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OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS 12/20/1999

State of Oregon
Department of Environmental Quality

RevisedA G E N D A

ENVIRONMENTAL QUALITY COMMISSION MEETING

Phone meeting

December 20, 1999
DEQ Conference Room 5B
811 S. W. Sixth Avenue
Portland, Oregon

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 listen to the discussion on any item should arrive at the beginning of the meeting to avoid missing the item of interest.

The Commission will hold and executive session at 8:30 a.m. in Room 5B pursuant to ORS 192.660(1)(h) to consult with legal counsel regarding current and likely litigation relating to the on-site sewage disposal rules (including EZ Drain v State of Oregon, no. 9809-06683) and tax credit applications (including Tidewater Barge v. EQC, no. CA A98545).

Beginning at 9:00 a.m.

A. Approval of Tax Credits

B. †Rule Adoption: Rules Establishing Review and Acceptance Criteria for New or Innovative Technologies and Materials for Application in the On-site Program

C. Tidewater Barge Lines Tax Credit Applications

†Hearings have already been held on the Rule Adoption items and the public comment period has closed. In accordance with ORS 183.335(13), no comments can be presented by any party to either the Commission or the Department on these items at any time during this meeting.

The Commission has set aside February 10-11, 2000, 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 229-5301, 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)229-5301 (voice)/(503)229-6993 (TTY) as soon as possible but at least 48 hours in advance of the meeting.

State of Oregon
Department of Environmental Quality

Memorandum

Date: December 14, 1999

To: Environmental Quality Commission

From: Langdon Marsh, Director

Subject: Addendum
Agenda Item A Tax Credit Applications
December 20, 1999 EQC Telephone Meeting

Staff requests the following amendment to Agenda Item A.

On December 9, 1999, Pope & Talbot, Inc. requested the transfer to Pollution Control Facility Certificate Number 3544, issued on 11/17/95, to Selco Service Corporation. A copy of the request, the certificate and supporting documents are attached.

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Certificate No: 3544
Date of Issue: 11/17/95
Application No: 4398

ISSUED TO:
Pope & Talbot
Fiber Products Division
PO Box 8171
Portland, Oregon 97207

ATTENTION:

LOCATION OF POLLUTION CONTROL FACILITY:
30480 American Drive
Halsey

AS: ( ) LESSEE (X) OWNER ( ) INDIV ( ) PARTNER (X) CORP ( ) NON-PROFIT ( ) CO-OP

DESCRIPTION OF POLLUTION CONTROL FACILITY:
Facility consists of an oxygen delignification system.

TYPE OF POLLUTION CONTROL FACILITY:
( ) AIR ( ) NOISE (X) WATER ( ) SOLID WASTE ( ) HAZARDOUS WASTE ( ) USED OIL

DATE FACILITY COMPLETED: 1/1/95 PLACED INTO OPERATION: 1/1/95

ACTUAL COST OF POLLUTION CONTROL FACILITY: $23,774,824.00

PERCENT OF ACTUAL COST PROPERLY ALLOCABLE TO POLLUTION CONTROL: 100%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

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

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed: William W. Wessinger (William W. Wessinger, Chairman)

Approved by the Environmental Quality Commission on the 17th day of November, 1995.

Staff: TM/WQ

POPE & TALBOT, INC.

December 9, 1999

Ms. Maggie Vandehey
Program Coordinator, Pollution Control Credit
Oregon Department of Environmental Quality
811 SW Sixth Avenue
Portland, Oregon 97204-1390

Dear Ms. Vandehey:

On September 30, 1999 Pope & Talbot, Inc. sold its Halsey pulp mill. The mill had previously qualified and received a certification for pollution control credits (Certificate # 3544) for the installation of an oxygen delignification system.

In conjunction with the sale of the mill, we request that you transfer the pollution control credit certification to the new owner of the mill. The new owner is:

Selco Service Corporation
127 Public Square
Cleveland, Ohio 44114-1306
EIN 34-1614731

Inquiries to the new owner should be addressed to Mr. Matt MacMillen, Vice President and Tax Director of KeyCorp. Keycorp is the parent company of Selco Service Corporation. His phone number is (216) 689-0809.

I am enclosing a copy of the original credit certificate, the Warranty Deed and Bill of Sale. The Warranty Deed is in the name of the trustee and to confirm the ownership by Selco Service Corporation, enclosed are selected pages from the trust agreement.

Please contact me if you have any questions.

Sincerely,

Patricia L. Whittington
Tax Director

Encl.
cc: Mr. Matt MacMillen

BILL OF SALE

POPE & TALBOT, INC., a Delaware corporation ("*Seller*"), for and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, does hereby TRANSFER, ASSIGN, SELL, CONVEY and SET OVER unto WILMINGTON TRUST COMPANY, a Delaware banking corporation ("*Purchaser*"), all of Seller's right, title and interest in and to the property described on Schedule A attached hereto (the "*Property*") and located on or attached to that certain real property located in Linn County, Oregon, and legally described in Schedule B attached hereto and made part hereof (the "*Parcel*"), or used in connection with the paper mill facility on the Parcel.

Seller hereby represents and warrants to Purchaser that Seller has, and hereby transfers and conveys to Purchaser, good and marketable title to the Property, free and clear of any and all Liens (as such term is defined in the Facility Lease, dated as of September 30, 1999, between Seller and Purchaser (the "*Facility Lease*"), as the same may be amended, supplemented or modified from time to time), or encumbrances except for the terms and conditions of that certain Site Lease dated September 30, 1999 between Purchaser and Seller, and Seller will warrant and defend such title forever against all claims and demands.

This Bill of Sale shall be governed by, and construed in accordance with, the laws of State of Oregon.

IN WITNESS WHEREOF, this Bill of Sale is executed this 30th day of September, 1999.

POPE & TALBOT, INC.

By _____
Its: President and Chief Executive Officer

By _____
Its: Vice President and Chief Financial Officer

After Recording Return to:
Cindy Wenig, Esq.
Chadbourne & Parke LLP
30 Rockefeller Plaza
New York, New York 10112

WARRANTY DEED

Pope & Talbot, Inc., a Delaware corporation, Grantor, conveys and warrants to Wilmington Trust Company, not in its individual capacity but solely as Owner Trustee, Grantee, the following described property free of encumbrances except as specifically set forth herein situated in Linn County, Oregon, to wit:

All buildings, improvements and fixtures located on the property more particularly described on Exhibit A attached hereto and made a part hereof. THIS DEED IS NOT INTENDED TO CONVEY THE FEE INTEREST IN SUCH PROPERTY, ONLY THE BUILDINGS, IMPROVEMENTS AND FIXTURES LOCATED THEREON.

The said property is free from encumbrances except as set forth in the public record and any liens of mechanics, suppliers, materialmen and laborers for work or service performed or materials furnished in connection with the buildings, improvements and fixtures which are not due and payable.

The true consideration for this conveyance is other value promised.

Until a change is requested, all tax statements shall be sent to the following address:

Pope & Talbot, Inc.
1500 SW First Avenue
P.O. Box 8171
Portland, OR 97207

THIS INSTRUMENT WILL NOT ALLOW USE OF THE PROPERTY DESCRIBED IN THIS INSTRUMENT IN VIOLATION OF APPLICABLE LAND USE LAWS AND REGULATIONS. BEFORE SIGNING OR ACCEPTING THIS INSTRUMENT, THE PERSON ACQUIRING FEE TITLE TO THE PROPERTY SHOULD CHECK WITH THE APPROPRIATE CITY OR COUNTY PLANNING DEPARTMENT TO VERIFY APPROVED USES AND TO DETERMINE ANY LIMITS ON LAWSUITS AGAINST FARMING OR FOREST PRACTICES AS DEFINED IN ORS 30.930.

Dated this 30th day of September, 1999

POPE & TALBOT, INC.

By _____
Its: President and Chief Executive Officer

By _____
Its: Vice President and Chief Financial Officer

970994.01.06
1497924

STATE OF ILLINOIS)
) SS
COUNTY OF COOK)

This instrument was acknowledged before me on September 30th, 1999 by Michael Flannery and Maria M. Pope, as President and Chief Executive Officer and Vice President and Chief Financial Officer, respectively, of Pope & Talbot, Inc., a Delaware corporation.

Julia R Browne
Notary Public

(Seal)

My Commission Expires: 3/4/01

OFFICIAL SEAL
JULIA R BROWNE
NOTARY PUBLIC STATE OF ILLINOIS
MY COMMISSION EXP. MAR. 4,2001

Environmental Quality Commission

☐Rule Adoption Item
X Action Item
☐Information Item

Agenda Item A
December 20, 1999 Meeting

Title: Tax Credit Applications

Summary: Staff recommends the following actions regarding tax credits:

	Certified Cost	*Value*
Approve		
Pollution Control Facility Tax Credit		
Air (12 applications)	$7,246,122	$3,623,061
Field Burning (3 applications)	$169,219	$79,980
USTs (13 applications)	$1,488,532	$702,873
Water (4 applications)	$2,604,563	$1,302,282
Pollution Control Facility Tax Credit (32 applications)	$11,508,436	$5,708,196
Pollution Prevention Tax Credit		
Perc (2 applications)	$71,000	$35,500
Approve 34 Applications	**$11,579,436**	**$5,743,696**
Deny		
Pollution Control Facility Tax Credit		
Air (1 application)	$801,096	$400,548
Water (1 application)	$4,859	$2,430
Deny 2 applications	**$805,955**	**$402,978**
Reject		
Pollution Control Facility Tax Credit		
Air (2 applications)	$649,277	$324,639
Solid Waste (1 application)	$2,596,818	$1,298,409
Reject 3 Applications	**$3,246,095**	**$1,623,048**
Transfer		
Four certificates		

Approve issuance of tax credit certificates for the applications presented in Attachment B. Deny issuance of tax credit certificates for the applications presented in Attachment C. Reject issuance of a tax credit certificate for applications 4570 and 4864 as presented in Attachment D. Transfer certificates as presented in Attachment E.

Margaret Vandehey — Report Author
Division Administrator
Lydia Taylor — Director

December 9, 1999

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

State of Oregon
Department of Environmental Quality Memorandum

Date: December 9, 1999

To: Environmental Quality Commission

From: Langdon Marsh, Director

Subject: Agenda Item A, December 20, 1999, EQC Meeting
Tax Credit Applications

Statement of the Need for Action
This staff report presents the staff analysis of pollution control facility, and pollution prevention tax credit applications and the Department's recommendation for Commission action on these applications.

- All applications are summarized in Attachment A of this staff report.
- Applications recommended for Approval are presented in detail in Attachment B.
- Applications recommended for Denial are presented in Attachment C.
- Two applications recommended for Commission Rejection, accompanied by one Department Rejection, are presented in Attachment D.
- Transfers are presented in Attachment E.

Background APPROVALS: Attachment B
The applications presented in Attachment B meet the eligibility requirements for approval. There are no Preliminary Approvals for the Pollution Control Tax Credit Program included in Attachment B. The applications are organized in application number sequence. Two tax credit programs are represented in Attachment B and are identified as Pollution Control Facility and Pollution Prevention.

Willamette Industries, Inc. – Application Number 4927
Willamette Industries, Inc. claimed an electrostatic precipitator, six baghouse connections and a pneumatic conveyor system on application number 4927. The Department determined that the conveyor system did not meet the definition of a pollution control facility and subtracted the amount of the system from the claimed facility cost. A letter addressed to the Commission from the Willamette Industries is included behind the Review Report in Attachment B.

Background DENIALS: Attachment C
The application presented in Attachment C did not meet the eligibility requirements of the Pollution Control Facility Tax Credit program. There are no preliminary applications presented for denial. According to the Commission's direction, this letter only calls out denials that may require background information not contained in the Review Reports or that may require a policy decision. No additional information is presented for denials.

Background REJECTIONS – Attachment D

Commission Rejection

The *Director's Recommendation* to reject applications submitted beyond two years after construction of the facility is completed is authorized by ORS 468.165 (6), which states:

> The application shall be submitted after construction of the facility is substantially completed and the facility is placed in service and within two years after construction of the facility is substantially completed. Failure to file a timely application shall make the facility ineligible for tax credit certification. An application shall not be considered filed until it is complete and ready for processing. The commission may grant an extension of time to file an application for circumstances beyond the control of the applicant that would make a timely filing unreasonable. However, the period for filing an application shall not be extended to a date beyond December 31, 2003.

Willamette Industries, Inc. - Application Number 4570

Willamette Industries submitted application number 4570 on December 26, 1995 — over two years after the date construction was completed. They are the owner and applicant of the claimed facility. Willamette Industries entered into a lease with Far West Fibers, an independent recycling company, on January 1, 1994. However, Far West Fibers began operating the claimed facility on September 27, 1993. Three months prior to the execution of the lease.

The Department recommends the rejection of application number 4570 for failure to file a timely application. The Department and the applicant, Willamette Industries, Inc., disagree on the date construction of the facility was substantially complete.

A letter addressed to the Commission from the Willamette Industries is included with the Review Report in Attachment D. The applicant claims that, since there was not a lease between the independent recycling company and the applicant until January 1 1994, the date of substantial completion of the facility should be the effective date of the lease. Under this reasoning, the application would have been submitted in a timely manner according to statute and rule.

This application was presented to the Commission several times beginning on November 21, 1997. At the applicant's request, the application was pulled from the agenda because the applicant wished to present additional information and to address the Commission but was unable to attend the Commission meetings.

Department Rejection

The Commission is not required to take action on *Department Rejections*. The Department rejects applications received prior to May 1,1998, on the following authority:

> If the Department determines the application is incomplete for processing and the applicant fails to submit requested information within 180 days of the date when the Department requested the information, the application will be rejected by the Department unless applicant requests in writing additional time to submit requested information; OAR 340-16-020(h). Hist.: ...DEQ 6-1990, f. & cert. ef. 3-13-90

Staff presents Department rejections in this Agenda Item to place it in the public record and to provide the applicant with an opportunity to address the Commission.

Willamette Industries, Inc. - Application Number 4800
Staff first presented application number 4800 to the Environmental Quality Commission on September 17, 1998. The applicant indicated that they wished to address the Commission at those times but was unable to attend the meetings. A Letter addressed to the Commission from the Willamette Industries is included with the Review Report in Attachment D. The applicant points to OAR 340-16-020 (1)(e) and (1)(h) as not being equitable.

The Department requested additional information 84 days after they received the application on July 21, 1997 – failing to meet the following requirement:

> OAR 340-16-020 (e) Within 30 days of receipt of an application, the Department shall request any additional information that applicant needs to submit in order for the application to be considered complete. The Department may also require any other information necessary to determine whether the construction is in accordance with Department statutes, rules and standards.

