the fund contains sufficient funds for closure and post-closure care when needed. (See also paragraph 6. below) The costs of providing a corporate guarantee for closure and post-closure care would be simply the costs of assembling the required financial information and certification by an independent CPA. (See also paragraph 5. below) EPA in the prologue to its Subtitle D regulations estimates that the annual cost of various other financial assurance mechanisms is 1 to 2 percent of the full amount required. That is, for closure costs of \$1,000,000, an annual cost for financial assurance would be \$10,000 to \$20,000.

2. Financial assurance for post-closure care. Thirty years of post-closure care are required (unless reduced by the Department). Post-closure care includes such activities as maintaining groundwater monitoring systems, sampling groundwater and maintaining site security. Groundwater monitoring is required for municipal sites, but in many cases is not for non-municipal sites.

Post-closure maintenance costs depend on many factors, including site-specific hydrogeology, size of the site and number of monitoring wells required. Annual monitoring costs may range from \$500 to \$5,000 per well. For a relatively straightforward site, annual post-closure maintenance costs could reach \$10,000. A large, complex site might incur annual maintenance costs of up to \$50,000. At a non-municipal site where no groundwater monitoring is required and there is no erosion, annual post-closure costs might be as little as \$300 (for one day's visual observation).

3. Financial assurance for corrective action. Financial assurance for corrective action will be required only if groundwater quality standards are violated by the facility and the Department requires corrective action (persons responsible for polluting groundwater are in any case responsible for remediation). Groundwater remediation begins with a full characterization of the geochemistry and geology of a site, and may include a pump and treat system that continues indefinitely. Such systems may easily cost \$500,000 a year, and may amount to millions or even tens of millions of dollars per site over time.

4. Preparation of conceptual "worst-case" closure plan and conceptual post-closure plan. Larger non-municipal solid waste land disposal sites might need to hire an engineering firm to prepare closure and post-closure plans. The two plans would likely be prepared together; \$10,000 is a representative cost for that service. A large pulp and paper site might require a synthetic liner; conceptual plans for such a site could run to \$30,000. Plans for small non-municipal sites (such as woodwaste sites with no groundwater monitoring requirement) could be much more modest, prepared in a day's time by a staff engineer at a cost of less than \$500.
5. Third party review. If a permittee elects to provide an "alternative" financial assurance mechanism, the permittee would submit their proposed financial assurance mechanism together with certification by a qualified third party. This certification would be restricted to a determination of whether the financial mechanism met all applicable regulations, not a determination of whether the cost estimates are accurate. The certification would include such things as whether the mechanism met the criteria (e.g. the amount of money needed at any given time in the future would be available when needed under the proposed mechanism). The "qualified third party" might be a certified public account, an attorney, or a licensed bookkeeper (in the case of a smaller facility). The certification might require one or two days' review time by an accounting firm. If the firm charges \$100 an hour, the costs to be borne by a permittee would range from \$800 to \$1600. This type of review is already required by rule for a permittee proposing to use a corporate guarantee as financial assurance.
6. Trust fund pay-in period. Use of a trust fund is one financial assurance option. The permittee would pay into a trust fund, over time, sufficient funds to pay for closure and post-closure care when those activities are scheduled to happen. The Subtitle D regulations require that the payments be made "over the term of the initial permit or over the remaining life" of the landfill unit, "whichever is shorter." The Department issues solid waste permits for five years. Adherence to this pay-in period would result in a severe financial hardship for many permittees, especially if they have short permit periods and a long site life remaining. They would have to complete potentially several million dollars of payments into a trust fund in two or three years. Discussions with EPA Region X staff suggest that the EPA regulation did not take into consideration that some states might issue short-term permits. The Department is proposing to allow a "state-approved trust fund" as an alternative financial assurance mechanism. The Department could approve a pay-in period equal to the active life of the facility, or in any case whenever the funds would be needed for scheduled closure or post-closure activities. This would avoid the adverse consequences of the Subtitle D pay-in period. The financial impact on a permittee would be positive, but would depend on the pertinent cost estimates and remaining active life of the facility.

7. Discount rate. Subtitle D (and Department rule) require cost estimates for closure and post-closure care to be made in "current dollars." Post-closure costs represent a future cash outflow stream covering up to a 30-year period of time. Appropriate financial practices dictate that such future cash flow streams be discounted before they can be stated in terms of current dollars. The proposed rule allows use of a discount rate equal to the current yield of a five-year U.S. Treasury Note (about 6%) for non-municipal solid waste land disposal sites. Use of the discount rate in calculating costs will avoid accumulating an excessive amount of financial assurance. For example, assume a permittee wants to establish a trust fund as financial assurance for post-closure care, making equal semiannual payments starting today. The post-closure care period will start five years from today. Further assume the permittee will incur \$10,000 annual post-closure costs for 30 years until the post-closure obligation ends in the year 2034. Using a zero discount rate the permittee would have to make payments of approximately \$4,412 semiannually. At a 6 percent discount rate it would cost the permittee approximately \$3,011 semiannually.

### **General Public**

There would be no direct effect on the general public. Additional costs of financial assurance would likely be passed on to the public by municipal solid waste landfills, likely as an increase in per-ton disposal fees. Costs charged by one municipal landfill in Oregon for their closure and post-closure sinking fund have ranged from \$.67 to \$5.41/ton. A benefit to the public is that the requirements for financial assurance will help ensure that permittees rather than the public will bear closure, post-closure and corrective action costs for their facilities.

### **Small Business**

Some landfill operators are small businesses. They would incur the costs identified above.

### **Large Business**

Some landfill operators are large businesses. They would incur the costs identified above in the same manner as small businesses. Large businesses are more likely than small businesses to operate larger industrial landfills, so they would more likely be affected by the costs associated with non-municipal land disposal site operation.

### **Local Governments**

Local governments operate both large and small landfills. However, small landfills are more likely to be operated by local governments than by private businesses. Some local governments operate construction and demolition (i.e. non-"municipal" landfills) and as such, would be affected by costs for non-municipal land disposal sites.

## State Agencies

### - DEQ

#### Workload:

The Department will need to devote increased resources to reviewing and approving proposals for "alternative" financial assurance mechanisms. Review of any financial assurance mechanisms selected for this review would require additional resources. It is likely that fewer than ten reviews would take place each year. Some review criteria will be developed. Existing staff (the Agency's Financial Officer) will perform the review. Some non-municipal permittees may request exemptions from financial assurance requirements before the April 9, 1995 date, creating additional work for the DEQ site project officer (engineer, hydrogeologist and/or environmental specialist).

Revenues: No effect on revenues.

Expenses: No additional expenses (except of diverting some existing staff effort from other activities to the above-mentioned reviews).

### - Other Agencies

The Department of Justice would be asked to determine legal sufficiency of any new legal documents developed for proposed "alternative" financial assurance mechanisms. This could require several hours per instrument, and would be handled with existing staff.

Other agencies would not be directly affected. No state agency holds a solid waste disposal permit.

fiscimp.fa



**ATTACHMENT B-5**

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

Rulemaking Proposal  
for  
Solid Waste Land Disposal Sites: Criteria for  
Financial Assurance for Closure and Post-Closure Care

**Land Use Evaluation Statement**

**1. Explain the purpose of the proposed rules.**

This rule implements changes required by 1993 Senate Bill 1012 in the provision of financial assurance for closure, post-closure care and corrective action (if needed) for solid waste land disposal sites. SB 1012 requires that financial assurance be provided "up front" rather than five years before anticipated closure, as was the case under previous state law. The rule establishes procedures and criteria for the provision of financial assurance.

**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 X

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.**

Issuing new solid waste land disposal site permits and renewal of solid waste permits when there is a significant change the site are considered programs affecting land use in the DEQ State Agency Coordination Program. Issuing solid waste land disposal site closure permits (with detailed plans on how the site will be closed and how post-closure maintenance will be carried out) is not considered to be a program affecting land use under the Coordination Program.

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.**

Deanne Mueller-Cezjia  
Division \_\_\_\_\_ Intergovernmental Coord. \_\_\_\_\_ Date \_\_\_\_\_

landuse.fa

## ATTACHMENT B-6

### **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?*

40 CFR Parts 257 and 258, Solid Waste Disposal Facility Criteria ("Subtitle D")  
-- apply to municipal solid waste landfills.

40 CFR Part 257 also applies to non-municipal land disposal facilities, but contains no regulations for financial assurance, or for closure or post-closure plans.

2. *Are the applicable federal requirements performance based, technology based, or both with the most stringent controlling?*

The federal requirements are for a detailed written estimate of the cost of closure, post-closure care and corrective action, if required, for municipal solid waste landfills, and a demonstration that financial assurance based on those costs is available. Several allowable financial assurance mechanisms are listed, with an additional "performance-based" option: other financial assurance mechanisms may satisfy the requirement if they meet certain criteria in 40 CFR §258.74, and are approved by the Director of an "approved State", which Oregon is.

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?*

The federal financial assurance rules are similar to existing Oregon rules. A main difference was that federal financial assurance for closure and post-closure care is required at the time a new municipal solid waste landfill permit is issued. Until the 1993 change in Oregon legislation (SB 1012, in response to federal Subtitle D requirements), financial assurance for closure of land disposal sites

was required five years before anticipated closure of the site. DEQ requested additional authorities from the 1993 Legislature in order to be able to fully implement the Subtitle D regulations and become an EPA-"approved state". ("Approved state" status brings a state considerable flexibility in implementing the Subtitle D regulations.) Among the necessary changes in state law were authority to require corrective action, authority to require financial assurance for corrective action, a requirement for a permittee to present financial assurance for closure and post-closure care "up front," and to update financial assurance annually. The proposed rule implements these new requirements for municipal solid waste landfills.