On June 5, 1998, Willamette Industries provided the additional information 235 days after the Department requested the additional information – missing the following requirement.

> OAR 340-16-020 (h) If the Department determines the application is incomplete for processing and the applicant fails to submit requested information within 180 days of the date when the Department requested the information, the application will be rejected by the Department unless applicant requests in writing additional time to submit requested information;

The pollution control facility tax credit law does not provide a remedy to the applicant when the Department's failure to meet a deadline. Statute clearly provides the Department with the authority to seek documentation that substantiates the cost and materials claimed for tax credit purposes.

> (2) The application shall be made in writing in a form prescribed by the Department of Environmental Quality and shall contain information on the actual cost of the facility, a description of the materials incorporated therein, all machinery and equipment made a part thereof, the existing or proposed operational procedure thereof, and a statement of the purpose of prevention, control or reduction of air...
>
> ORS 468.165 (3) The Director of the Department of Environmental Quality may require any further information the director considers necessary before a certificate is issued.

Background TRANSFERS – Attachment E
United Rentals, Inc. requested the transfer of three certificates issued to Power Rents, Inc. The certificates are numbered 3876, 3877, 3878. Simpson Investment company notified the Department that they disposed of Simpson Timber Company and request the transfer of certificate number 3523 to

the new owner, DYNO Overlays, Inc. Copies of the certificates along with the supporting documents are presented in Attachment E.

Conclusions

The recommendations for action on the attached applications are consistent with statutory provisions and administrative rules related to the pollution control facility, pollution prevention and reclaimed plastic product tax credit programs.

Recommendation for Commission Action

The Department recommends the Commission approve certification for the tax credit applications as presented in Attachment B of the Department's Staff Report.

The Department recommends the Commission deny the applications presented in Attachment C of the Department's Staff Report.

The Department recommends the Commission reject Application Number 4570 as presented in Attachment D of the Department's Staff Report.

The Department recommends the Commission transfer certificate numbered 3523, 3876, 3877, and 3878 as presented in Attachment E of the Department's Staff Report.

Intended Follow-up Actions

Staff will notify applicants the Environmental Quality Commission's action. The Department will notify applicants with denied or rejected applications or applications with a facility cost reduced from the amount claimed on the application by Certified Mail. Staff will notify Department of Revenue of any Issued, Transferred or Revoked certificates.

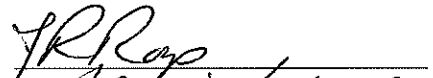
Attachments

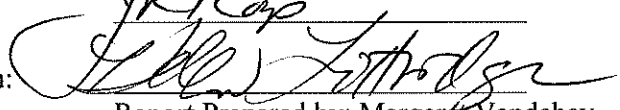
A. Summary
B. Approvals
C. Denials
D. Rejections
E. Transfers

Reference Documents (available upon request)

1. ORS 468.150 through 468.190.
2. OAR 340-016-0005 through 340-016-0050.
3. ORS 468A.095 through 468A.098.
4. OAR 340-016-0100 through 340-016-0125.
5. ORS 468.451 through OAR 468.491.
6. OAR 340-017-0010 through 340-017-0055.

Approved:

Section: 

Division: 

Report Prepared by: Margaret Vandehey
Phone: (503) 229-6878
Date Prepared: December 9, 1999

9912_EQC_Preparation.doc

Attachment A

Summary

Tax Credit Application Summary

Action	App. No.	Applicant	Certified Cost	Percentage	Type	Value
Approve	4789	Willamette Industries, Inc.	$1,045,564	100%	Air	$522,782
Approve	4792	Willamette Industries, Inc.	$61,631	100%	Air	$30,816
Approve	4905	Willamette Industries, Inc.	$91,098	100%	Water	$45,549
Approve	4906	Willamette Industries, Inc.	$35,904	100%	Water	$17,952
Approve	4927	Willamette Industries, Inc.	$1,155,228	100%	Air	$577,614
Approve	4934	Willamette Industries, Inc.	$1,398,042	100%	Air	$699,021
Approve	4978	Willamette Industries, Inc.	$1,423,208	100%	Air	$711,604
Approve	4986	Willamette Industries, Inc.	$402,848	100%	Air	$201,424
Approve	5020	Willamette Industries, Inc.	$542,210	100%	Water	$271,105
Approve	5191	Russell Oil Company	$23,320	100%	USTs	$11,660
Approve	5223	Cascade General, Inc.	$1,935,351	100%	Water	$967,676
Approve	5227	Willamette Industries, Inc.	$118,175	100%	Air	$59,087
Approve	5243	Arden, Inc.	$201,782	100%	Air	$100,891
Approve	5255	CO-GEN II, LLC	$687,653	100%	Air	$343,827
Approve	5256	CO-GEN Co., LLC	$588,507	100%	Air	$294,254
Approve	5274	Leroy & Lowell Kropf	$81,742	100%	Air	$40,871
Approve	5291	Truax Harris Energy LLC	$194,027	89%	USTs	$86,342
Approve	5292	Truax Harris Energy LLC	$317,343	94%	USTs	$149,151
Approve	5293	Nadim & Lama Yaqoub	$87,767	88%	USTs	$38,617
Approve	5294	Exxon of Woodburn LLC	$277,277	93%	USTs	$128,934
Approve	5305	John Tea	$36,000	100%	Dry Clean	$18,000
Approve	5306	Tomlin's Auto Service	$37,697	100%	USTs	$18,849
Approve	5307	Delbert Folk	$68,195	99%	USTs	$33,757
Approve	5323	Bob VanValin Enterprises, Inc.	$67,089	100%	USTs	$33,545
Approve	5324	Chan T. Him	$35,000	100%	Dry Clean	$17,500
Approve	5325	Larry A. Isom	$5,500	100%	Field Burning	$2,750
Approve	5329	Bryce D. Cruickshank	$115,724	92%	Field Burning	$53,233
Approve	5334	Larry M. and Mary Lou Neher	$47,995	100%	Field Burning	$23,998
Approve	5337	Clough Oil Company	$78,988	100%	USTs	$39,494
Approve	5339	Jim R. Titus and Freda J. Titus	$138,404	100%	USTs	$69,202
Approve	5340	Clough Oil Company	$26,019	100%	USTs	$13,009
Approve	5341	Larry Craig	$83,794	87%	USTs	$36,450
Approve	5342	Ferrell's Fuel Network, Inc.	$88,613	99%	USTs	$43,863
Deny	4714	Portland General Electric Company	$4,859	100%	Water	$2,430
Deny	4845	Integrated Device Technology (IDT)	$801,096	100%	Air	$400,548
Reject	4570	Willamette Industries, Inc.	$2,596,818	100%	Solid Waste	$1,298,409
Reject	4800	Willamette Industries, Inc.	$110,418	100%	Air	$55,209
Reject	4864	Georgia-Pacific Corp.	$538,859	100%	Air	$269,430

Attachment B

Approvals

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Willamette Industries**
Application No.	**4789**
Facility Cost	**$1,045,564**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a manufacturing facility producing abrasion resistant steel castings. The applicant's taxpayer identification number is 93-0312940 and their address is:

1300 SW Fifth Avenue, Suite 3800
Portland, OR 97201

Facility Identification

The certificate will identify the facility as:

Nitrogen oxide reduction system

The applicant is the owner of the facility located at:

3152 Old Salem Road
Albany, OR 97321

Technical Information

A nitrogen oxide (NO_X) reduction system was installed in the plant cogeneration system to reduce and control emissions. Components include:

1. A water injection system provided by GE Motors & Industrial Systems.
2. A Selective Catalyst Reduction (SCR) system, including an ammonia injection system, provided by Babcock & Wilcox.
3. Emission analyzers and gas monitoring equipment provided by Graseby STI.
4. Storage tank and loading facility for anhydrous ammonia.

The primary function of the SCR is to catalytically reduce gas turbine flue gas NOx emissions to nitrogen and water vapor using ammonia (NH_3) as a reducing agent. The SCR utilizes a fixed bed, honeycomb-type catalyst in a horizontal flow reactor. Ammonia is injected into the reactor, with maximum surface contact between flue gas and catalyst to obtain optimum NO_X reduction. Water is injected into the gas turbine where it mixes with fuel to lower the combustion temperature, thereby reducing the formation of NO_X.

Water injection and Selective Catalyst Reduction (SCR) systems are considered best available technology for NOx reduction.

Without the SCR system, an estimated 500 tons per year of NO_X emissions would be discharged. Actual emissions were 88.3 tons in 1997 as a result of the facility. The SCR system has a 75-90% destruction efficiency rating.

Eligibility

ORS 468.155 (1)(a)(B) The **principal purpose** of this **new equipment and installation** is to prevent and reduce a substantial quantity of air pollution.

ORS 468.155 (1)(b)(B) The disposal or elimination of or redesign to eliminate air contamination sources and the use of air cleaning devices as defined in ORS 468A.005

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**7/1/97**
Additional Information Requested	**1/24/98**
Additional Information Received	**7/16/98**
Additional Information Received	**11/11/99**
Additional Information Received	**11/17/99**
Application Substantially Complete	**11/23/99**
Construction Started	**10/94**
Construction Completed	**12/95**
Facility Placed into Operation	**7/31/95**

Facility Cost

Claimed Facility Cost	**$ 1,045,564**
Allowable Facility Cost	**$ 1,045,564**

KPMG Peat Marwick LLP provided the certified public accountant's statement on behalf of Willamette Industries. The cost of the facility is in excess of $500,000; therefore, Symonds, Evans & Larson, CPA, PC performed the accounting review on behalf of the DEQ. Vendor invoices substantiated 90% of the claimed facility cost. The remaining costs were substantiated by comparing information from the drawings and the site visit with 1999 Means Mechanical Cost Data. Allowable overhead costs were calculated by multiplying the allowable direct costs of the claimed facility by the ratio of the related overhead costs to the total direct costs for the entire cogeneration project.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. No gross annual revenues are associated with this facility therefore, there is zero return on the investment.
ORS 468.190(1)(c) Alternative Methods	The applicant identified no alternatives.
ORS 468.190(1)(d) Savings or Increase in Costs	There are no savings from the facility.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance/Other Tax Credits

The applicant states that the facility is in compliance with Department rules and statutes and with EQC orders and that no DEQ air permits have been issued for the Willamette Industries Albany Paper Mill site.

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Dennis E. Cartier, Associate, SJO Consulting Engineers, Inc.
Symonds, Evans & Larson, CPA, PC
Dave Kauth, AQ-DEQ
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Willamette Industries, Inc.**
Application No.	**4792**
Facility Cost	**$61,631**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a corporation operating as a laminated veneer lumber plant taking tax relief under taxpayer identification number 93-0312940. The applicant is the owner of the facility. The applicant's address is:

1300 SW Fifth Avenue, Suite 3800
Portland, Oregon 97201

Facility Identification

The certificate will identify the facility as:

Western Pneumatics baghouse.

The facility is located at:

Winston Engineered Wood Products Division
375 Dillard Garden Road
Winston, Oregon 97496

Technical Information

One new Western Pneumatic model #542 baghouse was installed for wood particulate control. The baghouse will handle up to 49,000 cfm air capacity. The installation includes fans, motors, ducting, structural supports and foundations.

Eligibility

ORS 468.155 (1)(a)	The **sole purpose** of the **new baghouse** is to control air pollution. The emission reduction is accomplished by the removal of air contaminants from the air stream before discharge to the atmosphere as defined in ORS 468A.005.
ORS 468.155 (1)(b)(B)	The use of air cleaning devices as defined in ORS 468A.005

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**7/8/97**
Application Substantially Complete	**6/11/98**
Construction Started	**12/30/96**
Construction Completed	**2/28/97**
Facility Placed into Operation	**2/28/97**

Facility Cost

Claimed Facility Cost		**$ 76,138**
Salvage Value		
Government Grants		
Other Tax Credits		
Insignificant Contribution	fire protection	(9,892)
	catwalk	(4,615)
Eligible Facility Cost		**$ 61,631**

Insignificant Contribution listed above includes $9,892 for fire protection, and $4,615 for catwalk equipment, installation and painting. Invoices substantiated the cost of the facility. KPMG Peat Marwick LLP provided the certified public accountant's statement.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the facility cost exceeds $50,000 and therefore, the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. No gross annual revenues associated with this facility.
ORS 468.190(1)(c) Alternative Methods	Alternatives were not considered.
ORS 468.190(1)(d) Savings or Increase in Costs	The claimed facility was said to have an average annual operating cost of $4,486 per year as a five–year average.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance

The facility is in compliance with Department rules and statutes and with EQC orders.
DEQ permits issued to facility: ACDP No. 10-0156

Reviewers: Dave Kauth

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Willamette Industries, Inc.**
Application No.	**4905**
Facility Cost	**$91,098**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility Tax Credit: Water
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a paper mill taking tax relief under taxpayer identification number 93-0312940. The applicant is the owned of the facility and their address is:

1300 SW Fifth Avenue, Suite 3800
Portland, OR 97201

Facility Identification

The certificate will identify the facility as:

Storm water control facility consisting of a bio-swale, clarifier pump station, sumps, pump and associated plumbing system.

The facility is located at:

1551 SW Lyle Street
Dallas, OR 97338

Technical Information

Contaminated storm runoff from the different areas in the mill is collected into several catch basins and sumps conveyed to a shallow bio-swale. The bio-swale is a shallow basin with earthen ridges perpendicular to the water flow. The ridges and the bank of the bio-swale were planted with aquatic plants to assist in trapping sediments and/or suspended solids. The treated storm runoff is discharged to Ash Creek.

In addition, dust control water runoff from the log yard scaling area is diverted to the new clarifier and then pumped into the city sanitary sewer.

Eligibility

ORS 468.155 (1)(a) The **sole purpose** of this **new excavation and equipment** is to reduce a substantial quantity of water pollution. The applicant's National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit 1200Z requires the applicant to prepare and implement a Storm Water Pollution Control Plan (SWCP). This plan may include the construction of structural control facility to reduce pollutants in storm water runoff such as bio-swales.

ORS 468.155 (1)(b)(A) The reduction of pollutants is accomplished with the use of treatment works for industrial waste as defined in ORS 468B.005.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**12/30/97**
Application Substantially Complete	**12/1/99**
Construction Started	**8/1/95**
Construction Completed	**4/30/96**
Facility Placed into Operation	**4/30/96**

Facility Cost

Facility Cost	**$91,098**
Eligible Facility Cost	**$91,098**

A Cost Summary Detail accompanied the application. KPMG Peat Marwick LLP provided the certified public accountant's statement.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. No gross annual revenues associated with this facility.
ORS 468.190(1)(c) Alternative Methods	No alternative investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings in costs. The average annual operating cost is $1,600.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Compliance

The facility is in compliance with the storm water discharge benchmarks specified in the NPDES Discharge Permit 1200Z issued to Willamette Industries.

Reviewers: RCDulay, NWR, DEQ
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9911

Director's Recommendation:	**APPROVE**
Applicant	**Willamette Industries, Inc.**
Application No.	**4906**
Facility Cost	**$35,904**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility Tax Credit: Water
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a paper mill taking tax relief under taxpayer identification number 93-0312940. The applicant is the owner of the facility and their address is:

1300 SW Fifth Avenue, Suite 3800
Portland, OR 97201

Facility Identification

The certificate will identify the facility as:

Wastewater containment facility consisting of concrete retaining walls, isolation valves and associated plumbing system.

The facility is located at:

55 SW Division
Bend, OR 97702

Technical Information

Individual containment systems are constructed at various sites where potential spillage could occur. The south settling ponds are modified with the construction of a concrete apron with 2 walls that will be used as an intermediate drainage area for the wood waste before loading onto the dump trucks. The drainage (wastewater) goes to the pond, settled and pumped into the city sewer system. Collected spillage in the containment system for the resin storage tanks, blenders and fuel storage tanks will be disposed of accordingly. Drainage from the plant site discharges to nearby ditches that will eventually go to the Deschutes River.

Eligibility

ORS 468.155 (1)(a) The **sole purpose** of this **installation and machinery** is to control a substantial quantity of water pollution. The applicant's National Pollutant Discharge Elimination System (NPDES) Storm Water Discharge Permit 1200Z requires them to prepare and implement a Storm Water Pollution Control Plan (SWCP). The plan may include construction of structural control facility such as containment systems to prevent spilt materials from discharging to the Drainage sewer system and then to the waters of the state.

ORS 468.155 (1)(b)(A) The control of pollutants is accomplished with the use of treatment works for industrial waste as defined in ORS 468B.005.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**12/30/97**
Application Substantially Complete	**12/7/99**
Construction Started	**9/1/95**
Construction Completed	**6/30/96**
Facility Placed into Operation	**6/30/96**

Facility Cost

Claimed	**$35,904**
Non-allowable	$ -
Eligible Facility Cost	**$35,904**

A Cost Summary Detail accompanied the application. KPMG Peat Marwick LLP provided the certified public accountant's statement.

Facility Cost Allocable to Pollution Control

According to ORS.190 (3), the only factor used to determine the percentage of the facility cost allocable to pollution control is the percentage of time the facility is used for pollution control. The percentage of time the facility is used for pollution control and therefore the percentage allocable to pollution control is 100%.

Compliance

The facility is in compliance with the conditions of the NPDES Permit 1200Z issued to Willamette Industries.

Reviewers: RCDulay, NWR, DEQ
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Willamette Industries, Inc.**
Application No.	**4927**
Facility Cost	**$1,155,228**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a manufacturing facility producing medium density fiberboard. The applicant's taxpayer identification number is 93-0312940 and their address is:

1300 SW Fifth Avenue, Suite 3800
Portland, OR 97201

Facility Identification

The certificate will identify the facility as:

A Geoenergy electrostatic precipitator and six baghouses

The applicant is the owner of the facility located at:

50 North Danebo Avenue
Eugene, OR 97402

Technical Information

The claimed air pollution control facility consists of a new Geoenergy electrostatic precipitator (ESP), numerous secondary baghouses, and connecting six additional baghouses to a pneumatic conveyor system. The following components are included in this application:

A Geoenergy E-tube style wet ESP designed to control the emissions from the first stage of a new two-stage flash-tube dryer. It is designed for 60,000 acfm. An existing wet ESP serves in tandem with the new ESP. The existing wet ESP was not large enough to handle the first-stage volume and maintain air quality requirements; therefore the new ESP was installed.

Previously the particleboard process utilized two dryers, a rotary pre-dryer and a flash tube final dryer. Exhaust off the pre-dryer was routed to a wet ESP and the flash dryer exhaust was routed to a low energy wet scrubber. The new Westec first stage dryer exhaust is routed to the two wet ESPS, and the Westec second stage dryer exhaust is routed to a new baghouse (BH-11, described below). The new two-stage flash-tube dryer is designed for an air volume of 100,000 cfm.

WP630 Baghouse filter (BH-1) removes particulate from the exhaust from the reject, trim, and clean-up cyclone and from the shaveoff cyclone.

WP386 Baghouse filter (BH-2) removes particulate from the ducted airstreams pulling dust off of the forming conveyor system which is operated by four vacuum fans.

WP42 Baghouse filter (BH-6) removes sanderdust generated at the discharge of Sander Dust Silo No. 1 and 2.

WP72 Baghouse filter (BH-8) removes particulate from the airstream pulling dust off the Saw Trim Silo. The saw trim air system was modified which added a new baghouse at the raw material collecting screw.

Donaldson Baghouse filter (BH-11), a relay exhaust baghouse filter system with an air to cloth ratio of 5: 1, fans and associated equipment were added to control particulate emissions from the exhaust off the second stage of the dryer.

WP121 Baghouse filter (CY-1) removes dust from the cross belt sander.

The applicant claimed a **new high pressure pneumatic conveying system** as a air pollution control device. The product conversion from particleboard to medium density fiberboard required modification to the material handling systems. The conversion to medium density fiberboard (MDF) production resulted in the inability to convey this new type of fiber with the old system because of the fiber characteristics. The applicant submitted Drawing Number 9408-AL-02, titled Pneumatic System Flow Diagram, on which the applicant highlighted the pneumatic piping that made up the claimed facility. A review of the this system revealed the claimed facility is being used to convey fiber as part of the manufacturing process of MDF.

Air emissions of all criteria pollutants except CO and NOx have been lowered as a result of the additional ESP and the new baghouses. The pneumatic conveying system conveys the product to the air cleaning devices. Air emission rates have been reduced as indicated in the table below. Values shown are in tons per year.

	1977	1994	1996	Change	Change
Pollutant	**Particleboard**	**Particleboard**	**MDF**	**from**	**from**
	Baseline	**Actual**	**Projected**	**1994**	**1977**
CO	46	53	63	10	17
Lead	.006	.0017	.0006	-.0011	-.0054
NOx	100	110	133	j23	33
PM	195	94	56	-38	-139
PM10	148	77	50	-27	-98
S02	2	2	1	-1	-1
VOC	202	175	181	6	-21

Eligibility

ORS 468.155 (1)(a)(B) The **principal purpose** of this **new ESP and baghouse filters** is to comply with the requirements of ACDP #200529 to control air pollution.

ORS 468.155 (1)(b)(B) Elimination of **air pollution** is accomplished with the use of air cleaning devices as defined in ORS 468A.005

ORS 468.155 (1)(a)(B) The **principal purpose** of the **new pneumatic conveying system** is **not** to comply with the requirements by ACDP #200529 to reduce or control air pollution.

ORS 468.155 (1)(b)(B) The pneumatic conveying system does not elliminate air pollution and is not an air cleaning device as defined in ORS 468A.005. The pneumatic system is required to convey the raw materials.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**2/2/98**
Additional Information Requested	**3/20/98**
Additional Information Received	**9/15/98**
Additional Information Received	**12/8/99**
Application Substantially Complete	**12/8/99**
Construction Started	**9/94**
Construction Completed	**2/19/96**
Facility Placed into Operation	**2/19/96**

Facility Cost

Claimed Facility Cost	**$ 1,511,959**
Ineligible Costs	
Pneumatic Conveying System	- $ 330,870
Baghouse Sprinkler Systems	- 25,861
Eligible Facility Cost	**$ 1,155,228**

Copies of purchase orders,invoices, and the project matrix cost listing substantiated 100% of the eligible facility cost. **KPMG Peat Marwick L.L.P**. provided a certified public accountant's statement on behalf of Willamette Industries. The facility cost is greater than $500,000, therefore Maggie Vandehey performed an accounting review on behalf of the Department with documentation obtained in the engineering review.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. No gross annual revenues are associated with this facility; therefore there is zero return on the investment.
ORS 468.190(1)(c) Alternative Methods	The applicant identified no alternatives.
ORS 468.190(1)(d) Savings or Increase in Costs	There are no savings from the facility.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance/Other Tax Credits

The applicant claims the facility is in compliance with Department rules and statutes and with EQC orders. The following DEQ permits have been issued to Willamette Industries Eugene MDF Division:

ACDP 200529, issued 12/95
Storm Water, 1200-Z, issued 10/1/92
Waste water 1700-J, issued 2/1/95

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Maggie Vandehey, DEQ

Willamette Industries, Inc.
Executive Offices

1300 S.W. Fifth Ave., Suite 3800
Portland, OR 97201
(503) 227-5581

December 8, 1999

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

Subject: ODEQ Pollution Control Facility Tax Credit Application No. 4927

Dear Commissioners:

Summary of Response

As you are aware, in the matter bearing ODEQ Application No. 4927he staff of the Oregon Department of Environmental Quality ("Department") has recommended certification only a portion of the Eugene Air System for pollution control tax credits. For the reasons explained below, Willamette Industries, Inc., requests that the EQC certify the facility in its entirety.

I. Principal Purpose Test is Met

The DEQ is incorrectly recommending disallowance of the pneumatic system at our Eugene MDF plant. This plant converted from a mechanical system of conveying wood fiber raw material to a pneumatic system. The system includes several baghouses that have been determined to qualify as pollution control equipment. The conversion from a mechanical system to a pneumatic one was required in order to maintain or reduce emissions. The **principal purpose of the facility** (a pneumatic controlled raw material conveying system with baghouses) is to control particulate emissions into the air. This integrated system, not just the specific air cleaning devices within this system, qualify for the pollution control tax credit. As required by ORS 468.155(1)(b)(B), the principal purpose of this new equipment, devices and installation is to prevent and reduce a substantial quantity of air pollution as required by ACDP #200529.

It is a well established doctrine in tax law that incentive/tax relief provisions of the statutes are to be construed liberally to effectuate their purpose. *Asjes v. Commissioner,* 74 TC 1005 (1980), *Davis v. United States,* 589 f.2d 446 (9th Cir. 1979). The recommended interpretation is neither liberal nor equitable.

Very truly yours,

Jim Aden, Tax Research Manager

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Willamette Industries, Inc.**
Application No.	**4934**
Facility Cost	**$1,398,042**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a particleboard manufacturer taking tax relief under taxpayer identification number 93-0312940. The applicant is the owner of the facility. The applicant's address is:

Duraflake Division
1300 SW Fifth Ave.
Suite 3800
Portland, OR 97201

Facility Identification

The certificate will identify the facility as:

Two Geoenergy 1013-189 Wet E-tube Electrostatic Precipitors (ESPs)

The facility is located at:

2550 Old Salem Road, NE
Albany, OR 97321

Technical Information

The claimed facility consists of two GeoEnergy E-tube wet ESPs, model 1013-189 with a 99% destruction efficiency. The wet ESPs remove particulate generated from the newly installed Westec 120 dryer and from the existing Hiel 105 dryer at the Duraflake plant. Wet ESPs are considered the best available control technology for controlling particulate emissions and opacity. The claimed facility reduced particulate emissions from 85.68 tons per year (tpy) to 42.84 tpy and opacity from 20% to under 5%.

One of the wet ESPs replaced the wet scrubber off of the Hiel 105 dryer. This old wet scrubber had previously been certified. The new Westec dryer replaced the existing Hiel 85 dryer and the second new wet ESP replaced a second wet scrubber off of the old Hiel 85 dryer. This wet scrubber had not previously been certified.

Eligibility

ORS 468.155 (1)(a)(A) The **principal** purpose of this **new equipment installation** is to comply with the requirements of the applicants Oregon Title V Operating Permit No. 22-0143 issued 12/1/95. Condition 3.c of the permit states, "At any time during the permit term, the permittee may modify emissions unit 205 by replacing the existing 9-foot diameter dryer with a 12-foot diameter gas fired Westec dryer. If this modification takes place, the permittee **shall** install wet ESP control devices on emissions units 203 and 205. These control devices would be identified as ESP ET-1 and ET-2....."

ORS 468.155 (1)(b)(B) The wet ESPs **removes contaminants** from the exhaust air, **eliminating air pollution** as defined in ORS 468A.005.

ORS 468.155 (2)(e) ET-1 is eligible as a **replacement facility** since it is a requirement imposed by the Department and it replaced a certified wet scrubber (Certificate No. 1382 on March 5, 1982.)

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**2/5/98**
Additional Information Requested	**4/14/98**
Additional Information Received	**10/5/98**
Additional Information Requested	**3/4/99**
Additional Information Received	**4/29/99**
Additional Information Received	**7/12/99**
Additional Information Received	**11/11/99**
Additional Information Received	**11/23/99**
Application Substantially Complete	**11/24/99**
Construction Started	**9/1/95**
Construction Completed	**2/16/96**
Facility Placed into Operation	**2/16/96**

Facility Cost

Claimed Facility Cost	**$ 1,478,486**
Ineligible Costs (Like-for-like replacement cost)	$ - 80,444
Eligible Facility Cost	**$ 1,398,042**

Copies of the purchase order, invoices and the Willamette Industries internal project matrix listing report were provided which substantiated the eligible facility cost. **KPMG Peat Marwick LLP** provided the certified public accountant's statement on behalf of Willamette Industries. The claimed

costs exceed $500,000, therefore Maggie Vandehey performed the accounting review on behalf of the Department.

"Like for Like Replacement Cost" means the current price of providing a new facility of the same type, size and construction materials as the original facility. The replaced wet scrubber accounts for $54,531 of the facility cost on Certificate No. 1382; which was 80% allocable to pollution control. The replaced facility began operation in September 1980 when the consumer price index (CPI) was 84. The replacement facility (ESP – ET1) was placed into operation in February 1996 when the CPI was 154.9. Therefore, the replacement cost of the original facility is calculated as follows:

$ 43,625	Amount allocated to original pollution control facility ($54,531 x 0.80)
x 1.844	2/96 CPI minus 9/80 CPI divided by the 9/80 CPI plus 1 [(154.9 - 84) / 84] + 1 = 1.844
$80,444	Like-for-like replacement cost of the original facility

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the facility cost exceeds $50,000 and therefore, the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	**Applied to This Facility**
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. No gross annual revenues associated with this facility.
ORS 468.190(1)(c) Alternative Methods	No alternative investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings or increase in costs.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance

The applicant states that the facility is in compliance with Department rules and statutes and with EQC orders. DEQ permits issued to the Willamette Industries Duraflake Particleboard Division site:

Title V Operating Permit #22-0143, issued 12/1/95
NPDES 100668

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Dennis E. Cartier, Associate, SJO Consulting Engineers, Inc.
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Willamette Industries, Inc.**
Application No.	**4978**
Facility Cost	**$1,423,208**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a plywood manufacturing plant. The applicant's taxpayer identification number is 93-0312940 and their address is:

Springfield Plywood Division
1300 SW Fifth Avenue, Suite 3800
Portland, OR 97201

Facility Identification

The certificate will identify the facility as:

A Geoenergy E-Tube Electrosatic Precipitator (ESP) System, model 1013-248 2TR.