The Department did not identify any issues of specific concern to Oregon related to the financial assurance part of the federal rule development.

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 rules will clarify how municipal solid waste landfill permittees are to comply with both federal and state regulations on financial assurance (and preparation of closure and post-closure plans), avoiding duplication of effort as much as possible.

5. *Is there a timing issue which might justify changing the time frame for implementation of federal requirements?*

Not applicable for municipal facilities; federal timing was more stringent than state.

There are no federal financial assurance requirements for non-municipal facilities; Oregon has had state requirements for financial assurance applicable to all "land disposal sites" since 1984. In establishing these requirements, the Legislature recognized that non-municipal sites as well as municipal sites incur costs of closure and, often, post-closure care. If the permittee is not required to make provision for such costs, costs of closure and post-closure care may fall back on the public. The Environmental Protection Agency is expected to develop more detailed criteria for non-municipal solid waste disposal sites in the future. These regulations may include requirements for financial assurance.

6. *Will the proposed requirement assist in establishing and maintaining a reasonable margin for accommodation of uncertainty and future growth?*

The requirement to update cost estimates and financial assurance annually provides for future expansion of the facility (and associated costs) that might occur in the future.

7. *Does the proposed requirement establish or maintain reasonable equity in the requirements for various sources? (level the playing field)*

All permittees in any category are treated the same. Federal regulations do not allow exemptions from financial assurance for municipal facilities. State law and the proposed rule continue to allow exemptions for non-municipal facilities if they meet exemption criteria.

8. *Would others face increased costs if a more stringent rule is not enacted?*

As noted above, if a landfill permittee does not provide sufficient funds for closure of the facility, post-closure care and corrective action (if needed), the public will likely have to pick up the costs for those activities.

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?*

Yes. For municipal facilities:

- o Permittees are required to use wording of financial assurance mechanisms specified by the Department. (Subtitle D: mechanisms must meet specific requirements, but exact wording is not required.) Requiring specific wording simplifies provision of financial assurance for the permittee, the financial institution issuing the mechanism, and for the Department. This is analogous to federal requirements for financial assurance for hazardous waste disposal sites.
- o The initial financial assurance instrument must be submitted to the Department. (Subtitle D: It must be placed in the facility operating record and the state Director notified of that action.) The Department believes that it must retain some responsibility for ensuring that the financial assurance mechanism has been prepared.
- o The permittee must notify the Department annually that the cost estimates of closure and post-closure care have been reviewed, and the financial assurance mechanism updated accordingly. (Subtitle D: the Director must be notified only if the amount of financial

assurance is reduced.) This is a part of the Department's continuing responsibility for ensuring that financial assurance is available in the appropriate amount.

- o A permittee may elect to propose an "alternative" financial assurance mechanism, rather than use one of the standard forms specified in the rule. A permittee must also submit a certification from a qualified third party that the alternative mechanism meets all state and federal requirements. Alternative mechanisms are subject to Department review and approval. (Subtitle D: an "alternative" [or "state-approved"] financial mechanism is subject to Department approval, but not third-party certification.) The Department believes that due diligence requires qualified third party review.
- o The Department requires Final Engineered Plans for closure and post-closure, in addition to plans required by Subtitle D. These plans are prepared five years before anticipated site closure, and are subject to Department approval. Such plans have been required since 1984, and are part of the Department's responsibility to ensure proper landfill closure and post-closure care for protection of groundwater and the environment.

Yes, for non-municipal facilities.

Requirements are similar to those for municipal facilities. Rationale is also the same.

*10. Is demonstrated technology available to comply with the proposed requirement?*

Not applicable.

*11. Will the proposed requirement contribute to the prevention of pollution or address a potential problem and represent a more cost effective environmental gain?*

An increased level of Department scrutiny in monitoring facility closure, post-closure and corrective action activities will correspondingly contribute to the prevention of pollution. Again, ensuring that permittees have available funds for those activities will preclude the public having to finance them.

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Attachment C

State of Oregon  
Department of Environmental Quality

Memorandum

Date: 10-5-94

**To:** Environmental Quality Commission

**From:** Joan Grimm, Solid Waste Policy and Programs

**Subject:** Presiding Officer's Report for Rulemaking Hearing  
Hearing Date and Time: 10/5/94, beginning at 2 p.m.  
Hearing Location: Conference Room 3A, DEQ  
Headquarters, Portland, Oregon

Title of Proposal: Criteria for Financial Assurance for Closure and Post  
Closure Care

The rulemaking hearing on the above titled proposal was convened at 2 p.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 people were in attendance, two people signed up to give testimony.

People were then called to testify in the order of receipt of witness registration forms and presented testimony as noted below.

**Bert Cathery: Representing Cascade Pacific Engineering**

Noted that he had recently completed a closure (post closure) plan for Short Mountain Landfill in Lane County. He ran into problems trying to complete the plan because of the lack of definition of "final cover." In trying to estimate a cost for the final cover, he started with a 24" layer of topsoil (in most states it is 18"), then there is a drainage layer 12" of gravel which is very expensive, a flexible membrane liner (FML) under the drainage layer, and finally on top of the waste, 24" of packed clay. In all, these closure costs amount to more than 7 million dollars. This is for 64 acres, using the DRAFT requirements. The only requirement in OAR 340-94 at the moment is for 3' of packed

Memo To: Environmental Quality Commission  
October 5, 1994  
Presiding Officer's Report on  
October 5, 1994 Rulemaking Hearing  
Page 2

clay. According to the federal rules, if there is an FML in the liner, there has to be one in the cover. That is very important to the cost estimates, and needs clarification.

Supports preparation of a conceptual plan; a final plan is very expensive, almost as expensive as preparing an application for a permit. Regarding estimating costs for costs for the worst possible scenario in closing the landfill--there should be a clause allowing the cost estimate to be reduced if there are changes in the landfill operation that would lower those costs. For example, at the moment Short Mountain has 64 acres ("worst case" scenario) to be closed. These will be closing as they go, as permitted elevations are reached, and those 64 acres will be reduced by 75%. They should be able to reduce the amount of financial assurance by 75%.

Norman Carr: Representing Selective Settlements International

Landfill owners and operators want to select the most appropriate and cost effective funding mechanism. Several acceptable funding mechanisms are listed in this regulation, including an insurance policy that provides the necessary funds when required for closure and post closure liabilities. It is not very descriptive. Most owners and operators are likely unaware that insurance policies do indeed exist for this, but calling these simply an insurance policy is somewhat of a misnomer. They should be referred to as an "environmental structured settlement," or a "funding agreement contract." These are essentially a spin-off from the traditional structured settlement device used historically in the personal injury litigation arena and restructured to respond to long-term environmental liabilities. It is very important to get the word out to people who could use this device. There are a lot of municipalities that will have extreme difficulty in responding to these new fiscal requirements. It might affect their capacity to borrow. This might a solution for them to consider. The rules should indicate that the above instrument is an option, rather than just stating an insurance policy is acceptable.

No one handed in written comments who did not present oral testimony.

There was no further testimony and the hearing was closed at 2:40 p.m.

Attachments:        Written Testimony Submitted for the Record.

eqc



State of Oregon  
Department of Environmental Quality

Memorandum

Date: October 7, 1994

**To:** Environmental Quality Commission  
**From:** Wayne C. Thomas, P.G., Hearings Officer  
**Subject:** Hearings Officer Report  
Proposed Financial Assurance Rules  
The Dalles, Oregon

On October 5, 1994, I conducted a Public Hearing for proposed rules to establish criteria and procedures for the provision of financial assurance for closure, post-closure care and corrective action by permittees of solid waste disposal sites, as stipulated in OAR 340-93 through 97. The hearing was held at 10:00 in the Northern Wasco PUD office, 401 Court Street, The Dalles, Oregon.

There were four members of the public present at the hearing. The original attendance list is attached. The attendees were:

1. Jim Tarr, Sanifill, The Dalles
2. Judith Henley, Sanifill, Inc., 300 Drakes Landing Suite #155, Greenbrae, CA 94904  
(Please add to DEQ Mailing list)
3. Gary Rahn, Rt.1 Box 79, Athena, Oregon 97813
4. Colleen Rahn (as above)

Prior to the hearing I asked the attendees if they intended to present testimony but they unanimously stated that they did not have testimony, instead they wanted to ask questions concerning the proposed action and Subtitle D in general. I closed the hearing and we proceeded to have an informal discussion regarding a variety of topics. The meeting adjourned at 11:30.

Attachment  
WCT:94072

Date: October 5, 1994

To: Environmental Quality Commission

From: *Donald L. Bramhall*  
Donald L. Bramhall

Subject: Presiding Officer's Report for Rulemaking Hearing

Hearing Date and Time: October 4, 1994  
beginning at 10 AM

Hearing Location: Department of  
Transportation  
Conference Room, Bend,  
Oregon

Title of Proposal: Solid Waste Rule Amendments:  
Criteria for Financial Assurance  
for Closure and Post-Closure Care

The rulemaking hearing on the above titled proposal was convened at 10 AM.

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, no one signed up to give testimony. I informally discussed the rulemaking proposal with the attendees, and we discussed other solid waste issues of interest to them. I also explained that written testimony would be received by the Department through October 12, 1994.

There was no testimony and the hearing was closed at 1:30 PM.

Attachments:

Sign-In Sheet.

State of Oregon  
Department of Environmental Quality

Memorandum

Date: 10 October 1994

To: Environmental Quality Commission

From: Charles A. Hensley

Subject: Presiding Officer's Report for Rulemaking Hearing  
Hearing Date and Time: 6 October, beginning at 6:30 PM  
Hearing Location: Jackson County Courthouse Auditorium,  
Medford, Oregon

Title of Proposal: Solid Waste Disposal Site Financial Assurance  
Requirements

The rulemaking hearing on the above titled proposal was convened at 6:30 PM. Witness registration forms were available for an attendance list and for those wishing to present testimony.

0 people were in attendance, 0 people signed up to give testimony.

No written comments were handed in.

There was no testimony and the hearing was closed at 7:00 PM.

State of Oregon  
Department of Environmental Quality

Memorandum

Date: 10/13/94

To: Environmental Quality Commission

From: Bob Barrows

Subject: Presiding Officer's Report for Rulemaking Hearing

Hearing Date and Time: October 6, 1994, beginning at 7 pm

Hearing Location: DEQ Offices  
1102 Lincoln St., Suite 210  
Eugene, OR

Title of Proposal: Solid Waste Rule Amendments: Criteria for Financial Assurance for Closure and Post-Closure Care

The rulemaking hearing on the above titled proposal was convened at --not convened because no one attended the hearing --. 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.

0 people were in attendance, 0 people signed up to give testimony.

Prior to receiving testimony, --not applicable-- 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.

----Not applicable.----

The following people handed in written comments but did not present oral testimony:

---Not applicable.---

There was no further testimony and the hearing was closed at -- I closed the doors to the building at 7:30 pm.--

Attachments:

Written Testimony Submitted for the Record. ---None---

## Attachment D

### INDEX OF ORAL AND WRITTEN COMMENTS RECEIVED DURING PUBLIC REVIEW

#### Solid Waste Financial Assurance Rules

A summary of all oral and written comments received on the Proposed Rules is contained in Attachment E, together with Department responses. The following persons gave oral comments on the Proposed Rules:

1. Bert Cathery, Cascade Pacific Engineering, 8365 S.W. Ridgeway Drive, Portland, OR 97225.
2. Norman D. Carr, Selective Settlements International, 4411 N.E. Tillamook, Portland, OR 97213.

The following persons submitted written comments on the Proposed Rules:

2. Norman D. Carr, Selective Settlements International, 4411 N.E. Tillamook, Portland, OR 97213. October 5, 1994.
3. Mark E. Leary, Manager, Regulatory Affairs, Browning-Ferris Industries, Western Region, 915 L Street, Suite 1140, Sacramento, CA 95814. October 1, 1994.
4. Dave Leonard, P.E., Director of Public Works, Public Works Department, Douglas County, 1036 S.E. Douglas, Room 219, Roseburg, OR 97470. October 7, 1994.
5. Doug Coenen, Division President and General Manager, Oregon Waste Systems, Inc., Columbia Ridge Landfill & Recycling Center, 18177 Cedar Springs Lane, Arlington, OR 97812. October 10, 1994.
6. Al Driver, Transportation and Solid Waste Director, Deschutes County Department of Public Works, 61150 S.E. 27th St., Bend, OR 97702.

The following persons submitted additional written comments after the close of the public comment period:

Norman D. Carr, Selective Settlements International, 4411 N.E. Tillamook, Portland, OR 97213. October 14, 1994 and November 3, 1994.

Mark Leary, Manager, Regulatory Affairs, Browning-Ferris Industries, Western Region, 915 L Street, Suite 1140, Sacramento, CA 95814. October 31, 1994.

Attachment E

State of Oregon  
Department of Environmental Quality

Memorandum

Date: October 26, 1994

**To:** Environmental Quality Commission

**From:** E. Patricia Vernon, Manager, Solid Waste Policy and Programs Section

**Subject:** Summary and Evaluation of Public Comments and Response to Comments,  
Solid Waste Financial Assurance Rule Adoption

Public hearings were held on the Proposed Rules on October 4, 5 and 6, 1994 in Portland, Bend, The Dalles, Eugene and Medford. A total of 12 people attended the hearings. Two persons gave oral testimony. Six written comments were received by the Department (including one submitted by a person testifying orally). One additional written comment was received after the end of the comment period. Below is a summary of the comments received and the Department's responses. The numbers in brackets refer to the list in Attachment D.

Comment 1: DEQ Rulemaking Process

COMMENT: [Comments received from #4] DEQ's rulemaking process is philosophically troublesome. The agency solicits comments from affected parties and then interprets those comments for the governing board (EQC). How can affected entities be assured that their concerns are clearly interpreted and objectively presented?

RESPONSE: Staff makes every effort to accurately represent comments received. In addition, copies of all written comments received by DEQ are forwarded to the EQC together with the staff report, as well as being summarized in that report.

Comment 2: Stringency

COMMENT: [Comments received from #4] Oregon rules are often more stringent than Federal law. Few or none of those "more stringent" provisions serve the public interest. Each such provision should be reexamined objectively.

RESPONSE: The following are major areas that were identified as more stringent

than federal requirements in the August 29, 1994 Memo to Interested and Affected Public on this rulemaking:

- a. Financial assurance for non-municipal land disposal sites (for closure, post-closure care, and corrective action). This is required by Oregon statute, and thus cannot be changed by rule. Statute and rule both allow exemptions if the site is not likely to cause environmental problems.
- b. Financial assurance for corrective action is tied to state groundwater protection standards, which are in some cases more stringent than federal requirements. This rulemaking is not the appropriate forum for proposing changes to the state groundwater protection standards.
- c. Requirement for engineered site closure plans requiring Department approval. This has been a part of Oregon solid waste rules since 1984, and is considered by the Department to be a necessary part of its oversight in assuring environmentally sound site closure.
- d. Requirement for certification by a qualified third party of any proposed "alternative" financial assurance mechanism. Alternative financial assurance mechanisms are allowed, but all such mechanisms must be approved by the Director of DEQ. Such "state-approved" alternative mechanisms are allowed but not required by federal regulations for municipal solid waste landfills. Allowing alternative mechanisms is an advantage for permittees who may find it difficult to provide any of the specific mechanisms permitted outright by federal requirements. Third-party certification will facilitate the Department's review by limited staff available for this purpose.

The proposed rules were not changed in response to this comment.

Comment 3: Trust fund pay-in period (OAR 340-94-145(5)(g))

COMMENT: [Comments received from #5] Expressed concern that rules allow a trust fund to be built up (fully funded) over the entire projected life of the site. This means that adequate funds would not be available for both closure and post-closure care if for some unexpected reason the site had to close prior to the forecasted site life. There are other forms of financial assurance available, but some permittees may choose not to select those mechanisms either because they do not meet financial

standards required by the financing institution, or because the options appear too expensive. Such permittees may have marginal financial wherewithal and may represent the highest risk. Allowing the pay-in approach cited above could have the effect of encouraging inadequately financed permittees to postpone recognition of their true liabilities. This is counter to the intent of the rule.

If DEQ believes the "pay-in" approach is acceptable, the same standard should be applied to other mechanisms such as surety bonds. The required bond amount in any given year would be the same as the amount required to be in a trust fund in that year, and would similarly increase year-to-year. This would minimize a built-in financial advantage to those using a trust fund.

RESPONSE: A trust fund is different from other financial assurance mechanisms in that it provides actual cash to be used for its stated purposes. DEQ's financial assurance rule closely parallels the federal Subtitle D rule, which specifically allows a pay-in period for trust funds. Federal regulations do not allow "phasing in" for the amount required for other types of financial assurance, as the commenter suggests. In every case, the financial assurance plan for a facility must be designed to fit the individual case; the maximum amount required (e.g. for a "worst-case" closure scenario) will change over time. This could allow eventual reduction of the maximum amount to be covered by whatever mechanism is chosen. (See Comment 20) The proposed rules were not changed in response to this comment.

Comment 4: "Worst-Case" Closure Performance Standard (OAR 340-94-100 and 34-95-050)

COMMENT: [Comments received from #5] The sections dealing with "worst-case" closure plans require a forecast of the largest open (i.e. unclosed) area that will exist over the site life. Language should be added that explicitly forbids a permittee from expanding the "unclosed" portion of the landfill to an area larger than that represented by the worst-case closure area.

RESPONSE: The Department believes that this situation is self-governing and does not require a separate rule provision. If a permittee did exceed its forecast of the largest open area, without including that additional cost in the annual update to its financial assurance plan and mechanism, that permittee would be in violation of Department rule. Subtitle D for municipal solid waste landfills explicitly requires that any time landfill conditions change to increase the maximum cost of closure (such as



having a larger open area than forecast), the owner/operator must increase the corresponding amount of financial assurance. The proposed rules were not changed in response to this comment.

**Comment 5: Discount Rate (OAR 340-94-140 and 340-95-90)**

**COMMENT:** [Comments received from #4] DEQ has proposed a discount rate (to be used in the annual closure/post-closure cost update) equal to the current yield of a five-year U.S. Treasury Note. This is too liberal to be an accurate indicator. Few agencies consistently match its performance. Most public agencies in Oregon are limited by statute to short-term (less than two years) investments. Most public agencies invest their funds in the Local Government Investment Pool (LGIP) administered by the State Treasurer. An index based on the LGIP average rate would be more accurate because of the large number of regulated agencies using this investment mechanism.