The applicant is the owner of the facility located at:

419 S 28th Street
Springfield, OR 97477

Technical Information

The facility consists of a Geoenergy E-Tube ESP, model 1013-248 2TR and associated electrical components, structural foundation and footings, and piping. The facility removes air pollutants from the two veneer dryer exhaust stacks. It is designed for 60,000 acfm and has 248 tubes.

The dryer exhaust stacks are routed through the electrostatic precipitator for collection of the fine particulate then discharged into the atmosphere, thereby controlling blue haze emissions associated with the wood drying process. Average opacity is 10%.

Eligibility

ORS 468.155 (1)(a) The **principal purpose** of this **new installation and equipment** is to prevent, control or reduce a substantial quantity of air pollution. The requirement is imposed by the Lane Regional Air Pollution Authority in the Stipulated Final Order (SFO #1142). Since Springfield is a non-attainment area for PM_{10}, the Lowest Achievable Emission Rate **(LAER)** criteria must be met.

ORS 468.155 (1)(b)(B) The disposal or elimination of or redesign to eliminate air contamination sources and the use of air cleaning devices as defined in ORS 468A.005

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**4/2/98**
Additional Information Requested	**6/3/98**
Additional Information Received	**9/22/98**
Additional Information Received	**11/11/99**
Additional Information Received	**11/18/99**
Application Substantially Complete	**11/23/99**
Construction Started	**10/28/96**
Construction Completed	**5/15/97**
Facility Placed into Operation	**5/15/97**

Facility Cost

Claimed Facility Cost	**$ 1,423,208**
Allowable Facility Cost	**$ 1,423,208**

Copies of invoices, purchase order records, the Willamette Industries internal project matrix listing and the general ledger accounts payable reports were provided to substantiate the claimed facility cost. Maggie Vandehey performed an accounting review on behalf of the Department using documentation received during the engineering review.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the facility cost exceeds $50,000; therefore, the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. No gross annual revenues associated with this facility.
ORS 468.190(1)(c) Alternative Methods	No alternative investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings however operating costs increased.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance

The applicant states that the facility is in compliance with Department rules and statutes and with EQC orders.

DEQ permits issued to facility:

Air discharge 208864, issued 1/1/88
Storm water 1200-Z, issued 11/14/97
City sewer W-200-S-110696, issued 12/10/96

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Dennis Cartier, Associate, SJO Consulting Engineers, Inc.
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Willamette Industries, Inc.**
Application No.	**4986**
Facility Cost	**$402,848**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a millwork and coating entity and a laminated veneer lumber entity. The applicant's taxpayer identification number is 93-0312940 and their address is:

1300 SW Fifth Avenue
Suite 3800
Portland, OR 97201

Facility Identification

The certificate will identify the facility as:

Four Western Pneumatic baghouses: three model WP630 and one model WP460.

The applicant is the owner of the facility of the facility located at:

2812 Old Salem Road
Albany, OR 97321

Technical Information

The claimed facility consists of four baghouse/cyclone combination systems. Process exhaust air associated with the Laminated Veneer Lumber (LVL) operation are routed to a cyclone to recover wood waste. The wood waste from this cyclone is ducted in a high-pressure system to a second smaller cyclone at the inlet to the chip bins. The exhaust from the second cyclone is ducted to a Western Pneumatics Model WP460 baghouse to control wood dust emissions.

Exhaust air from various machines in the Custom Products production line is routed to three cyclones to recover wood waste. The exhaust from these cyclones is ducted to three Western Pneumatic Model WP630 baghouses to control wood dust emissions.

The model WP460 baghouse has an air to cloth ratio of 5.4 to 1 and the model WP630 baghouses have an air to cloth ratio of 5.9 to 1. The baghouses have an estimated efficiency of 97% and emissions are expected to total less than 0.2 tons per year. The particulate captured in the baghouses is disposed of offsite.

Eligibility

Baghouses

ORS 468.155 (1)(a) The **principal purpose** of this **new equipment and installation** is to comply with an ACDP requirement imposed by the DEQ to control air pollution.

ORS 468.155 (1)(b)(B) The control is accomplished by elimination of air contaminants and the use of air cleaning devices as defined in ORS 468A.005.

Cyclones

ORS 468.155 (1)(a) The **principal purpose** of this **new equipment and installation** is **not** to comply with a requirement imposed by the DEQ or the federal Environmental Protection Agency to prevent, control or reduce air pollution.

ORS 468.155 (1)(b)(B) The **sole purpose** of this **new equipment and installation** is not to prevent, control or reduce a substantial quantity of air pollution. It's other purpose is to recover process materials and prevent damage to the baghouse.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**4/3/98**
Additional Information Requested	**5/19/98**
Additional Information Received	**9/22/98**
Additional Information Received	**11/10/99**
Application Substantially Complete	**12/7/99**
Construction Started	**9/1/95**
Construction Completed	**12/1/96**
Facility Placed into Operation	**12/1/96**

Facility Cost

Claimed Facility Cost		**$ 961,680**
Ineligible Costs:		
Western Pneumatics cyclones and ducting, and:	$ 518,909	
Overtime for Accelerated Schedule	9,360	
Slipsets to 7" pipes	1,447	
Piping to Test Lab	2,496	
Collapsed Pipe Repair	10,656	
Rework Roof Supports	6,320	
Hook Up Splitter Saw	5,473	
Sander Hoods and Piping	3,992	
Shut-Off Valves	179	
Total Ineligible		($ 558,832)
Eligible Facility Cost		**$ 402,848**

Copies of purchase orders, invoices, and the internal matrix project cost listing substantiated 100% of the eligible facility cost. The cost of the baghouses and motors was provided by Western Pneumatics. The claimed facility included the costs associated with the cyclones and ducting. This equipment is ineligible because they do not perform any pollution control function. They provide the ability to convey and recover product prior to exhausting to the baghouses. Spark detection was not eliminated as an ineligible cost.

A certified public accountant's statement was not provided because the claimed costs exceed $500,000; therefore, **Maggie Vandehey** performed the accounting review on behalf of the Department.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the facility cost exceeds $50,000 and therefore, the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	The cyclones recover a useable commodity valued at $84,000 per year.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. Gross annual revenues associated with this facility are $51,101.
ORS 468.190(1)(c) Alternative Methods	No other alternatives were investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings or increase in costs.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Compliance

The applicant states the facility is in compliance with Department rules and statutes and with EQC orders. DEQ permits issued to facility:

ACDP # 22-0002 issued 10/95;
Storm Water Erosion Control 1200-C;
Storm Water Discharge #1200-Z.

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Dennis E. Cartier, Associate, SJO Consulting Engineers, Inc.
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Willamette Industries, Inc.**
Application No.	**5020**
Facility Cost	**$542,210**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: Water
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a paper mill. The applicant's taxpayer identification number is 93-0312940 and their address is:

1300 SW Fifth Avenue
Suite 3800
Portland, OR 97201

Facility Identification

The certificate will identify the facility as:

Storm water control system.

The applicant is the owner of the facility located at:

50 North Danebo Avenue
Eugene, OR 97402

Technical Information

A storm water control system, including sloped concrete paving, a settling basin, ditch covers, and a sawdust storage slab was constructed to prevent surface water contamination. The storm water control plan is a requirement of the NPDES General Permit 1200Z (reissued NPDES 1200-W) contamination by reducing debris (primarily wood fiber) in storm water runoff. Resin containment facilities (concrete barriers) were also designed and installed to prevent leaks and spills from contaminating storm water runoff to the city storm water system or to neighboring wetlands.

Storm water diversion and debris removal has minimized the volume and contamination levels of storm water discharges from the sawmill. Storm water discharge is being monitored and is meeting the storm water benchmarks required in the NPDES General Permit 1200Z.

Eligibility

ORS 468.155 (1)(a) The applicant claims **principal purpose** of this **new device** is to comply with a requirement of the DEQ to control a substantial quantity of water pollution. The applicant states that the requirement is imposed by Stormwater permit 1200-Z, issued 7/22/97

ORS 468.155 (1)(b)(A) The control is accomplished by the disposal or elimination of industrial waste and the use of treatment works for industrial waste as defined in ORS 468B.005.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**2/13/98**
Additional Information Requested	**3/20/98**
Additional Information Received	**9/15/98**
Application Substantially Complete	**10/2/98**
Construction Started	**9/1/94**
Construction Completed	**2/19/96**
Facility Placed into Operation	**2/19/96**

Facility Cost

Facility Cost	**$ 542,210**
Eligible Facility Cost	**$ 542,210**

Copies of invoices and internal project ledgers were provided by Willamette Industries which substantiated 100% of the eligible facility cost. The claimed facility cost exceeds $500,000 therefore, Maggie Vandehey performed an accounting review on behalf of the Department with documentation obtained through the engineering review. KPMG Peat Marwick L.L.P. performed an accounting review on behalf of Willamette Industries.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the facility costs exceeds $50,000 and therefore, the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. No gross annual revenues are associated with this facility, therefore there is zero return on the investment.
ORS 468.190(1)(c) Alternative Methods	The applicant identified no alternatives.
ORS 468.190(1)(d) Savings or Increase in Costs	There are no savings from the facility.
ORS 468.190(1)(e) Other	No other relevant factors.

Relevant Factors

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance and Other Tax Credits

The applicant claims the facility is in compliance with the conditions of the NPDES General Permit 1200-Z.

DEQ permits issued to the Eugene MDF Division site:
ACDP 200529, issued 12/95
Storm water 1200-Z, issued 7/22/97
Waste water 1700-J, issued 2/1/95

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Dennis E. Cartier, Associate, SJO Consulting Engineers, Inc.
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Russell Oil Company**
Application No.	**5191**
Facility Cost	**$23,320**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **an S corporation**
Business: **a retail gas station and store**
Taxpayer ID: **93-0815129**

The applicant's address is:

PO Box 7
Boardman, OR 97818

Facility Identification

The certificate will identify the facility as:

Impressed current cathodic protection on underground storage tanks, automatic tank gauge system with overfill alarm and line leak detectors.

The applicant is the owner of **DEQ Facility ID 4312,** located at:

1430 N 1st
Hermiston, OR 97838

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **addition** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**04/19/1999**
Application Substantially Complete	**12/01/1999**
Construction Started	**03/01/1999**
Construction Completed	**03/20/1999**
Facility Placed into Operation	**03/20/1999**

Facility Cost

Corrosion Protection	
Cathodic protection (impressed current)	$7,985
Leak Detection	
Automatic tank gauge system with alarm	6,073
Line leak detectors	699
Labor, material, misc. parts	8,563
Eligible Facility Cost	**$23,320**

The facility cost does not exceed $50,000. An independent accounting review was not required. However, invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost does not exceed $50,000. According to ORS 468.190 (3), the only factor used in determining the percentage allocable to pollution control is the percentage of time the facility is used for pollution control. Therefore, the percentage of the facility cost allocable to pollution control is **100%**.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewers: Barbara J Anderson

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant **Cascade General, Inc.**
Application No. **5223**
Facility Cost **$1,935,351**
Percentage Allocable **100%**
Useful Life **10 years**

Pollution Control Facility: Water
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **a C corporation**
Business: **ship repair and conversion**
Taxpayer ID: **93-0956534**

The applicant's address is:

5555 N Channel Avenue
Portland, OR 97217

Facility Identification

The certificate will identify the facility as:

wastewater treatment system

The applicant is the owner of the facility located at:

5555 N Channel Avenue
Portland, OR 97217

Technical Information

The Port of Portland owns three Dry Docks (Dry Docks 1, 3 and 4) at the Portland Shipyard. Cascade General, Inc. operates the Dry Docks to perform ship repair and conversion under a lease agreement with the Port.

The claimed facility collects, conveys, stores and treats wastewater generated by the Dry Docks. The wastewater consists of process water and storm water. Process water is generated during the ship repair and maintenance operations of hydroblasting, pressure washing, and sandblasting. Storm water is generated from rainfall that falls on the open Dry Docks and mixes with the process water.

The collection system consists of walls and dams on the Dry Docks that direct wastewater to catch basins at the landside end of the three Dry Docks. Two pumps are installed in each of the catch basins to transfer the wastewater through dedicated piping to the treatment facility.

The treatment system is designed to remove suspended solids, oil and grease, and dissolved metals. The treatment processes consist of storage, inlet solids removal, chemical precipitation, clarification, and filtration. The treatment facility includes of the following components:

100,000 gallon holding tank: Provides storage and flow equalization for the peak daily wastewater flow of 100,000 gallons. Two feed pumps transfer the wastewater at 100 gallons per minute (gpm) to treatment.

Grit removal: Separators remove the majority of the suspended solids from the wastewater, comprised mainly of paint chips and sandblast grit. The separated solids are collected for offsite disposal.

Chemical treatment: Treatment is carried out in a 1,800 gallon, agitated tank. Dimethyldithiocarbamate (DTC) and Bentonite Clay are metered into the treatment tank. DTC converts the dissolved metals to insoluble salts that precipitate. Clay is added to absorb oil and some additional metals. The treated wastewater with the chemical precipitates overflows to the clarifier.

Clarification: The chemical precipitates are removed in a three-stage clarifier. The first stage of the clarifier is a rapid mixing of the wastewater with a polymer solution. The polymer binds the precipitates together into larger particles. In a second slowly mixed stage, the particles continue to grow in size and density. In the third stage, the wastewater enters a settling chamber, where the solids settle into an internal sludge holding tank. The clarified wastewater overflows to 1,000-gallon tank where it is pumped to a filter.

Filtration: The filter removes the residual solids that pass through the clarifier. The solids collected in the filter are returned to chemical treatment. The filtered wastewater is pumped to an existing outfall for discharge to the Willamette River.