**RESPONSE:** The comment is well taken that a less than two-year investment timeframe may more accurately reflect reality for public agencies. While many solid waste disposal facilities are operated by public entities, others are run by private industry which has a different investment framework. In the course of developing this rule, the Department received various recommendations for discount rates, ranging from this one for two years to the 30-year U.S. Treasury Bond rate. The Department agrees that using a discount rate based on the yield of a five-year U.S. Treasury Note (in the Proposed Rule) may be relatively liberal. However the Department believes that the five-year perspective is a reasonable and defensible middle ground. In addition it corresponds to the five-year timeframe for which solid waste permits are issued. While it would be possible to establish different discount rates for public and private permittees, the Department believes it would be more equitable to use the same discount rate for all permittees. Therefore the proposed rules were not changed in response to this comment.

**Comment 6: DEQ Access to Permitted Sites (OAR 340-93-050(5)(e))**

**COMMENT:** [Comments received from #4] A representative of the site operator should be allowed or required to accompany any visit to a permitted site by a DEQ inspector. This would offer an opportunity for the owner's representative to provide sufficient firsthand information to satisfy the inspector's concerns, and avoid

misunderstandings leading to the operator having to expend substantial effort to respond. Access for inspection of a site should be regulatorily similar to Oregon OSHA.

RESPONSE: The proposed rule would add access to *records* to current rule language concerning site access and inspection, as authorized by 1993 legislation. The rule follows statutory language, allowing site access "at reasonable times to determine compliance with and to enforce" solid waste statutes. OSHA Administrative Rules require an OSHA Compliance Officer to conduct a joint opening conference, if possible, with the employer or a representative, to explain the nature of the inspection and request records to be examined, among other procedures. A closing conference is also held. OSHA regulations also state that no inspection will be made if no one is present, except under special conditions. These OSHA procedures go beyond DEQ statutory requirements.

In order to locate site records for inspection, the Department inspector would have to speak with a representative of the permittee. The Department has no policy that prevents an owner/operator from accompanying a DEQ inspector on a site visit. Therefore the Department believes that a change in rule language is unnecessary.

Comment 7: Jury of Professionals to Arbitrate Differences of Opinion (OAR 340-94-115(3)(d)(B))

COMMENT: [Comments received from #4] [The comment specifically refers to the part of the rule dealing with a request to amend a post-closure plan to extend or reduce the post-closure care period. The rule includes a demonstration "to the satisfaction of the Department" of certain criteria in order for the plan amendment to be approved. There are also other places in the rule requiring such a demonstration.] That DEQ should be both the maker and interpreter of rules is logically unsound, and leaves the permittee in a vulnerable position to be manipulated by DEQ. Suggest that a jury of professionals should be used to arbitrate differences of opinion between DEQ and permittees. This would provide a more objective method of satisfying the intent of the rules, and be more cost- and time-effective.

RESPONSE: The Department has a broad charge to protect public health and the environment. A significant part of its responsibility is to exercise professional judgment in approving engineering plans and designs which meet the general performance standards set by Department rule. The statute (ORS 459.270(3))

specifically states that a permittee may apply for termination of a permit after a disposal site is closed; but further states that "Before the Department grants a termination or release..., **the Department must find** that there is no longer a need for active supervision of the site [etc]..." [emphasis added] Submitting differences of opinion between the Department and permittees for arbitration to a jury of professionals could absorb significant time and financial resources. But more importantly, it would be contrary to statute and an abdication of the Department's responsibility. Therefore the proposed rules were not changed in response to this comment.

Comment 8: Landfill Closure Cutoff Date (OAR 340-94-120(4))

COMMENT: [Comments received from #4] [The comment refers to the section of the rule requiring written approval from the Department of the closure of a landfill.] This provision is overly broad; there are many landfills that have closed in the last hundred years. This provision leaves a local government vulnerable to hidden or unknown liabilities. There should be an exemption for landfills closed prior to a specific point in time, e.g. 1975, 1980, etc.

RESPONSE: In 1983 the Department was given explicit statutory authority to regulate closed landfills; at that time DEQ was also allowed to require closure permits for any landfills closing after January 1, 1980. The rule in question (340-94-120) is meant to apply to landfills that are under permit, not those that may have closed at some time in the distant past. To clarify regulatory intent, the Department is adding the January 1, 1980 date to this rule and to the corresponding rule for non-municipal land disposal sites (OAR 340-95-070).

Comment 9: Disposal of Excess Monies (in Financial Assurance Mechanism) (OAR 340-94-140(4)(e) and 340-94-140(8)(b) and (e))

COMMENT: [Comments received from #4] [The comment refers to the sections of the rule which states that the financial assurance plan must contain a proposal with provisions satisfactory to the Department for disposing of any excess monies received for financial assurance, and not use the funds for any purpose other than specified in the financial assurance plan. The rule also establishes how any such excess monies shall be used, e.g. to reduce rates for solid waste collection services.] This provision should not apply to counties that use general, unrestricted revenue to fund landfill

operation, development and closure. When such a county completes post-closure requirements, any established funds should be released to the county to be appropriated in any manner the local budget law permits. DEQ's role should not be to dictate use of these funds. Moreover, this provision appears to violate local budget and appropriation laws.

RESPONSE: The language in OAR 340-94-140(4)(e)(A) is taken directly from statute (ORS 459.273). This requires an applicant to "establish provisions satisfactory to the department for disposing of any excess moneys received or interest earned on moneys received for financial assurance." The statute further establishes two areas for which excess funds are to be used "to the extent practicable." The Attorney General's Office has informed DEQ that they do not see a conflict between the rule and any local requirements.

The proposed rules were not changed in response to this comment.

Comment 10: Department Determination that Additional Funding (for Financial Assurance) is Required

COMMENT: [Comments received from #4] The proposed rules allow DEQ to determine that closure and post-closure plans are not conservative enough, and to require additional funding. There is no protection to preclude DEQ from being overly conservative in requiring accumulation of funds and then mandating the extra funds be used for activities that the local government may not need or want. The permittee has no mechanism to appeal DEQ's actions. This is not the role DEQ should be assuming. This is another area in which a jury of professionals could be used. (The commenter clarified by phone on 10/21/94 that the reference was to the annual update requirement in OAR 340-94-140(6)(d). This requires a permittee to submit an annual certification to the Department that the "annual update" for closure and post-closure cost estimates has been completed, and that the financial assurance mechanism has been adjusted accordingly. The annual submittal to DEQ implies that DEQ could deem the amount of funds to be insufficient.)

RESPONSE: Permittees are required by law to "demonstrate evidence of financial assurance" and to "annually review and update the financial assurance" for closure and post-closure care. ORS 459.272(1) and (3). As the law does not specify how this is to be done, the rules spell out how this is to be "demonstrated." Namely, the permittee is to adjust cost estimates for inflation, and any changes in facility

operations which affect the cost of closure or post-closure care; and adjust the amount of financial assurance accordingly. The permittee is then to certify that this has been done, and place the certification in the facility operating record as well as submit the certification to the Department. This is an **information** requirement, not an **approval** requirement. This provision was supported by the Department's Work Group. See Comment 9 above for discussion of the statutory requirement for disposition of excess financial assurance funds. The proposed rules were not changed in response to this comment.

Comment 11: Audits (OAR 340-94-140(8)(c))

COMMENT: [Comments received from #4] [Comment refers to stipulation that the permittee is subject to audit by the Department or the Secretary of State in order to determine compliance with financial assurance requirements.] Counties are required to have detailed annual audits by qualified CPAs, performed under the supervision of the Secretary of State. This provision should specify that such audits are sufficient, and that additional audits to satisfy the solid waste rules would be required only in the event of fraud, etc.

RESPONSE: The Secretary of State's Office has administrative rules which must be followed by cities and counties in performing an annual audit. These are submitted to the Secretary of State's Office, and are chosen randomly for additional checking. The DEQ rule provision allowing audits is not a change from existing rule. This audit provision is limited in scope, applying only to compliance with financial assurance requirements. It should not be duplicative of the audit performed under the Secretary of State's rules. The Department believes it needs to retain the ability to require an audit as part of its overall responsibility for assuring proper closure and post-closure procedures. The proposed rules were not changed in response to this comment.

Comment 12: Department as Beneficiary (OAR 340-94-145(2))

COMMENT: [Comments received from #4] The provision that the Department or a party approved by the Department shall be a beneficiary of the financial assurance is unnecessary, unwise and the intent is unclear. At most, DEQ should enjoy joint custody of the funds, and then only when proposed for expenditure on items not listed in the approved closure or post-closure plans.

**RESPONSE:** The Department was advised by its financial advisor and by the Attorney General's Office that DEQ or its designate should be named beneficiary of financial assurance mechanisms. This requirement protects the integrity of the funding mechanism by allowing the Department to have access to the funds if an owner/operator disappears. The Work Group on Financial Assurance agreed with this provision. (Note: a permittee is not allowed to make expenditures on items not identified in the closure or post-closure plans.) The Department is not proposing a change to the rule in response to this comment.

**Comment 13: Expenditure of Trust Funds (OAR 340-94-145(5)(a))**

**COMMENT:** [Comments received from #4] The provision that the permittee notify the Department in writing before any expenditure of trust fund moneys is made is unnecessarily burdensome, and should be changed to specify that the permittee shall notify the Department in writing only before expenditures for activities other than those identified in the adopted closure or post-closure plan.

**RESPONSE:** The Rulemaking Proposal contained a change from existing rule which is designed to make expenditures from a trust fund less burdensome. Namely, the Department would have 30 days (rather than 60) to respond to a notice of proposed expenditure; if no response is made within that time, the permittee could proceed with the expenditure. This gives the Department an opportunity to review the appropriateness of expenditures. This provision was supported by the Department's Work Group. See also Response to Comment 12 for note on allowable expenditures. No change is proposed in the rule.

**Comment 14: Surety Bonds Guaranteeing Payment (OAR 340-94-145(5)(b))**

**COMMENT:** [Comments received from #4] These bonds are probably not available, and if available in the future, the cost will likely be exorbitant.

**RESPONSE:** Surety bonds are an allowable mechanism should they be available and a permittee wish to use them.

**Comment 15: Disallow Use of Corporate Guarantee (OAR 340-94-145(5)(f))**

COMMENT: [Comments received from #4] Public exposure [to future financial liabilities] through mismanagement, misappropriation or malfeasance may be high from privately operated facilities. The corporate guarantee should not be allowed as a financial assurance mechanism. It leaves the public vulnerable to financial reverses, bankruptcy, mismanagement, etc. by publicly or privately owned businesses. They should be required to use the same mechanisms as public agencies.

RESPONSE: A corporate guarantee is an allowable mechanism under the Environmental Protection Agency's Hazardous Waste Program (Subtitle C), on which the Department's financial assurance mechanisms were originally modelled. The Department believes that the various financial tests comprising the "corporate guarantee" provide sufficient security to protect the public interest. The proposed rules were not changed in response to this comment.

Comment 16: Use of Bond Rating for Corporate Guarantee (OAR 340-94-145(5)(f))

COMMENT: [Comments received from #3] The Department proposed modifying the corporate guarantee test to rely, partially, on Altman's Z-Score and Beaver's Ratio. Bond ratings are a frequently used and reliable indicator of the financial strength of corporate entities. There is a strong historic correlation between corporate defaults and previous downgrades of bond ratings. Bond ratings are simple to determine and easy to verify (unlike Altman's or Beaver's). The use of the latter would likely increase costs of compliance in developing the multiple "alternative ratios." A bond rating can be used for both a local government and corporate financial test; entities with highly rated bonds are quite unlikely to encounter short-term financial distress. We believe it is appropriate to use a bond ratings-based approach.

RESPONSE: A bond rating usually applies to a specific security, not to the corporation itself; bond ratings are used to establish *price*. A bond rating in itself does not give a complete financial picture of the corporation (e.g. how much senior or junior debt there is). While a bond rating may give a reasonably good indication of a corporation's long-term viability, it does not measure the corporation's liquidity. If funds are needed for an unanticipated current problem, liquidity is a greater concern. If a bond rating basis is used, it is difficult to decide where to draw the line between acceptable and unacceptable ratings, and the permittee can use the basic, current financial test (assets, vs. assets, current and debt:equity ratios) without invoking Beaver or Altman, both of which are incorporated in EPA's ABEL (Ability to Pay)

model. The Department believes that the Altman's Z-Score and Beaver's Ratio are not unduly complicated; they use quite standard formulas. From the point of view of demonstrating capability to provide financial assurance, they have the advantage of being less weighted to equity and more to cash flow, giving a better picture of the company. The proposed rules were not changed in response to this comment.

**Comment 17: Account with the LGIP (OAR 340-94-145(5))**

**COMMENT:** [Comments received from #4] The Department should consider adding another financial assurance mechanism for local governments. They should be allowed to establish an account with the State of Oregon Local Government Investment Pool (LGIP) under the joint custody of DEQ and the permittee. The LGIP is widely used by government agencies, is effectively administered, and less onerous than use of performance bonding.

**RESPONSE:** Use of the LGIP may offer advantages to local governments as a means of providing financial assurance, and the Department would encourage interested permittees to explore this option. The Department has contacted Oregon State Treasury officials about use of assets in the LGIP for financial assurance. They identified some unresolved questions as to how this might work in practice, including some legal issues. Under current rule a local government permittee could propose use of this use of the LGIP as an "alternative" financial assurance mechanism. The Department will be very willing to work with a permittee who proposes this. But because of the unresolved issues, the Department does not recommend changing the proposed rules to establish use of the LGIP as an outright approved mechanism.

**Comment 18: Local Government Financial Test**

**COMMENT:** [Comments received from #6] Our major concern is that the proposed rule does not include the "Local Government Financial Test" from 40 CFR Part 258, Subsection 258.74(f) ("Subtitle D"), as an allowable mechanism. It was our understanding that DEQ would adopt this to conform to EPA's rule. We have based our financial assurance plan on the criteria in that document.

**RESPONSE:** The Subtitle D Local Government Financial Test referred to was included in a proposed rule issued by the Environmental Protection Agency (EPA) on December 17, 1993. As of this date, EPA has not issued a final rule on this issue.



The Department cannot adopt a federal rule before it is finally promulgated. When EPA issues its final rule, the Department will consider adopting it by reference. In the meanwhile, a local government wishing to use the proposed Subtitle D Local Government Financial Test as a financial assurance mechanism may so propose to DEQ as an alternative form of financial assurance under OAR 340-94-145(5)(g). The proposed rules were not changed in response to this comment.

Comment 19: Definition of "Final Cover" (OAR 340-94-120(2))

COMMENT: [Comments received from #1] There is no definition of "final cover" in the rule. The DEQ rules specify one thing (three feet of compacted soil) while federal requirements are different. This is very important to estimating closure costs, and should be clarified.

RESPONSE: The rule as written is not incompatible with federal rules, and allows a Subtitle D-equivalent final cover. The determination of final cover is always made on a case-by-case basis. The Department believes that in some cases three feet of compacted soil (as required by current rule) are necessary. The question of final cover is technical and complicated. The Department believes it may be desirable to reconsider the "final cover" rule, but in the context of a separate rulemaking dealing with such matters. That would allow any Department proposal to be reviewed and commented on by the regulated community, rather than trying to formulate a quick fix now without the benefit of wider review. The proposed rules were not changed in response to this comment.

Comment 20: Reduction of Cost Estimates (OAR 340-94-140(6)(d)(B) and 340-95-090(6)(d)(B))

COMMENT: [Comments received from #1] A permittee should be able to reduce estimates of landfill closure as changing circumstances at the facility (e.g. filling cells) reduce the maximum financial exposure of the permittee.

RESPONSE: Subtitle D allows this. The Department agrees with the comment, and is changing the proposed rules for municipal and non-municipal landfills to reflect that.

Memo To: Environmental Quality Commission  
October 26, 1994  
Page 13

**Comment 21: Environmental Structured Settlements (OAR 340-94-145(5)(e))**

**COMMENT:** [Comments received from #2] The "insurance policy" financial assurance mechanism is not very descriptive. It should be referred to as an "environmental structured settlement" or a "funding agreement contract." Such mechanisms are a development from the traditional structured settlement device used historically in the personal injury litigation arena and restructured to respond to long-term environmental liabilities. The rule should clarify that such an instrument is an option, rather than just referring to an "insurance policy."

**RESPONSE:** The Department has not received sufficient information to include this option outright as an approved financial assurance mechanism. However, a permittee could propose use of an "environmental structured settlement" as an alternative mechanism. The Department is prepared to consider the merits of such a mechanism. The proposed rules were not changed in response to this comment.

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## Attachment F

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY

### Rulemaking Proposal for Criteria for Financial Assurance for Closure and Post-Closure Care

## Rule Implementation Plan

### Summary of the Proposed Rule

The proposed rule would establish criteria and procedures for provision of financial assurance for closure, post-closure care and corrective action by permittees of solid waste land disposal sites. It would also require permittees to prepare two kinds of closure and post-closure plans. It affects all permittees of solid waste land disposal sites. Permittees of non-municipal land disposal sites and of municipal solid waste landfills not subject to the federal "Subtitle D" regulations may be exempted from the financial assurance requirement if they meet certain criteria.

### Proposed Effective Date of the Rule

Upon filing. However the existing rule itself contains specific dates by which certain actions must take place (e.g. April 9, 1995 and October 9, 1995 when financial assurance must be demonstrated).

### Proposal for Notification of Affected Persons

All permittees of solid waste land disposal sites will be notified of the rule's adoption and of its availability. The notification will include a summary of the procedures required to provide financial assurance.

### Proposed Implementing Actions

The solid waste permit template will be changed to incorporate revised procedures and requirements.

DEQ's Solid Waste Permit Guidance document will be updated to include the amended requirements.

Most municipal solid waste landfill permittees subject to federal Subtitle D regulations should already have prepared a "worst case" closure plan and a "Subtitle D" post-closure plan. Very small facilities meeting federal criteria have until October 9, 1995 to prepare these plans. Closure and post-closure plans must be placed in the facility operating record. These facilities must provide financial assurance for closure and post-closure care by April 9, 1995 (October 9, 1995 for the "very small" facilities). This includes providing a copy of the financial assurance mechanism to the Department by those dates, together with a certification by the permittee that the financial assurance meets all applicable state and federal regulations. If a permittee wants to use an "alternative" form of financial assurance (i.e. one not specifically listed in the rule), it must submit a proposal describing that financial assurance mechanism to the Department for review and approval. This proposal must include certification by a qualified third party (such as a CPA) that the proposed mechanism meets all applicable state and federal requirements.

Municipal solid waste landfill permittees not subject to Federal Subtitle D requirements need to begin preparation of Final Engineered Site Closure and Post-Closure plans immediately, or establish a schedule with the Department for their preparation, together with associated financial assurance (unless exempted by the Department).

Non-municipal land disposal sites are required to prepare a conceptual "worst-case" closure plan and a conceptual post-closure plan by April 9, 1995. They must provide associated financial assurance by April 9, 1995, unless exempted by the Department.

All solid waste land disposal permittees must prepare Final Engineered Site Closure and Post-Closure plans five years before estimated final closure dates.

Financial assurance for corrective action must be provided if corrective action is required by the Department.