Sludge Dewatering: The precipitated solids are periodically withdrawn from the clarifier and pumped to a sludge holding tank. When this tank is full, the sludge is pumped to a plate and frame filter press, where the solids and water are separated. The dewatered solids are collected for offsite disposal. The water is returned to chemical treatment.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **new installation of equipment, piping and building** is to, control a substantial quantity of water pollution.
ORS 468.155 (1)(b)(A)	The disposal or elimination of or redesign to eliminate industrial waste and the use of treatment works for industrial waste as defined in ORS 468B.005

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**6/22/99**
Additional Information Requested	**10/15/99**
Additional Information Provided	**11/2/99**
Application Substantially Complete	**11/3/99**
Construction Started	**1/1/94**
Construction Completed	**10/1/97**
Facility Placed into Operation	**10/1/97**

Facility Cost

Facility Cost	**$2,076,909**
US Navy Reimbursement	**($141,558)**
Eligible Cost	**$1,935,351**

The facility cost exceeds $500,000. Maggie Vandehey performed the accounting review on behalf of the Department. The applicant's itimization of the facility costs was thouroughly substantiated through The Port of Portland's accounting reports. Internal labor direct is based upon actual hours worked and labor indirects are reasonable.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control. The percentage of the facility cost allocable to pollution control is **100%**.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 10 years. No gross annual revenues were associated with this facility.
ORS 468.190(1)(c) Alternative Methods	No alternative investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings or increase in costs.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statues. The following DEQ permits have been issued at this location: NPDES Permit 101393, issued 5/8/98. Title V Operating Permit 26-3224, issued 7/2/989

Reviewers: Bill Carson, Carson Engineering
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Willamette Industries, Inc.**
Application No.	**5227**
Facility Cost	**$118,175**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a **particleboard manufacturer**. The applicant's taxpayer identification number is 93-0312940 and their address is:

1300 SW Fifth Avenue
Suite 3800
Portland, OR 97201

Facility Identification

The certificate will identify the facility as:

Cover system for ply-trim and planer shavings storage pile

The applicant is the owner of the facility of the facility located at:

3401 Green River Road
Sweet Home, OR 97386

Technical Information

The claimed facility consists of a ply-trim and planer shavings storage pile cover, 175' wide by 350' long by 40' high. It includes a metal framework and chain-link fence around the perimeter of the shavings pile, tarps as a cover, and concrete blocks to anchor the tarps.

The function of the system is to minimize fugitive emissions of airborne particulate and reduce wood fiber in stormwater runoff. Notice of Approval for NC #016519 was issued by the DEQ on 8/20/97.

Eligibility

ORS 468.155 (1)(a)(A) The **principal purpose** of this **new device** is to comply with the following requirements imposed by DEQ to prevent air and water pollution. The requirement is imposed by DEQ:
OAR 340-021-0060 (2) states: No person shall cause, suffer, allow, or permit any materials to be handled, transported, or stored; or ……., without taking reasonable precautions to prevent particulate matter from becoming airborne.
OAR 340-025-0320 (1) states: Truck Dump and Storage Areas: (a) Every person operating or intending to operate a particleboard manufacturing plant shall cause all truck dump and storage areas holding or intended to hold raw materials to be enclosed

to prevent windblown particle emissions from these areas from being deposited upon property not under the ownership of said person; (b)
NPDES 1200-Z requires implementation of storm water best management practices (BMP) if technically and economically feasible which states "Fueling, manufacturing, treatment, storage, and disposal areas shall be covered to prevent exposure of storm water to potential pollutants. Acceptable covers include, but are not limited to, permanent structures such as roofs or buildings and temporary covers such as tarps."

ORS 468.155 (1)(b)(B) The prevention is accomplished by elimination of air contamination sources and with the use of an air cleaning device.
An air cleaning device is defined in ORS 468A.005 as a method which reduces air contaminants prior to their discharge to the atmosphere. The cover acts as a barrier to the release of air contaminants before they can become airborne.

OAR 340-016-0060 (4) (g) The facility is used to prevent spills or unauthorized releases.

OAR 340-016-0010 (10) defines a spill or unauthorized release as "The discharge, deposit, injection, dumping, spilling, emitting, releasing, leakage or placing of oil, hazardous materials, or other polluting substances into the air or into or on any land or waters of the state, as defined in ORS 468B.005, except as authorized by a permit issued under ORS Chapter 454, 459, 468, or 469, ORS 466.005 to 466.385, 466.880 (1) and (2), 466.890 and 466.995 (1) and (2) or federal law while being sored or used for its intended purpose;"

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**6/2/99**
Additional Information Requested	**7/23/99**
Additional Information Received	**8/23/99**
Application Substantially Complete	**12/7/99**
Construction Started	**9/27/98**
Construction Completed	**12/23/98**
Facility Placed into Operation	**12/23/98**

Facility Cost

Claimed Facility Cost	**$ 118,175**
Non-allowable Costs	
Allowable Facility Cost	**$ 118,175**

A certified public accountant's statement was performed by **KPMG Peat Marwick LLP** on behalf of the applicant. Copies of invoices were provided which substantiated 99% of the claimed facility cost.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the facility cost exceeds $50,000 and therefore, the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	The cover does not produce any salable or usable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. There is no gross annual revenue associated with this facility.
ORS 468.190(1)(c) Alternative Methods	No other alternatives were investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings and operating costs increase.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Compliance

The facility is in compliance with Department rules and statutes and with EQC orders.
DEQ permits issued to facility: NPDES Storm Water Discharge #1200-Z, issued 7/22/97

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Dennis E. Cartier, Associate, SJO Consulting Engineers, Inc.
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Arden, Inc.**
Application No.	**5243**
Facility Cost	**$201,782**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **an S corporation**
Business: **manufacturer of sand blasting abrasives, roofing granules, and foundry sands.**

Taxpayer ID: **93-1251219**

The applicant's address is:

PO Box D
Riddle, OR 97469

Facility Identification

The certificate will identify the facility as:

Installation of a Serbaco 20,000 CFM 1B Baghouse (ID # BH102)

The applicant is the owner of the facility located at:

6th & E Streets
Riddle, OR 97469

Technical Information

The claimed facility replaces an existing wet scrubber system with a baghouse system to reduce PM-PM10 emissions from 52.5 tons/year to 5.5 tons/year. The claimed facility consists of a used Serbaco 20,000 CFM 1B Baghouse (ID #BH102) from Glenbrook Nickel Company, with the required structures, controls and mechanical equipment.

Eligibility

ORS 468.155 (1)(a) The **principal purpose** of this **new installation** is to prevent, control or reduce a substantial quantity of air pollution. The applicant installed the baghouse in response to changes that DEQ made to the applicant's Air Contaminant

Discharge Permit. The unit passed permit limits on October 17, 1998 according to the Notice of Approved Construction Completion dated December 10, 1998.

OAR 340-16-025(g)(B) **Replacement:** This facility is a replacement of a system that was no longer able to pass recent source testing. The applicant did not request a tax credits for the previous system.

ORS 468.155 (1)(b)(B) The baghouse project eliminates air contamination sources by the use of air cleaning devices as defined in ORS 468A.005

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**7/27/99**
Requested Additional Information	**8/30/99**
Received Additional Information	**9/15/99**
Application Substantially Complete	**9/15/99**
Construction Started	**5/20/98**
Construction Completed	**11/10/98**
Facility Placed into Operation	**11/10/98**

Facility Cost

Facility Cost	**$201,782**
Eligible Facility Cost	**$201,782**

The applicant applied for a waiver of the independent accounting review since invoices and canceled checks substantiated the cost of the facility. Maggie Vandehey performed the accounting review on behalf of the Department.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control. The percentage of the facility cost allocable to pollution control is **100%**.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	As of October 6, 1999, Green Diamond is stockpiling the dust recovered from the baghouse, they currently do not have a use for the material and it has no market value.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 10 years. No gross annual revenues were associated with this facility.
ORS 468.190(1)(c) Alternative Methods	Yes, alternatives were investigated, this method was chosen based on best available technology.

ORS 468.190(1)(d) Savings or Increase in Costs	The previous system used water and discharged wastewater containing solids into a settling pond which had to be dredged to keep operable.
	Dredging cost savings (from 1998) $17,932
	Electrical savings (pumps) $ 1,724
	Total annual savings $19,656
	Less baghouse bag changes <$ 2,500>
	Net annual cost savings **$17,156**
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. DEQ permits issued to facility: Air Contaminant Discharge Permit # 10-0066 expiring on 01/01/01.

Reviewers: Darrel Allison, P.E. HCMA Consulting Group
Jeff Ament, P.E. HCMA Consulting Group
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Co-Gen II, LLC**
Application No.	**5255**
Facility Cost	**$687,653**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a Limited Liability Corporation operating a wood waste fuel burning cogeneration plant. The applicant's taxpayer identification number is 93-0931641 and their address is:

PO Box 66
Riddle, OR 97469

Facility Identification

The certificate will identify the facility as:

PPC Industries electrostatic precipitator (Model 17R-1230-27125S) and ash removal system.

The applicant is the owner of the facility located at:

1991 Pruner Road
Riddle, OR 97469

Technical Information

The claimed air pollution control facility consists of a new PPC Industries electrostatic precipitator (ESP) and ash removal system. The facility controls particulate matter emissions from a woodwaste-fired boiler. The woodwaste firing the boiler comes from D.R. Johnson Lumber and several other wood products firms in the vicinity. Electrical power from the co-gen facilility is sold to the grid. The ESP model number describes it as having 17 gas passages 12 inches wide between the plates, 2 fields, rigid electrodes and a stack.

The system supplements a previously installed multiclone particulate control device which was inadequate to meet emission requirements. The new construction intercepted the ducting previously routed to the stack, constructed and installed new ducting to the ESP, constructed and installed the ESP and necessary auxiliary equipment, including a foundation and a new stack, and constructed and installed an ash removal system. Additional work was required after initial installation to resolve electrical problems, including inadequate grounding. The initial design of the ESP ash removal system dumped the ash at a location on an existing ash drag conveyor that proved to present problems

for the existing ash drag conveyor system. The ESP ash removal system was modified slightly to resolve these problems.

Ash from the ESP is hauled by truck to an on-site disposal pit which is in compliance with regulations.

Air emissions of particulate matter have been decreased by 53 tons per year as a result of the ESP and the ash removal system.

Eligibility

ORS 468.155 (1)(a)(B) The **principal purpose** of this **new equipment, devices and installation** is to **prevent** and **reduce** a substantial quantity of air pollution as required by Title V Operating Permit 10-0002. The primary purpose of the ash conveyor systmen is not pollution control but material handeling.

ORS 468.155 (1)(b)(B) The ESP eliminates **air contamination sources** and the use of air cleaning devices as defined in ORS 468A.005. The ash conveyor is not an air cleaning device.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**8/10/99**
Additional Information Requested	**9/9/99**
Additional Information Received	**10/1/99**
Application Substantially Complete	**10/1/99**
Construction Started	**9/20/98**
Construction Completed	**10/21/98**
Facility Placed into Operation	**1/8/99**

Facility Cost

Claimed Cost	**$ 728,281**
Ineligible Cost	
Ash removal conveyor – initial installation	**(25,681)**
Modifications to ash conveyor	**(8,021)**
Invoice #249 submitted in error	**(126)**
Ash drag conveyor replacement chain	**(6,800)**
Eligible Facility Cost	**$687,653**

Copies of invoices and canceled checks substantiated most of the facility cost. Vendors confirmed product shipment and payment on the remaining amount. Maggie Vandehey performed the accounting review on behalf of the Department.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 20 years. No gross annual revenues are associated with this facility; therefore there is zero return on the investment.
ORS 468.190(1)(c) Alternative Methods	The applicant identified no alternatives.
ORS 468.190(1)(d) Savings or Increase in Costs	There are no savings from the facility.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance/Other Tax Credits

The applicant claims the facility is in compliance with Department rules and statutes and with EQC orders. A Title V Operating Permit was issued to Co-Gen II, LLC on 1/6/97

Reviewer: Michael G. Ruby, Ph.D., P.E., Envirometrics, Inc.
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Co-Gen Co., LLC**
Application No.	**5256**
Facility Cost	**$588,507**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a Limited Liability Corporation operating a wood waste fuel burning cogeneration plant. The applicant's taxpayer identification number is 93-0916485 and their address is:

PO Box 66
Riddle, OR 97469

Facility Identification

The certificate will identify the facility as:

PPC Industries electrostatic precipitator (Model 17R-1230-27125S) and ash removal system.

The applicant is the owner of the facility located at:

457 Front Street
Prairie City, OR 97869

Technical Information

The claimed air pollution control facility consists of a new PPC Industries electrostatic precipitator (ESP) and ash removal system. The facility controls particulate matter emissions from a woodwaste – fired boiler. The wood waste comes from Prairie Wood Products and other regional industrial sources. Electrical power from the co-gen facility is sold into the grid. The ESP model number describes it as having 17 gas passages 12 inches wide between the plates, 2 fields, rigid electrodes and a stack.

The ESP supplements a previously installed (1985) multiclone particulate control device that was inadequate to meet emission requirements. The new construction intercepted the ducting previously routed to the stack, constructed and installed new ducting to the ESP, constructed and installed the ESP and necessary auxiliary equipement, including a foundation and a new stack, and constructed and installed an ash removal system.

The collected ash is taken to an on-site disposal pit. Air emissions of particulate matter have been

decreased by 80 tons per year as a result of installation of the ESP.

Eligibility

ORS 468.155 (1)(a)(B) The **principal purpose** of this **new equipment, devices and installation** is to **prevent** and **reduce** a substantial quantity of air pollution as required Title V Air Operating Permit 12-0001.

ORS 468.155 (1)(b)(B) The disposal or elimination of or redesign to eliminate **air contamination sources** and the use of air cleaning devices as defined in ORS 468A.005

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**8/10/99**
Additional Information Requested	**9/9/99**
Additional Information Received	**10/1/99**
Application Substantially Complete	**10/1/99**
Construction Started	**1/25/99**
Construction Completed	**2/19/99**
Facility Placed into Operation	**5/18/99**

Facility Cost

Claimed Cost	**$610,485**
Ash removal system	**(21,978)**
Eligible Cost	**$588,507**

Copies of purchase orders and canceled checks substantiated the facility cost. Maggie Vandehey performed the accounting review on behalf of the Department.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 20 years. No gross annual revenues are associated with this facility; therefore there is zero return on the investment.
ORS 468.190(1)(c) Alternative Methods	The applicant identified no alternatives.
ORS 468.190(1)(d) Savings or Increase in Costs	There are no savings from the facility.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Compliance/Other Tax Credits

The applicant claims the facility is in compliance with Department rules and statutes and with EQC orders. A Title V Operating permit was issued to Co-Gen Co., LLC on 1/6/97.