Permittees must prepare an annual update of their cost estimates for closure and post-closure care, and certify to the Department that the update has taken place and that their financial assurance mechanism has been updated accordingly.

Financial assurance mechanisms are not required to be reviewed or approved by the Department (except for alternative forms of financial assurance, as noted above), although the Department reserves the right to review these mechanisms.

It should be noted that the US Environmental Protection Agency (EPA) has recently published a proposed rule that would delay implementation of federal financial assurance requirements for municipal solid waste landfill owners and operators for one year -- until April 9, 1996. Should EPA adopt this rule, the Department would likely propose to the

Environmental Quality Commission to adopt similar dates in DEQ rule. This could affect both municipal and non-municipal permittees, as the Department has as a matter of policy in the past recommended identical effective dates for provision of financial assurance for both municipal and non-municipal permittees, based on dates set by EPA for municipal solid waste permittees. It is likely that any date extension would need to be done by temporary rule, as the EPA extension may be promulgated too close to the current effective date (April 9, 1995) to accommodate the regular DEQ rulemaking process.

### **Proposed Training/Assistance Actions**

DEQ Solid Waste staff have been given summaries of the proposed new provisions; these will be further discussed during quarterly solid waste staff meetings.

DEQ Regional Solid Waste staff will work with existing solid waste permittees to further inform them of requirements and to develop schedules for preparation of needed closure and post-closure plans, and financial assurance plans.

As part of this rulemaking the Department has developed standard forms to be used in providing financial assurance. Permittees are required to use these forms.

The Department will prepare summaries of required procedures and make them available to affected persons. The Department is considering preparing a worksheet for use by third parties when third-party certification is required.

The Department will seek appropriate forums (such as workshops and conferences) to present information on financial assurance requirements to the regulated community.

implan.fa

**ATTACHMENT G**

**SOLID WASTE FINANCIAL ASSURANCE WORK GROUP  
MEMBERS**

Paul Hribernick, Chair  
Black, Helterline  
Portland

Carter Webb  
ESCO Corp  
Portland

Commissioner Rick Allen  
Jefferson County Courthouse  
Madras

Gary Barton  
Waste Control Systems, Inc.  
Corvallis

Lauri Aunan  
OSPIRG  
Portland

Rich Barrett  
Willamette Industries  
Albany

**(Financial Resource Persons:)**

Doug Coenen  
Oregon Waste Systems  
Arlington

Chris Gram  
Preston Law Firm  
Portland

Bob Emrick (OSSI rep.)  
City Sanitary & Recycling Service  
McMinnville

Duane Woods  
Heller Ehrman  
Portland

Chip Pierce  
Public Financial Management Inc  
Portland

Ron Larvik  
Grande Ronde Recovery Center, Inc.  
LaGrande

Bruce McIntosh  
Sanifill Northwest  
Hillsboro, OR 97123

Craig Starr  
Lane County Land Management  
Eugene

# ENVIRONMENTAL STRUCTURED SETTLEMENTS CAN DRAMATICALLY REDUCE SUPERFUND SETTLEMENT COSTS

by Norman D. Carr

PORTLAND, OR — After more than a decade of

investigations, studies, legal challenges, guarded responses to regulatory agencies and protracted litigation, thousands of potentially responsible parties (PRPs) are arriving at the same conclusion— It's time to get serious about settlement!

The PRPs have been forced to participate in lengthy and expensive remedial investigations and feasibility studies (RI/FS) under the threat



Norman D. Carr

of fines; administrative orders; punitive damages; and strict, joint and several liability. Finally, after completion of the RI/FS, settlement negotiations can commence. To expedite settlement, the PRP should have decided on a negotiation strategy and thoroughly investigated settlement options and funding sources so that a comprehensive settlement proposal can be offered at the first opportunity.

In all Superfund cases requiring long-term remedial actions, an environmental structured settlement should be considered.

## An Old Idea - A New Application

Since the mid '70s, the structured settlement has been used as an effective tool for resolving personal injury litigation outside the courtroom. It is a mechanism which focuses attention on a thorough needs assessment, rather than subjective demands and offers. When the long-term life care needs are determined, an annuity contract is purchased by the defendant to provide periodic payments over time to the injured party. The common result is a quicker and more satisfactory settlement which provides a secure and cost-effective funding vehicle, takes advantage of the time value of money and affords favorable tax treatment for both sides.

Structured settlements have revolutionized the tort industry, requiring all participating attorneys to re-evaluate their client responsibilities and to re-examine their settlement strategies. The environmental structured settlement is expected to have the same impact on the practice of environmental law as the traditional structured settlement has had in the tort arena.

The U.S. Justice Department and all of the federal tort claims agencies have embraced the structured-settlement concept and consistently utilize structured settlements to reduce their claims costs.

A 1988 Environmental Protection Agency study of existing

and alternative financing mechanisms found that structured settlements showed great promise for promoting Superfund settlements. A test case in the study showed that the structured settlement could have reduced the PRP's up-front expense by 34 percent at the Superfund site.

To date, only a handful of environmental structured settlements have been consummated. However, their use is expected to increase dramatically as the settling PRPs and their attorneys begin to discover the potential benefits they offer.

## Potential Uses

The environmental structured settlement can be used as a creative settlement tool and a cost-effective funding mechanism for:

- Hazardous waste cleanup actions;
- Cleanups known as "corrective actions" under RCRA;
- Financing the cost of closing RCRA business;
- Environmental liability transfers in mergers and acquisitions;
- Insurance policy buyouts;
- Natural resource damage claims;
- Clean Water Act public works, such as building water treatment plants;
- Clean Air Act emissions control devices;
- Municipal settlements;
- International environmental disputes; and
- Toxic torts.

## Benefits

Some of the potential benefits of environmental structured settlements are as follows:

- Cost savings by virtue of the time value of money;
- Current income tax deductions allowed under some circumstances;
- Reduced administrative and legal fees;
- Secure, flexible and cost-effective funding to assure regulatory agencies that agreed-upon funds will be available as required;
- Improved PRP bargaining position;
- Possibility of a more complete release;
- Quicker and more favorable settlement; and
- Opportunity for favorable public relations.

## Conclusion

It would be financially irresponsible for a PRP or an insurance company to agree to long-term remedial actions in a large environmental claim without first evaluating the potential benefits of an environmental structured settlement. In this regard, an early consultation with a qualified environmental structured settlement consultant is essential.

The settlement consultant's involvement should not be limited to providing quotations. Instead, he or she should be involved as active member of the defense team and interface with the PRPs, regulatory agencies, insurance companies, attorneys, and technical consultants throughout the settlement process.

In this fashion, the PRPs can take full advantage of the special knowledge and negotiating skills of the environmental structured settlement consultant.

*(The writer is vice president-environmental affairs with Structured Settlements International, which has offices throughout the United States.)*



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**BROWNING-FERRIS INDUSTRIES**  
WESTERN REGION

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OCT 01 1994  
WESTERN REGIONAL CLEANING DIVISION  
Department of Environmental Quality

Deanna Mueller-Crispin  
Oregon Department of Environmental Quality  
Waste Management and Cleanup Division  
811 S.W. 6th Avenue  
Portland, Oregon 97204

RE: Proposed Criteria for Financial Assurance for Closure and Post-Closure Care

Dear Ms. Mueller-Crispin:

Browning-Ferris Industries, Inc. ("BFI") appreciates the opportunity to comment on the above-referenced proposed rules. We congratulate the Department for its efforts to craft financial responsibility requirements that are both consistent with the Federal criteria and promote the equitable treatment of municipal and non-municipal solid waste land disposal sites. Our comments concern proposed rule 340-94-145, subpart (f) (corporate guarantee). In an earlier correspondence, which is referred to at page 8 of the August 29, 1994 background memorandum, we proposed the adoption of a bond ratings-based financial test/corporate guarantee mechanism. The Department has indicated that it "agrees that some relaxation of the current criteria may be appropriate, but disagrees with using the bond rating (approach)." Background Memorandum, at 8. We urge the Department to reconsider its position, for the following reasons:

(1) As the U.S. EPA has emphasized, bond ratings are a frequently used and reliable indicator of the financial strength of governmental and private entities:

(A) bond rating incorporates an evaluation of the (owner/operator's) financial management practices. Bond ratings are widely used as a measure of credit risk associated with a long-term general obligation debt instrument. The Agency has included bond rating measures in financial tests under other RCRA programs, including financial assurance requirements for subtitle C TSDFs and subtitle I underground storage tanks.

58 Fed. Reg. 68,353, 68,356 (Dec. 27, 1993) (preamble to proposed 40 C.F.R. Part 258 local government financial test/guarantee mechanism). The EPA's proposed Part 258 local government financial test would essentially focus on bond ratings, since only a small



number of communities with ownership or operational interests in a MSWLF lack an investment-grade bond rating.

(2) The attached monogram demonstrates that there is a strong historic correlation between corporate defaults and previous downgrades of Moody's (as well as Standard and Poor's) bond ratings.

(3) In sharp contrast to the proposed "Beaver's Ratio" and "Altman's Z-Score", bond ratings are simple to determine and easy to verify. Unlike the proposed alternative ratios, environmental agencies, financial institutions, facility owners/operators, and governmental entities are all familiar with both the concept of bond ratings and their use. There would be no need for independent review and the submission of certifications by qualified third parties. Current bond ratings are publicly available, and can typically easily be obtained from local libraries.

(4) The adoption of recent SEC reporting requirements regarding long-term closure and post-closure obligations, and Statement No. 18 of the Governmental Accounting Standards Board ("Accounting for Municipal Solid Waste Landfill Closure and Postclosure Care Costs") (copy attached) will help to ensure that bond rating agencies carefully, and continuously, examine a company's fiscal status. BFI believes that a bond-ratings based test is appropriate for use by both the public and the private sectors.

(5) A financial test for use by either local governments or the private sector should be designed to be:

- (a) Readily understood by the regulated community;
- (b) Based on appropriate measures of credit risk and financial obligations; and
- (c) To the maximum practicable extent, roughly "available" to all regulated sectors.

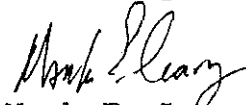
Accordingly, we submit that the use of a bond ratings-based approach would not only simplify the regulations but provide a ready yardstick for evaluating the ability of an owner/operator to satisfy its closure and post-closure care obligations. The proposal, with its use of multiple "alternative ratios" (ratios that apparently have not previously been utilized in any Federal or state waste management financial obligation rules), would likely increase the costs of complying with the regulation, as companies attempt to fashion the ratios to accommodate the test.

Simplicity is an important, but by no means the only, virtue of bond ratings. Bond ratings are, indeed, an excellent measure of an entity's financial status and serve as a valuable barometer of the potential for bankruptcy. There is strong evidence that firms with

highly rated bonds are quite unlikely to encounter short-term financial distress. Similar evidence exists regarding rated municipal bonds.

The adoption of a bond ratings based financial test/corporate guarantee would afford the Department an opportunity to facilitate the availability of a cost-effective means of demonstrating financial responsibility while ensuring that the interests of the Department and the general public are fully protected. We appreciate the opportunity to comment, and would be pleased to further discuss our recommended approach at any time.

Sincerely,

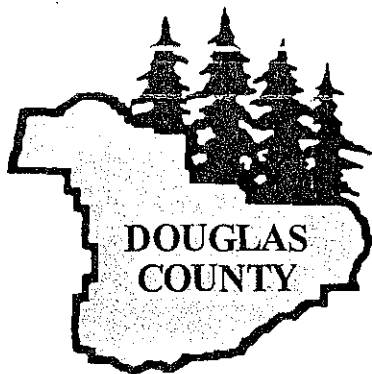


Mark E. Leary  
Manager, Regulatory Affairs

Enclosures

(Available on request)

# PUBLIC WORKS DEPARTMENT



Administration  
1036 SE Douglas, Room 219  
Roseburg, Oregon 97470  
(503) 440-4208

## DIVISIONS

Administrative Services  
1036 SE Douglas, Room 220  
Roseburg, Oregon 97470  
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Engineering and Construction  
1036 SE Douglas, Room 304  
Roseburg, Oregon 97470  
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Operations and Maintenance  
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Roseburg, Oregon 97470  
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Natural Resources  
1036 SE Douglas, Room 306  
Roseburg, Oregon 97470  
(503) 440-4255

October 4, 1994

Department of Environmental Quality  
Waste Management & Cleanup Division  
811 S.W. Sixth Avenue  
Portland, OR 97204

Attention: Deanna Mueller-Crispin

Reference: Proposed Rulemaking, Financial Assurance

Gentlemen:

Thank you for the opportunity to comment on the proposed rules for financial assurance for closure and post-closure care. I share DEQ's concerns regarding closure and believe these rules, if more fully developed, will be a very effective environmental tool. If poorly developed or not fully thought through prior to adoption, the results will be burdensome and difficult to manage.

Please consider the following comments;

### General

The Department of Environmental Quality rulemaking process is philosophically troublesome. Any rulemaking process where an agency, DEQ in this case, solicits

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comments from affected entities on rulemaking proposed by that agency, and which then interprets those comments for the governing board, the Environmental Quality Commission in this case, is suspect. How can the affected entities be assured that their comments and concerns are being clearly interpreted and objectively presented?

Publicly and privately, DEQ makes much of the fact that Oregon rules are often more stringent than Federal law. I do not believe that most, possibly none, of the provisions that are more stringent serve the public interest. I urge you to reexamine each of these provisions objectively and carefully.

You have proposed a discount rate equal to the current yield of a five-year U.S. Treasury note. I believe it appropriate to specify a discount rate, but believe that the five-year U.S. Treasury note rate is not an accurate indicator, being too liberal in most cases. Few agencies consistently match U.S. Treasury note performance. In most cases, public agencies in Oregon are limited by statute to short-term investments for a term of less than two years. Most public agencies invest their funds in the Local Government Investment Pool (LGIP) administered by the State Treasurer. The rate on these short-term investments can vary dramatically with that on the five-year U.S. Treasury note, usually being lower because of the short-term nature of the investments. An index based on the LGIP average rate would be more conservative, and inherently more accurate because of the large number of regulated agencies using this investment mechanism.

<sup>93</sup>  
**Paragraph 340-94-110 (5) (e):** Although I do not take exception to DEQ's need for access to permitted sites at reasonable times, I believe that a representative of the site operator should be allowed, or even required to accompany the visit, even on short notice. My firsthand experience is that, too often, the DEQ inspector is poorly prepared for a site visit, jumps to faulty conclusions, and frivolously asserts his regulatory authority, requiring substantial effort to respond on the part of the

permittee. In many cases, an owner's representative could provide sufficient firsthand information to satisfy the inspector's concerns. Access for inspection of a site should be regulatorily similar to OR-OSHA.

**Paragraph 340-94-115 (3) (d) (B):** DEQ's role as maker of rules, interpreter of rules, as well as arbitrator of requests to vary from the rules, by agencies or design professionals trying to use professional judgement, is logically unsound. Absolute power does, in fact, corrupt. I suggest that a jury of professionals to arbitrate differences of opinion between DEQ and the permittees would provide a more objective method of satisfying the intent of the rules in an impartial fashion. Any reference in any rule to "evidence demonstrating to the satisfaction of the Department" leaves the permittee in a very vulnerable position, too easily manipulated by DEQ in general or by an individual DEQ employee. A jury of professionals practicing in the field in question would be more cost and time effective, as well as add impartiality.

**Paragraph 340-94-120 (4):** Many, many landfills have been closed in the past 100 years. This provision is overly broad, and leaves the local entity very vulnerable to hidden, or unknown, liabilities. It is not productive, and places an unfair cloud on the financial stability of an agency for the rules to be overly broad. I suggest that landfills closed prior to a specific point in time, 1975, 1980, adoption of Subtitle D, etc. would be most appropriate.

**Paragraph 340-94-140 (4) (e):** This provision should not apply to counties, such as Douglas, that use general, unrestricted revenue to fund landfill operation, development and closure. When Douglas, or any similar county, meets whatever post-closure requirements necessary, the funds that have been established should be released to the county to be appropriated in any manner that local budget law permits. Succinctly, if closure and post-closure funds are developed from solid waste fees, then

it may be appropriate for DEQ to have a voice in disposition of excess revenues. In the case where funds are not established through fees, it is clearly not the role of DEQ to dictate use of excess funds. Even more troublesome, the proposed rules allow DEQ to determine that closure and post-closure care plans are not conservative enough, that additional efforts, i.e. additional funding will be required. There is no protection for a permittee to preclude DEQ from being overly conservative or overly aggressive in accumulating closure and post-closure funds, then mandating that the funds be used for activities that the local government may not need, would normally not fund, or would otherwise not desire. This is simply not the role that DEQ should be assuming, and, again, the permittee has no mechanism to appeal DEQ's actions. This is another area in which a jury of professionals could be used.

*and (e)*  
**Paragraph 340-94-140 (8) (b) (E):** See my comment on 4 (e).

**Paragraph 340-94-140 (c):** The counties and other municipal corporations are required to have extremely detailed annual audits by qualified firms of certified public accountants, performed under the supervision of the Secretary of State. This provision should specify that the annual audit under the supervision of the Secretary of State is sufficient, and that additional audits to satisfy the solid waste rules would only be required in the event of fraud, etc., if even then.

**Paragraph 340-94-140 (d):** I do not practice law, however am of the opinion that this provision violates local budget and appropriation laws.

**Paragraph 340-94-140 (e):** See my comments on 4 (e).

**Paragraph 340-94-145 (2):** This provision is unnecessary, unwise and the intent is

unclear. At the very most, DEQ should enjoy joint custody of the funds, and then only when proposed for expenditure on items not listed in the approved closure or post-closure plans.

**Paragraph 340-94-145 (5) (a):** This provision is unnecessarily burdensome, and should be changed to reflect that the permittee shall notify the Department in writing before trust funds are expended for activities other than those identified in the adopted closure or post-closure plan.

**Paragraph 340-94-145 (5) (b):** These bonds are probably not available, and if available in the future, the cost will likely be exorbitant.

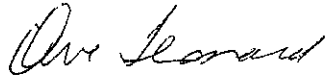
**Paragraph 340-94-145 (5) (f):** The proposed closure and post-closure care rules intend to safeguard the public from mismanagement, misappropriation or malfeasance by government officials. The public exposure is at least as high, however, from privately operated facilities, and I believe that corporate guarantee should not be allowed. In addition to creating an unlevel playing field, so to speak, the corporate guarantee leaves the public vulnerable to financial reverses, bankruptcy, mismanagement, etc. by publicly or privately owned businesses. I strongly suggest that these companies be required to bond in a similar fashion as public agencies.

**Paragraph 349-94-145 (5) (g):** Another alternative financial assurance mechanism that should be considered is to allow a government permittee to establish an account with the State of Oregon Local Government Investment Pool under the joint custody of DEQ and the permittee in accordance with 340-94-145 (2) as modified by my comments. Reiterating, the LGIP is widely used by government agencies in the State, is effectively administered, and much less onerous than use of performance bonding, etc.