Reviewer: Michael G. Ruby, Ph.D., P.E., Envirometrics, Inc.
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Leroy & Lowell Kropf**
Application No.	**5274**
Facility Cost	**$81,742**
Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation operating as a grass seed cleaning business. The applicant's taxpayer identification number is 93-0812235 and their address is:

24305 Powerline Road
Harrisburg, Oregon 97446

Facility Identification

The certificate will identify the facility as:

Baghouse, model CSL 121TR10HEI

The applicant is the owner of the facility located at:

24305 Powerline Road
Harrisburg, Oregon 97446

Technical Information

The claimed air filtration facility includes a baghouse filter collector, model CSL 121TR10HEI, sized for 11,000 cfm with 121 polyester filter bags, fan and motor, airlock, 10 HP blower system, ductwork and piping. The facility is used in a grass seed cleaning warehouse. Dirty air and wastes are collected throughout the grass seed cleaning operation and ducted to the baghouse. The baghouse is periodically cleaned by reverse air flow provided by compressed air from a 10 HP air compressor. The collected particulate drops through a rotary air lock into a pnuematic low pressure conveying system which provides 200 cfm through a 3" pipe to a truck loadout bin. The waste is hauled off for disposal or animal feed. The applicant also claimed the room enclosing the baghouse where the filtered air is discharged.

Prior to installation of this facility, two less efficient cyclone/baghouse systems were used and external emissions were approximately 0.90 tons per year. The present system is 99% efficent and external emmisions have been reduced to 0.05 tons per year.

Eligibility

ORS 468.155 (1)(a)(B) The **principle purpose** of this **new equipment** is to **prevent** a substantial quantity of air pollution because it is in accordance with the applicants air contaminant discharge permit requirements.

ORS 468.155 (1)(b)(B) The **prevention** is accomplished by the elimination of air pollution and the use of the installed baghouses which meet the definition of an air cleaning device in ORS 468A.005.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**10/06/99**
Additional Information Requested	**11/11/99**
Additional Information Received	**11/24/99**
Application Substantially Complete	**11/24/99**
Construction Started	**04/15/99**
Construction Completed	**05/20/99**
Facility Placed into Operation	**05/20/99**

Facility Cost

Claimed Facility Cost		**$ 103,040**
Ineligible Costs		
Dust Collection Ductwork is not an eligible cost because it is for mechanical ventilation, not pollution control.	- ($ 13,264)	
Room enclosing baghouse does not make a significant contribution to pollution control, therefore is not an eligible cost item.	- (8,034)	
Total Ineligible Costs	-	**($21,298)**
Eligible Facility Cost		**$ 81,742**

Copies of invoices were provided which substantiated 100% of the eligible facility cost. The claimed facility cost is greater than $50,000 but less than $500,000, therefore, **Grove, Mueller & Swank, P.C.** performed an accounting review on behalf of the applicant and according to Department guidelines.

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the facility costs exceeds $50,000 and therefore, the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	The waste product produced as a result of this facility is hauled off for animal feed. It currently has no value.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. No gross annual revenues are associated with this facility, therefore there is zero return on the investment.

ORS 468.190(1)(c) Alternative Methods	The applicant identified no alternatives considered.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings result from the facility.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance and Other Tax Credits

The applicant claims the facility is in compliance with Department rules and statutes and with EQC orders. DEQ permits issued to the site: ACDP 22-0015, issued May 18, 1999.

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Dennis E. Cartier, Associate, SJO Consulting Engineers, Inc.
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Truax Harris Energy LLC**
Application No.	**5291**
Facility Cost	**$194,027**
Percentage Allocable	**89%**
Useful Life	**10 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: a **Limited Liability Corp.**
Business: **Retail Gas station**
Taxpayer ID: **93-1083912**

The applicant's address is:

P O Box 607
Wilsonville, OR 97070

Facility Identification

The certificate will identify the facility as:

Four doublewall fiberglass underground storage tanks, doublewall flexible plastic piping, spill containment basins, line leak detectors, sumps, monitoring wells, oil/water separator, automatic shutoff valves and Stage I vapor recovery.

The applicant is the owner of **DEQ Facility ID 171**, located at:

635 SE 7th Avenue
Portland, OR 97214

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**10/27/99**
Application Substantially Complete	**11/15/99**
Construction Started	**09/01/97**
Construction Completed	**12/01/97**
Facility Placed into Operation	**12/01/97**

Facility Cost

Corrosion Protection	
Fiberglass underground tanks – doublewall	$42,220
Flexible plastic piping – doublewall	4,050
Spill & Overfill Prevention	
Spill Containment basins	1,517
Oil/water separator	1,898
Sumps	2,980
Automatic shutoff valves	1,951
Leak Detection	
Line Leak detectors	1,206
Monitoring well	227
Automatic tank gauge system	1,504
VOC Reduction	
Stage I vapor recovery	1,537
Stage II vapor recovery	3,390
Labor, material, misc. parts	136,441
	$198,921
Ineligible Costs	($4,894)
The automatic tank gauge system ($1504) and Stage II vapor recovery ($3390) have already been claimed in prior applications and cannot be claimed again here (see Certificate Nos. 2280, 9/21/90 and 3387, 12/2/94)	
Eligible Facility Cost	**$194,027**

The applicant applied for a waiver of the independent accounting review since invoices or cancelled check substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control

Eligible Facility Cost	$194,027
Less Claimed Corrosion Protection	46,270

The allocable cost of a corrosion protected piping system is determined 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 this application:

System Cost				
Protected system cost	**$46,270**	less bare steel cost	**$21,520**	**24,750**

Total Reduced Cost	**172,507**
Total Reduced Cost ÷ Eligible Facility Cost = the percentage of the facility cost allocable to pollution control	**89%**

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

DEQ permits issued to facility:

Reviewers: Barbara J Anderson

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Truax Harris Energy LLC**
Application No.	**5292**
Facility Cost	**$317,343**
Percentage Allocable	**94%**
Useful Life	**10 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: a **Limited Liability Corp.**
Business: **Retail Gas station**
Taxpayer ID: **93-1083912**

The applicant's address is:

P O Box 607
Wilsonville, OR 97070

Facility Identification

The certificate will identify the facility as:

Four doublewall fiberglass underground storage tanks, doublewall flexible plastic piping, turbine leak detectors, sumps, monitoring wells, oil/water separator, automatic shutoff valves and Stage I vapor recovery.

The applicant is the owner of **DEQ Facility ID 6443,** located at:

2485 Mission Street SE
Salem, OR 97302

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**10/27/99**
Application Substantially Complete	**11/17/99**
Construction Started	**07/01/98**
Construction Completed	**10/01/98**
Facility Placed into Operation	**10/01/98**

Facility Cost

Corrosion Protection	
Fiberglass underground tanks – doublewall	$34,894
Flexible plastic piping – doublewall	15,872
Spill & Overfill Prevention	
Spill Containment basins	1,083
Overfill alarm	300
Oil/water separator	1,898
Sumps	5,443
Automatic shutoff valves	3,877
Leak Detection	
Turbine Leak detectors	861
Monitoring wells	256
Automatic tank gauge system	11,017
VOC Reduction	
Stage I vapor recovery	724
Labor, material, misc. parts	253,518
	$329,743
Ineligible Costs	($12,400)
The automatic tank gauge system ($11,017), overfill alarm ($300) and spill containment basins ($1,083) have already been claimed in prior tax credit applications and cannot be claimed again here (see Certificate Nos. 2322, 12/14/90 and 2166, 6/3/94).	
Eligible Facility Cost	**$317,343**

The applicant applied for a waiver of the independent accounting review since invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control

Eligible Facility Cost	$317,343
Less Claimed Corrosion Protection	50,766

The allocable cost of a corrosion protected piping system is determined 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 this application:

System Cost				
Protected system cost	**$50,766**	less bare steel cost	**$19,002**	**31,764**

Total Reduced Cost	**298,341**
Total Reduced Cost ÷ Eligible Facility Cost = the percentage of the facility cost allocable to pollution control	**94%**

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

DEQ permits issued to facility:

Reviewers: Barbara J Anderson

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Nadim & Lama Yaqoub**
Application No.	**5293**
Facility Cost	**$87,767**
Percentage Allocable	**88%**
Useful Life	**10 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **a Sole Proprietorship**
Business: **Retail Gas station**
Taxpayer ID: **141-46-0419**

The applicant's address is:

2675 Marche Hts.
Turner, OR 97392

Facility Identification

The certificate will identify the facility as:

One fiberglass-clad steel underground storage tanks (with two compartments), doublewall flexible plastic piping, spill containment basins, automatic tank gauge system, overfill alarm, sumps, monitoring well, automatic shutoff valves and stage II vapor recovery piping.

The applicant is the owner of **DEQ Facility ID 1612**, located at:

4495 River Rd., N.
Keizer, OR 97303

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quntity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**10/28/99**
Application Substantially Complete	**11/12/99**
Construction Started	**05/28/98**
Construction Completed	**07/20/98**
Facility Placed into Operation	**07/20/98**

Facility Cost

Corrosion Protection	
Fiberglass underground tanks – doublewall	$18,843
Flexible plastic piping – doublewall	4,500
Spill & Overfill Prevention	
Spill Containment basins	824
Overfill alarm	295
Sumps	3,958
Automatic shutoff valves	663
Leak Detection	
Monitoring well	117
Automatic tank gauge system with line leak det.	4,848
VOC Reduction	
Stage II vapor recovery piping	92
Labor, material, misc. parts	54,112
	$88,252
Ineligible Costs	($485)
Ten percent of the tank gauge system is ineligible since the device can serve other purposes, for example, inventory control.	
Eligible Facility Cost	**$87,767**

The applicant applied for a waiver of the independent accounting review since invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control

Eligible Facility Cost	$87,767
Less Claimed Corrosion Protection	23,343

The allocable cost of a corrosion protected piping system is determined 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 this application:

System Cost				
Protected system cost	**$23,343**	less bare steel cost	**$10,242**	**13,101**

Total Reduced Cost	**$77,525**
Total Reduced Cost ÷ Eligible Facility Cost = the percentage of the facility cost allocable to pollution control	**88%**

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewers: Barbara J Anderson

Tax Credit Review Report

EQC 9912

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Director's Recommendation: **APPROVE**

Applicant	**Exxon of Woodburn LLC**
Application No.	**5294**
Facility Cost	**$277,277**
Percentage Allocable	**93%**
Useful Life	**10 years**

Applicant Identification

Organized As: a **Limited Liability Corp.**
Business: **Retail Gas station**
Taxpayer ID: **93-1243105**

The applicant's address is:

850 Lawson Avenue
Woodburn, OR 97071

Facility Identification

The certificate will identify the facility as:

Two doublewall fiberglass underground storage tanks (one has two compartments), doublewall flexible plastic piping, spill containment basins, automatic tank gauge system, line leak detectors, overfill alarm, sumps, monitoring well, oil/water separator, automatic shutoff valves and stage II vapor recovery piping.

The applicant is the owner of **DEQ Facility ID 11751**, located at:

850 Lawson Avenue
Woodburn, OR 97071

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**10/28/99**
Application Substantially Complete	**11/12/99**
Construction Started	**08/05/97**
Construction Completed	**10/30/97**
Facility Placed into Operation	**11/03/97**

Facility Cost

Corrosion Protection	
Fiberglass underground tanks – doublewall	$32,921
Flexible plastic piping – doublewall	6,309
Spill & Overfill Prevention	
Spill Containment basins	1,300
Overfill alarm	300
Oil/water separator	3,000
Sumps	2,269
Automatic shutoff valves	1,955
Leak Detection	
Line Leak detectors	852
Monitoring well	127
Automatic tank gauge system	9,408
VOC Reduction	
Stage II vapor recovery piping	136
Labor, material, misc. parts	219,641
	$278,218
Ineligible Costs	($941)
Ten percent of the tank gauge system is ineligible since the device can serve other purposes, for example, inventory control.	
Eligible Facility Cost	**$277,277**

The applicant applied for a waiver of the independent accounting review since invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control

			Eligible Facility Cost	$277,277
			Less Claimed Corrosion Protection	39,230

The allocable cost of a corrosion protected piping system is determined 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 this application:

System Cost				
Protected system cost	**$39,230**	less bare steel cost	**$17,281**	**21,949**
			Total Reduced Cost	**259,996**
Total Reduced Cost ÷ Eligible Facility Cost = the percentage of the facility cost allocable to pollution control				**93%**

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewers: Barbara J Anderson

Application No. 5305

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT
POLLUTION PREVENTION PILOT PROGRAM

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1. Applicant

John Tea
The Hollywood Cleaners
1925A NE 42nd Avenue
Portland, Oregon 97213

The applicant owns and operates a perchloroethylene dry-cleaning shop located at 1925A NE 42nd Avenue Portland, Oregon.

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

2. Description of Facility

The claimed facility is a new non venting dry-to-dry perc dry-cleaning machine which was installed as a replacement for an old perc dry-cleaning machine which vented emissions to the atmosphere. The new perc machine reduces the creation of emissions by maintaining them within the machine.

Claimed Facility Cost: $ 36,000

3. Procedural Requirements

The facility is governed by ORS 468A.095 through 468A.098, and by OAR Chapter 340, Division 16.

The facility met all regulatory deadlines in that:

Installation of the pollution prevention facility was substantially completed on August 16, 1999. The application for final certification was received by the Department on November 4, 1999. The application was found to be complete on November 16, 1999, within one year of installation of the facility.

4. Evaluation of Application

Rationale For Eligibility

(1) The pollution prevention facility is eligible because it meets the requirement of avoiding the substantive requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP), specifically 40 CFR 63.320 to 63.325 national perchloroethylene air emissions standard for dry cleaning facilities.

The facility does not qualify for a pollution control tax credit under ORS 468.165 and 468.170.

(2) The owner installed equipment which resulted in perchloroethylene use of less than 140 gallons per year and the dry cleaning facility qualifies as a small area source under the NESHAP.

(3) The dry cleaning facility is registered under the Clean Air Act Title III National Emissions Standards for Hazardous Air Pollutants.

5. Summation

a. The pollution prevention facility was constructed in accordance with all regulatory deadlines.

b. The facility is eligible for final tax credit certification in that it meets the definition of a pollution prevention facility for this pilot program.

c. The applicant indicated that the tax credit program was not a determining factor in installing this equipment.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Prevention Facility Certificate bearing the cost of $ 36,000 be issued for the facility claimed in Tax Credit Application No. 5305.

DPK
11/16/99 10:34 AM

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Tomlin's Auto Service**
Application No.	**5306**
Facility Cost	**$37,697**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **a sole proprietorship**
Business: **a retail gas station**
Taxpayer ID: **SSN**

The applicant's address is:

751 Highway 99 N
Eugene, OR 97402

Facility Identification

The certificate will identify the facility as:

Epoxy lining and impressed current cathodic protection of four underground storage tanks and spill containment basins.

The applicant is the owner of **DEQ Facility ID 8344,** located at:

751 Hwy 99 N
Eugene, OR 97402

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a) The **principal purpose** of this **improvement** is to prevent, control or reduce a substantial quantity of air and water pollution.