Again, thank you for the opportunity to comment. Since I disagree with the concept of DEQ staff interpreting for the Environmental Quality Commission my concerns about proposed rulemaking, I have provided a copy of these comments directly to the Environmental Quality Commission and others, as appropriate.

Please contact me if you have any questions.

Sincerely,



Dave Leonard, P.E.  
Director of Public Works

DML:DJW

cc: Oregon State Legislators (Douglas County)  
Environmental Quality Commission  
Douglas County Commissioners



The Wall Street Journal  
October 4, 1994

THE WALL STREET JOURNAL

## Curbside Recycling Programs Divert Little Trash From Dumps, Study Finds

By Jeff Bailey

Staff Reporter of THE WALL STREET JOURNAL

Popular curbside collection of recyclable materials from homes diverts only a small portion of U.S. trash from dumps and incinerators, but is adding hundreds of millions of dollars annually to the nation's sanitation bill, a new study concludes. The study, to be released tomorrow, could be disturbing to the more than 6,700 communities that have already set up recycling programs, usually rolling out a second and sometimes a third fleet of trash trucks to collect separately garbage, recyclable items and yard waste.

The study's findings indicate that other means of collecting consumer items, such as drop-off and buyback bins, are much less expensive and surprisingly effective. And the study also points out that retrieving recyclable items from businesses is far more cost-effective, though many municipalities have focused the bulk of their recycling efforts on residences.

Curbside programs, the most visible

element in the nation's growing recycling movement, covered one-third of single-family residences in the U.S. as of 1992, or 27 million homes, but were diverting just 2.5% of the nation's total trash volume for recycling. More traditional drop-off and buyback programs, including paper drives, beverage container deposit laws and other consumer scrap efforts, pulled out 1.5%.

Collection of yard waste diverted another 3% from dumps and incinerators. And commercial recycling efforts accounted for 11%. Overall, in 1992 the U.S. generated about 203 million tons of so-called municipal solid waste, and 21% of that was either recycled or composted.

The study was done by Franklin Associates Ltd., Prairie Village, Kan., a consulting firm that also regularly quantifies waste trends for the Environmental Protection Agency and for companies in the packaging and consumer products industry. About 20 big companies that are members of an industry-backed group,

Keep America Beautiful, including Philip Morris Cos., Coca-Cola Co., Georgia-Pacific Corp. and WmX Technologies Inc., paid for the \$400,000 study.

Industry has been frustrated and bewildered as recycling's popularity has grown, even as the environmental and economic justifications for it have been sharply questioned. Companies don't generally oppose curbside programs because consumers pay, not industry; they do oppose other outgrowths of recycling, such as mandatory deposits on beverage containers, laws that require recycled content in packaging and products, and so-called advanced disposal fees that are charged to distributors on packaging that doesn't meet recycling goals.

The recycling movement initially boomed in the late 1980s, based on the belief, now known to be false, that the nation was running out of dump space. Proponents also claimed that recycling would save money if only markets for recyclable materials would develop.

In the past 18 months, huge amounts of papermaking capacity, targeted at old newspapers, cardboard and other paper, has come on line, providing markets. But the Franklin study makes clear that curbside collection is so expensive that, even with favorable prices for waste items,

community recycling programs add to sanitation costs. Collection costs dominate the economics of recycling, said William Franklin, the concern's chairman.

Consumer surveys, nevertheless, indicate that many Americans continue to believe that dump space is scarce, and that recycling has big environmental and economic benefits. Curbside collection is thus very popular.

But even a very efficient curbside program would add about \$1.50 to a monthly household trash bill, the study estimates, or \$382 million a year nationally based on the 1992 level of programs. In addition to the billions of dollars of processing and manufacturing infrastructure it requires to do actual recycling, California alone estimated it would require \$2 billion of investment to reach its 50% recycling goal in 2000.

States have set goals from 25% to 70% for recycling, and the study concludes that all but the bottom end of that range would be very difficult and expensive to reach.

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Columbia Ridge Landfill & Recycling Center  
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Arlington, Oregon 97812  
503/454-2030 • FAX: 503/454-2133



A Waste Management Company

October 10, 1994

Deanna Mueller-Crispin  
Oregon Department of Environmental Quality  
Solid Waste Policy and Programs  
811 S.W. 6th Avenue  
Portland, OR 97204

Subject: Comments on Proposed Rules; Financial Assurance for Closure and Post-Closure Care

Dear Deanna:

Thank you for the opportunity to have served on the Financial Assurance Work Group. Having had a chance to review the final version of the proposed rules, it is clear that all of the thoughts raised by the Work Group were seriously considered in developing this draft.

In general, the proposed rule is an outstanding effort, and those DEQ people involved should be complimented. We respectfully offer the following comments/suggestions based on our review of the most recent draft issued for public comment.

1. Trust Fund Pay In Period

We are concerned that permittees that opt for the use of a trust fund can build up the funds over the entire projected life of the site. This means that adequate funds would not be available for both closure and post-closure care in any contingency situation that would force premature closure prior to the forecasted site life. While this may meet with EPA's approval, it does not assure that the necessary funds are available when needed, which is the fundamental objective of this rule.

This concern is emphasized by a fairly simple consideration. Forms of financial assurance other than the trust fund approach are available in the marketplace to all permittees. Some permittees may choose not to pursue these alternatives because they do not meet financial standards required by the financing institution, or because these options appear too expensive. In either case, the financial fitness and wherewithal of the permittee comes into question. The proposed rule could have the effect of encouraging inadequately financed permittees to postpone recognition of their true liabilities, which is clearly counter to the intent of the rule.

However, if DEQ believes that the "pay-in" approach is acceptable, we suggest that the same standard be applied to other instruments. For example, if a permittee chooses to utilize a surety bond, then the required bond amount in any given year would

be the same as the amount required to be in trust fund in that year, and would increase from year-to-year like the trust fund would. This would help to minimize a built-in financial advantage that could otherwise be enjoyed by permittees having marginal financial wherewithal that may represent the highest risk.

2. "Worst-Case" Closure Performance Standard

Sections 340-94-110 and 340-95-060 reference a "worst-case" closure scenario, which is then used to establish closure funding requirements. A key element in estimating this cost is to forecast the largest open (i.e. unclosed) area that will exist over the site life.

We propose that a performance standard be added to the rules that explicitly forbids a permittee from expanding the "unclosed" portion of the landfill to an area larger than that represented by the worst-case closure area. Our suggested approach would be to add the following (or equivalent):

New Sections:  
OAR 340-94-100(7)

*"No person shall operate a disposal site having a total unclosed area that exceeds the area specified in the closure plan pursuant to 340-94-110(3)(c)."*

OAR 340-95-050(7)

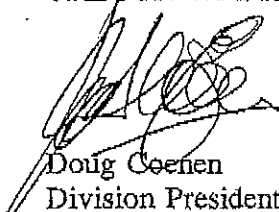
*"No person shall operate a disposal site having a total unclosed area that exceeds the area specified in the closure plan pursuant to 340-95-060(3)(a)(c)."*

This change would assist DEQ inspectors in verifying compliance and would emphasize the need to keep closure plans up-to-date.

Thank you for the opportunity to comment. If you have any questions, feel free to contact me.

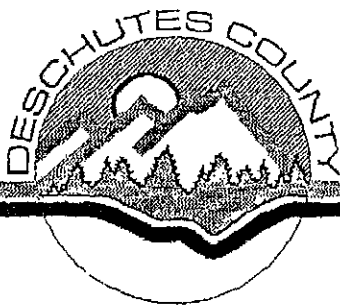
Sincerely,

OREGON WASTE SYSTEMS, INC.



Doug Coenen  
Division President and  
General Manager

cc: Will Spears  
Gerry Preston, ODEQ

**Department of Public Works**

61150 S.E. 27th St, Bend, OR 97702  
(503) 388-6581 • FAX (503) 388-2719

Deanna Mueller-Crispin  
Waste Management and Cleanup Division  
811 S.W. 6th Avenue  
Portland, OR. 97204

Dear Deanna,

Deschutes County was not able to present their concerns regarding the "Criteria for Financial Assurance for Closure and Post-Closure Care" at the October 4th, 1994 hearings.

Please accept this letter wherein we express our concerns relating to the above mentioned rulemaking.

Our major concern is the deletion of the process as provided for by CFR 40, Part 258, Subsection 258.74, (f), entitled "Allowable Mechanisms, Local Government Financial Test". This County has prepared its Financial Assurance Plan based on the criteria as spelled out in this document. It was our understanding that DEQ would adopt this process for conformity to EPA's rulemaking.

Thank you for the opportunity to comment and please call if you have any questions.

Sincerely,

Al Driver  
Transportation and Solid Waste Director

c.c. Don Bramhall  
Gerry Preston  
Timm Schimke

# BLACK HELTERLINE

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OUR FILE NUMBER

December 1, 1994

## HAND-DELIVERED

Environmental Quality Commission  
811 S.W. Sixth Avenue  
Portland, OR 97204

### Reference: Financial Assurance Work Group

Dear Members of the Commission:

I served as Chair of the Department of Environmental Quality's Work Group on Financial Assurance. The Group met in early 1994 to help develop procedures to provide required financial assurance, and to integrate the federal and state requirements.

After thorough discussion of the multiple issues involved, the Work Group was in basic agreement with the rule as now proposed, with the "third-party certification" requirement restricted to alternative forms of financial assurance. As Chair of the Work Group, I recommend that you adopt the draft rules as presented.

Sincerely,

  
Paul R. Hribernick

PRH:jp  
prh009

State of Oregon  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
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