OAR-016-0025 (2)(g) Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**11/09/1999**
Application Substantially Complete	**11/16/1999**
Construction Started	**10/29/1998**
Construction Completed	**12/15/1998**
Facility Placed into Operation	**12/15/1998**

Facility Cost

Corrosion Protection	
Epoxy lining on underground tanks	$23,597
Cathodic protection (impressed current)	$9,400
Spill & Overfill Prevention	
Spill Containment basins	$4,700
Eligible Facility Cost	**$37,697**

The facility cost does not exceed $50,000. An independent accounting review was not required, but was provided by Demers, Sawicki & Assoc., Inc. Invoices were also provided to substantiate the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost does not exceed $50,000. According to ORS 468.190 (3), the only factor used in determining the percentage allocable to pollution control is the percentage of time the facility is used for pollution control. Therefore, the percentage of the facility cost allocable to pollution control is **100%**.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewer: Barbara J Anderson

Director's Recommendation: **APPROVE**

Applicant	**Delbert Folk**
Application No.	**5307**
Facility Cost	**$68,195**
Percentage Allocable	**99%**
Useful Life	**10 years**

Tax Credit Review Report

EQC 9912

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **an Individual**
Business: **Retail Gas station**
Taxpayer ID: **SSN**

The applicant's address is:

324 SW Birdie Ct.
Warren, OR 97146-9408

Facility Identification

The certificate will identify the facility as:

Doublewall flexible plastic piping, automatic tank gauge system with alarm and sumps.

The applicant is the owner of **DEQ Facility ID 1013**, located at:

1215 S. Holladay
Seaside, OR 97138

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**11/09/99**
Application Substantially Complete	**11/16/99**
Construction Started	**10/01/97**
Construction Completed	**11/24/97**
Facility Placed into Operation	**11/24/97**

Facility Cost

Claimed Facility Cost

Corrosion Protection	
Flexible plastic piping – doublewall	$7,062
Spill & Overfill Prevention	
Sumps	5,329
Leak Detection	
Automatic tank gauge system with alarm	5,650
Labor, material, misc. parts	50,719
	$68,760
Ineligible Costs	$565
Ten percent of the tank gauge system is ineligible since the device can serve other purposes, for example, inventory control.	
Eligible Facility Cost	**$68,195**

The facility cost was greater than $50,000 but less than $500,000. Therefore, Demers, Sawicki & Associates, Inc., a CPA firm, performed an accounting review according to Department guidelines on behalf of the Applicant.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control

Eligible Facility Cost	$68,195
Less Claimed Corrosion Protection	7,062

The allocable cost of a corrosion protected piping system is determined 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 this application:

System Cost				
Protected system cost	**$7,062**	less bare steel cost	**$656**	**6,406**

Total Reduced Cost	**$67,539**
Total Reduced Cost ÷ Eligible Facility Cost = the percentage of the facility cost allocable to pollution control	**99%**

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

DEQ permits issued to facility:

Reviewers: Barbara J Anderson

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Bill VanValin Enterprises, Inc.**
Application No.	**5323**
Facility Cost	**$67,089**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **an S Corporation**
Business: **Retail Gas station**
Taxpayer ID: **93-1088688**

The applicant's address is:

1762 Main Street
Sweet Home, OR 97386

Facility Identification

The certificate will identify the facility as:

Impressed current cathodic protection on underground storage tanks, doublewall flexible plastic piping, singlewall fiberglass piping, automatic tank gauge system with alarm, sumps and automatic shutoff valves.

The applicant is the owner of **DEQ Facility ID 5768**, located at:

1762 Main Street
Sweet Home, OR 97386

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**11/10/99**
Application Substantially Complete	**11/23/99**
Construction Started	**09/08/94**
Construction Completed	**07/31/98**
Facility Placed into Operation	**07/31/98**

Facility Cost

Corrosion Protection	
Fiberglass & doublewall flexible plastic piping	$3,190
Impressed current cathodic protection	13,366
Spill & Overfill Prevention	
Overfill alarm	223
Sumps and automatic shutoff valves	4,495
Leak Detection	
Automatic tank gauge system	10,583
Labor, material, misc. parts	45,825
Claimed Cost	**$77,682**
Ineligible Costs	($10,593)

(A) Ten percent of the tank gauge system (1,058) is ineligible since the device can serve other purposes, for example, inventory control. (B) expenses for a soil and groundwater sampling report (7,062 and non-replaced tank decommissioning (2,473) are ineligible because they do not meet the definition of a pollution control facility in ORS 468.155.

Eligible Facility Cost **$67,089**

The facility cost was greater than $50,000 but less than $500,000. Therefore, Demers, Sawicki & Associates, Inc., a CPA firm, performed an accounting review according to Department guidelines on behalf of the Applicant.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control

Eligible Facility Cost	$67,089
Less Claimed Piping Corrosion Protection	3,190

The allocable cost of a corrosion protected piping system is determined 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 this application:

System Cost				
Protected system cost	**$3,190**	less bare steel cost	**$246**	**2,944**

Total Reduced Cost	**$66,843**
Total Reduced Cost ÷ Eligible Facility Cost = the percentage of the facility cost allocable to pollution control	**100%**

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewers: Barbara J Anderson

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT
POLLUTION PREVENTION PILOT PROGRAM

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1. Applicant

Chan T. Him
9500 A SW Wilsonville Rd.
Wilsonville, Oregon 97070

The applicant owns and operates a dry-cleaning shop located at 9500 A SW Wilsonville Road Wilsonville, Oregon.

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

2. Description of Facility

The claimed facility is a new dry-cleaning machine that uses Dow solvent. The new machine was installed as a replacement for a dry-cleaning machine that used perc as a solvent. The replacement eliminates the emissions of perc to the atmosphere.

Claimed Facility Cost: $ 35,000

3. Procedural Requirements

The facility is governed by ORS 468A.095 through 468A.098, and by OAR Chapter 340, Division 16.

The facility met all regulatory deadlines in that:

Installation of the pollution prevention facility was substantially completed on December 7, 1998. The application for final certification was received by the Department on November 12, 1999. The application was found to be complete when processed on December 2, 1999. A complete application was submitted within one year of installation of the facility.

4. Evaluation of Application

Rationale For Eligibility

(1) The pollution prevention facility is eligible because it meets the requirement of avoiding the requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAP), specifically 40 CFR 63.320 to 63.325 national perchloroethylene air emissions standard for dry cleaning facilities.

The claimed facility was installed between January 1, 1996 and December 31, 1999.

The facility does not qualify for a pollution control tax credit under ORS 468.165 and 468.170.

(2) The owner installed equipment which resulted in the elimination of perchloroethylene use and is in-turn not subject to the NESHAP.

(3) The dry cleaning facility has registered under the Clean Air Act Title III National Emissions Standards for Hazardous Air Pollutants.

5. Summation

a. The pollution prevention facility was constructed in accordance with all regulatory deadlines.

b. The facility is eligible for final tax credit certification in that it meets the definition of a pollution prevention facility for this pilot program.

c. The applicant indicated that the tax credit program was not a determining factor in installing this equipment.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Prevention Facility Certificate bearing the cost of $ 35,000 be issued for the facility claimed in Tax Credit Application No. T-5324.

DPK
12/02/99 10:50 AM

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Larry A. Isom**
Application No.	**5325**
Facility Cost	**$5,500.00**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: Field Burning
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **a Sole Proprietor**
Business: **grass seed farm**
Taxpayer ID: **Personal SSN**

The applicant's address is:
415 N 6th Street
Harrisburg, OR 97446

Facility Identification

The certificate will identify the facility as:

John Deere15' wide, rotating flail mower

The applicant is the owner of the facility located at:
30505 Substation Dr.
Harrisburg, OR 97446

Technical Information

Applicant open field burned grass seed fields up to 1995. He then turned to chopping the straw, plowing it under, harrowing, rolling, and land planing to incorporate the straw residue and stubble into the soil. Initially, the applicant borrowed his father's flail chopper but it became evident after several seasons that a wider flail chopper was required to more timely complete each season this phrase of the selected alternative to open field burning. This flail also chops the straw finer allowing for near complete decomposition over the fall and winter.

Eligibility

ORS 468.155 (1)(a)	The **sole purpose** of this **new equipment** is to prevent, control or reduce a substantial quantity of air pollution.
OAR-016-025 (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.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**11/12/99**
Application Substantially Complete	**12/1/99**
Construction Started	**5/1/99**
Construction Completed	**5/1/99**
Facility Placed into Operation	**7/1/99**

Facility Cost

Facility Cost	**$5,500.00**
Eligible Facility Cost	**$5,500.00**

The facility cost does not exceed $50,000. An independent accounting review was not required. However, invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost does not exceed $50,000. According to ORS 468.190 (3), the only factor used in determining the percentage allocable to pollution control is the percentage of time the facility is used for pollution control. Therefore, the percentage of the facility cost allocable to pollution control is **100%**.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. There were no DEQ permits issued to facility.

Reviewers: James Britton

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Bryce D. Cruickshank**
Application No.	**5329**
Facility Cost	**$115,724**
Percentage Allocable	**92%**
Useful Life	**10 years**

Pollution Control Facility: Field Burning
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **a Sole Proprietor**
Business: **a grass seed farm**
Taxpayer ID: **SSN**

The applicant's address is:

5465 Red Prairie Road
Sheridan, OR 97378

Facility Identification

The certificate will identify the facility as:

storage barn for grass seed straw

The applicant is the owner of the facility located at:

5465 Red Prairie Road
Sheridan, OR 97378

Technical Information

The applicant has 400 acres of perennial grass seed under cultivation. In the past he open field burned as many acres as the smoke management program and weather permitted. With this facility, he is able to bale off his acreage and 300 acres of his neighbor's grass seed producing fields (also previously open field burned), store the straw, and market it over the fall, winter and spring months. The applicant states that the straw storage building will eliminate the need to burn on this acreage.

Eligibility

ORS 468.155 (1)(a)	The **sole purpose** of this **new** is to prevent, control or reduce a substantial quantity of air pollution.
OAR-016-025 (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.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**11/24/99**
Application Substantially Complete	**12/8/99**
Construction Started	**6/1/99**
Construction Completed	**7/1/99**
Facility Placed into Operation	**7/1/99**

Facility Cost

Facility Cost	**$115,724**
Eligible Facility Cost	**$115,724**

The facility cost was greater than $50,000 but less than $500,000. Therefore, James F. Brian, CPA performed an accounting review according to Department guidelines and on behalf of the Applicant.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control. The percentage of the facility cost allocable to pollution control is 92%.

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control. The percentage of the facility cost allocable to pollution control is **100%**.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	The facility provides a salable commodity by protecting straw bales from inclement weather.
ORS 468.190(1)(b) Return on Investment	The actual cost of the claimed facility ($115,724) divided by the average annual cash flow ($13,332) equals a return on investment factor of 8.68. Using the calculations in rule and considering the life of the facility is 25 years, the percent allocable to pollution control is 92%.
ORS 468.190(1)(c) Alternative Methods	No alternative investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings or increase in costs.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. There were no DEQ permits issued to facility.

Reviewers: James Britton

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Neher, Larry M. and Mary Lou**
Application No.	**5334**
Facility Cost	**$47,995.00**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: Field Burning
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **a Sole Proprietor**
Business: **a grass seed farm**
Taxpayer ID: **SSN**

The applicant's address is:

28485 Brownsville Road
Brownsville, OR 97327

Facility Identification

The certificate will identify the facility as:

A drainage tile installation on 50 acres.

The facility is located at:
Approximately two miles north of Brownsville on Brownsville Road.
Brownsville, OR

Technical Information

The applicant has 900 acres of annual and 900 acres of perennial grass seed varieties under cultivation. The Nehers have progressively reduced acres open field burned over the last several years. They continue to increase their efforts to remove straw by baling and flail chopping. However, they do resort to field burning periodically to control weeds and volunteer grass seedlings.

Providing adequate drainage will allow the applicants to select crops that do not require flame sanitation as a rotation crop with grass seed production. Crop rotation provides for non-thermal sanitation following a grass seed stand.

Eligibility

ORS 468.150 The equipment is an **approved alternative method** for field sanitation and straw utilization and disposal that reduces a substantial quantity of air pollution.

ORS 468.155 (1)(a) The **principal purpose** of this **new installation** is to reduce a substantial quantity of air contaminents by reducing the maximum acreage to be open-burned in the Willamette Valley as required in OAR 340-026-0013.

OAR 340-016-0025 The facility is an alternative to open field burning by reducing or eliminating grass seed acreage that requires open field burning through the use of a drainage tile system.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**11/30/99**
Application Substantially Complete	**12/08/99**
Construction Started	**8/01/99**
Construction Completed	**8/30/99**
Facility Placed into Operation	**8/30/99**

Facility Cost

Facility Cost	**$47,995**
Eligible Facility Cost	**$47,995**

The facility cost does not exceed $50,000, however, an independent accountant review was performed according to Department guidelines by Michael A. Schaefer, CPA on behalf of the applicant.

Facility Cost Allocable to Pollution Control

According to ORS 468.190 (3), the only factor used in determining the percentage allocable to pollution control is the percentage of time the facility is used for pollution control. Therefore, the percentage of the facility cost allocable to pollution control is 100%.

Compliance

The facility is in compliance with Department rules and statutes and with EQC orders.

Reviewers: James Britton, Oregon Department of Agriculture

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Clough Oil Co.**
Application No.	**5337**
Facility Cost	**$78,988**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **a S Corporation**
Business: **Commercial fueling station**
Taxpayer ID: **93-0763352**

The applicant's address is:

P O Box 338
Klamath Falls OR 97601

Facility Identification

The certificate will identify the facility as:

Epoxy tank lining in four underground storage tanks, doublewall flexible plastic piping, spill containment basins, sumps, monitoring well, and Stage II vapor recovery piping.

The applicant is the owner of **DEQ Facility ID 697,** located at:

978 Spring Street
Klamath Falls, OR 97601

Technical Information

The facility meets federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**11/30/99**
Application Substantially Complete	**12/07/99**
Construction Started	**10/23/98**
Construction Completed	**01/31/99**
Facility Placed into Operation	**01/31/99**

Facility Cost

Corrosion Protection	
Epoxy tank lining	$31,547
Flexible plastic piping – doublewall	4,400
Spill & Overfill Prevention	
Spill Containment basins	796
Sumps	6,120
Leak Detection	
Monitoring well	164
VOC Reduction	
Stage II vapor recovery piping	708
Labor, material, misc. parts	35,253
Eligible Facility Cost	**$78,988**

The applicant applied for a waiver of the independent accounting review since invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. The Department considered the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system when considering the percentage allocable to pollution control.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewers: Barbara J Anderson

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**James R. Titus and Freda J. Titus**
Application No.	**5339**
Facility Cost	**$138,404**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: a **S Corporation**
Business: **Retail Gas station & Store**
Taxpayer ID: **540-50-1906**

The applicant's address is:

9217 Greenbrier Dr.
Klamath Falls, OR 97603

Facility Identification

The certificate will identify the facility as:

Epoxy tank lining and impressed current cathodic protection for three underground storage tanks, doublewall flexible plastic piping, spill containment basins, automatic tank gauge system, sumps, monitoring wells and automatic shutoff valves.

The applicant is the owner of **DEQ Facility ID 2350**, located at:

2104 S. 6th Street
Klamath Falls, OR 97601

Technical Information

The facility is an upgrade to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**12/07/99**
Application Substantially Complete	**12/07/99**
Construction Started	**05/01/95**
Construction Completed	**08/01/98**
Facility Placed into Operation	**08/01/98**

Facility Cost

Corrosion Protection	
Epoxy tank lining	$22,130
Impressed current cathodic protection	7,800
Flexible plastic piping – doublewall	5,062
Spill & Overfill Prevention	
Spill containment basins	1,970
Automatic shutoff valves	558
Sumps	11,147
Leak Detection	
Monitoring wells	2,925
Automatic tank gauge system	5,162
Labor, material, misc. parts	82,166
	$138,920
Ineligible Costs	$516
Ten percent of the tank gauge system is ineligible since the device can serve other purposes, for example, inventory control.	
Eligible Facility Cost	**$138,404**

The applicant applied for a waiver of the independent accounting review since invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. The Department considered the difference in cost between the protected piping system and an equivalent bare steel system as a percent of the protected system when considering the percentage allocable to pollution control.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewers: Barbara J Anderson

Tax Credit Review Report

EQC 9912

Director's Recommendation: **APPROVE**

Applicant	**Clough Oil Co.**
Application No.	**5340**
Facility Cost	**$26,019**
Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **an S corporation**
Business: **a fuel bulk plant**
Taxpayer ID: **93-0763352**

The applicant's address is:

P O Box 338
Klamath Falls, OR 97601

Facility Identification

The certificate will identify the facility as:

Epoxy tank lining in three aboveground fuel storage tanks and monitoring wells for leak detection around underground product piping.

The applicant is the owner of the **aboveground storage tank facility** located at:

977 Spring Street
Klamath Falls, OR 97601

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **addition** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**12/06/1999**
Application Substantially Complete	**12/07/1999**
Construction Started	**09/06/1998**
Construction Completed	**09/10/1999**
Facility Placed into Operation	**09/10/1999**

Facility Cost

Claimed Facility Cost

Corrosion Protection	
Epoxy tank lining	$10,788
Leak Detection	
Monitoring wells for leak detection	1,800
Labor, material, misc. parts	13,431
Eligible Facility Cost	**$26,019**

The facility cost does not exceed $50,000. An independent accounting review was not required. However, invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost does not exceed $50,000. According to ORS 468.190 (3), the only factor used in determining the percentage allocable to pollution control is the percentage of time the facility is used for pollution control. Therefore, the percentage of the facility cost allocable to pollution control is **100%**.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewers: Barbara J Anderson

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**APPROVE**
Applicant	**Larry L. Craig**
Application No.	**5341**
Facility Cost	**$83,794**
Percentage Allocable	**87%**
Useful Life	**10 years**

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: a **Sole proprietorship**
Business: **Retail gas station & store**
Taxpayer ID: **93-0675678**

The applicant's address is:

7923 E. Evans Creek Rd.
Rogue River, OR 97537

Facility Identification

The certificate will identify the facility as:

One doublewall fiberglass underground storage tank with two compartments, doublewall flexible plastic piping, spill containment basins, automatic tank gauge system, overfill alarm, line leak detectors, monitoring wells, sumps and automatic shutoff valves.

The applicant is the owner of **DEQ Facility ID 11810**, located at:

Larry's Country Store
7923 E. Evans Creek Rd.
Rogue River, OR 97537

Technical Information

Upgrade the facility to meet federal Environmental Protection Agency requirements.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**12/07/99**
Application Substantially Complete	**12/07/99**
Construction Started	**08/15/98**
Construction Completed	**10/01/98**
Facility Placed into Operation	**10/01/98**

Facility Cost

Corrosion Protection	
Doublewall fiberglass tank	$20,652
Doublewall flexible plastic piping	1,495
Spill & Overfill Prevention	
Overfill alarm	300
Sumps	623
Automatic shutoff valves	491
Leak Detection	
Automatic tank gauge system	7,178
Line leak detectors	438
Monitoring wells	216
Labor, material, misc. parts	52,737
	$84,512
Ineligible Costs Ten percent of the tank gauge system is ineligible since the device can serve other purposes, for example, inventory control.	$718
Eligible Facility Cost	**$83,794**

The applicant applied for a waiver of the independent accounting review since invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control.

Eligible Facility Cost	$83,794
Less Claimed Corrosion Protection	22,147

The allocable cost of a corrosion protected tank and piping system is determined 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 this application:

System Cost				
Protected system cost	**$22,147**	less bare steel cost	**$10,506**	**11,641**

Total Reduced Cost	**$73,288**
Total Reduced Cost ÷ Eligible Facility Cost = the percentage of the facility cost allocable to pollution control	**87%**

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewers: Barbara J Anderson

Tax Credit Review Report

EQC 9912

Pollution Control Facility: USTs
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Director's Recommendation: **APPROVE**

Applicant	**Ferrell's Fuel Network Inc.**
Application No.	**5342**
Facility Cost	**$80,613**
Percentage Allocable	**99%**
Useful Life	**10 years**

Applicant Identification

Organized As: a **S corporation**
Business: **Retail/commercial fuel station**
Taxpayer ID: **93-1088618**

The applicant's address is:

977 Spring St./P O Box U
Klamath Falls, OR 97601

Facility Identification

The certificate will identify the facility as:

Secondary containment for three aboveground fuel storage tanks, doublewall flexible plastic piping, oil/water separator, sumps and automatic shutoff valves.

The applicant is the owner of **DEQ Facility ID 2692,** located at:

3029 Greensprings Dr.
Klamath Falls, OR 97601

Technical Information

Upgrade facility to meet federal Environmental Protection Agency requiremetns.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this **installation** is to prevent, control or reduce a substantial quantity of air and water pollution.
OAR-016-0025 (2)(g)	Installation or construction of facilities which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**12/07/99**
Application Substantially Complete	**12/07/99**
Construction Started	**01/02/98**
Construction Completed	**12/01/99**
Facility Placed into Operation	**12/28/98**

Facility Cost

Claimed Facility Cost

Corrosion Protection	
Doublewall flexible plastic piping	$5,666
Spill & Overfill Prevention	
Oil/water separator	1,307
Sumps	529
Automatic shutoff valves	1,502
Aboveground tank secondary containment	20,000
Labor, material, misc. parts	60,301
	$89,305
Ineligible Costs	$8,692
Expenses for material and miscellaneous parts that do not meet the statutory definition of a pollution control device.	
Eligible Facility Cost	**$80,613**

The applicant applied for a waiver of the independent accounting review since invoices or canceled checks substantiated the cost of the facility.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control

Eligible Facility Cost	$80,613
Less Claimed Corrosion Protection	5,666

The allocable cost of a corrosion protected piping system is determined 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 this application:

System Cost				
Protected system cost	**$5,666**	less bare steel cost	**$ 820**	**4,846**

Total Reduced Cost	**$79,793**
Total Reduced Cost ÷ Eligible Facility Cost = the percentage of the facility cost allocable to pollution control	**99%**

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders. especially, Underground Storage Tank requirements under OAR Chapter 340, Division 150.

Reviewers: Barbara J Anderson

Attachment C

Denials

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**DENY** **Ineligible Purpose**
Applicant	**Portland General Electric**
Application No.	**4714**
Claimed Facility Cost	**$4,859**
Claimed Percentage Allocable	**100%**
Useful Life	**10 years**

Pollution Control Facility: Water
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **a C corporation**
Business: **Supplier of electrical energy**
Taxpayer ID: **93-0256820**

The applicant's address is:

121 SW Salmon Street
Portland, OR 97204

Facility Identification

The certificate will identify the facility as:

An Effluent Monitoring System

The applicant is the owner of the facility located at:

200 Ullman Blvd.
Boardman, OR 97818

Technical Information

The claimed facility consists of two in-line meters that measure the flow rate of the effluent discharged into the Port of Morrow's wastewater system. One flow meter is located at the facility's wastewater sump outlet and one is located on the cooling tower blowdown line.

Eligibility

ORS 468.155 (1)(a)(A) The **principle purpose** of this **new equipment** is **not** to prevent, control or reduce a substantial quantity of water pollution since DEQ or the Federal Environmental Protection Agency did not require it.

ORS 468.155 (1)(a)(B) The **sole purpose** of this **new equipment** is **not** to prevent, control or reduce a substantial quantity of water pollution. This equipment is used for monitoring the flow of effluent discharged to the Port of Morrow for billing purposes only. The applicant is charged a fee based on the amount of effluent discharged. The facility provides no pollution control benefit.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**12/9/96**
Application Substantially Complete	**9/20/99**
Construction Started	**8/12/95**
Construction Completed	**11/15/95**
Facility Placed into Operation	**11/15/95**

Facility Cost

Claimed Facility Cost	**$ 4,859**
Non-allowable Amount	-$ 4,859
Allowable Facility Cost	**$ 0**

The facility cost does not exceed $50,000, therefore an independent accounting review was not required. However, **Coopers & Lybrand L.L.P.** provided an independent accounting statement on behalf of PGE. Documentation that could substantiate the cost of the facility was not provided.

Facility Cost Allocable to Pollution Control

The facility cost does not exceed $50,000. According to ORS 468.190 (3), the only factor used in determining the percentage allocable to pollution control is the percentage of time the facility is used for pollution control. Therefore, the percentage of the facility cost allocable to pollution control is **0%**.

Compliance and Other Tax Credits

The applicant states that the facility is in compliance with Department rules and statutes and with EQC orders. DEQ permits issued to facility: Air Contaminant Discharge Permit No. 25-0031, issued May 31, 1994.

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers
MaggieVandehey, DEQ

Tax Credit Review Report

EQC 9912

Director's Recommendation: **DENY Ineligible Facility**

Applicant **Integrated Device Technology (IDT)**
Application No. **4845**
Claimed Facility Cost **$801,096.00**
Claimed Percentage Allocable **100%**
Useful Life **10 years**

Pollution Control Facility: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

Organized As: **a C corporation**
Business: **a designer, manufacturer & marketer of intergated circuits**
Taxpayer ID: **94-2669985**

The applicant's address is:
2975 Stender Way
Santa Clara, CA 95054

Facility Identification

The facility is identified as:

8 Controlled Decomposition/ Oxidation systems and 10 Dynamic Neutralization Chambers. Both type of unit are used to treat process exhaust gas/es & vapors.

The applicant is the owner of the facility located at:
3131 NE Brookwood Pkwy.
Hillsboro, OR 97124

Technical Information

The applicant claimed two types of units that are used to treat process exhaust gases and vapors before they enter the main exhaust ductwork and through to the acid scrubbers. (The acid scrubbers were certified on 12/30/1997.) The claimed facility is located on Level 1 within FAB IV. The two types of units are:

- Eight Delatech Controlled Decomposition/Oxidation (CDO) systems (model CDO 858V-4). Each unit is used to manage flammable and hazardous gases within the process environment. They eliminate fires and explosions in the exhaust, ductwork and scrubber systems, and the process effluent gas stream. The applicant claimed shutoff valves, regulators, gauges, flow controllers and sensors, fittings, and piping to support the CDOs.

The CDO units consist of three sections. Oxygnator Section controls oxygen enrichment to produce a mixture for effective use in the Thermal Reaction Section where decomposition/oxidation occurs. Primary Cooling/Scrubbing Section washes particulate and water-soluble gases and vapors out of the gas stream.

- Ten Dynamic Neutralization Chambers manufactured by Evans Components, Inc. These units dilute flammable gases with air in the neutralization chamber, which allows gases to react and form particulate in a safe and efficient manner.

Eligibility

ORS 468.155 (1)(a) The applicant claims that the **sole purpose** of these **new devices** is to prevent, control or reduce a substantial quantity of air pollution. The applicant states, the facility provides a "...means of removing flamable gas/es vapors, as and vapors, as well as (s)come hazardous gases from the process exhaust air streams. The facility virtually eliminates potential for fires and explosions in the exhaust and scrubber systems, and it removes hazardous gasses before the air is exhausted to the environment."

Staff determined that the sole and "exlusive" purpose of the claimed facility is not pollution control since the devices do not "prevent, control or reduce a substantial quantity of air pollution." The Dynamic Neutralization Chambers and the Controlled Decomposition/Oxidation units are used to prevent potential fires and explosions while maintaining workplace safety and the conditions required for manufacturing intergated circuits.

> *"Air pollution" means the presence in the outdoor atmosphere of one or more air contaminants, or any combination thereof, in sufficient quantities and of such characteristics and of a duration as are or are likely to be injurious to public welfare, to the health of human, plant or animal life or to property or to interfere unreasonably with enjoyment of life and property throughout such area of the state as shall be affected thereby. ORS 468A.005.*

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**10/1/97**
Application Substantially Complete	
Construction Started	**5/1/95**
Construction Completed	**10/1/95**
Facility Placed into Operation	**10/1/95**

Facility Cost

Facility Cost	**$801,096.00**
Insignificant Contribution ORS 468.155(2)(d)	**($801,096.00)**
Eligible Facility Cost	**$0**

The facility cost exceeds $500,000. However, an accounting review was not performed.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. According to ORS 468.190 (1), the factors listed below were considered in determining the percentage of the facility cost allocable to pollution control. The percentage of the facility cost allocable to pollution control is **100%**.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 10 years. No gross annual revenues were associated with this facility.
ORS 468.190(1)(c) Alternative Methods	No alternative investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings or increase in costs.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Compliance and Other Tax Credits

The facility is in compliance with Department rules and statutes and with EQC orders.

Reviewers: Dave Kauth
Maggie Vandehey, DEQ

Attachment D

Rejections

Tax Credit Review Report

EQC 9912

Director's Recommedation:	**REJECT Untimely Submittal**
Applicant	**Willamette Industries, Inc**
Application No.	**4570**
Claimed Facility Cost	**$2,596,818**
Claimed % Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility Tax Credit: Solid Waste Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C Corporation, a **manufacure of linerboard and bagpaper.** The taxpayer's identification number 93-0312940.

The applicant's address is:

3800 First Interstate Tower
Portland, OR 97201

Facility Identification

The facility is identified as:

Ebterprise Baler (Model 16-ezrrb-200), Kraus Baler Conveyor (93KRACONV0050) Krause Sorting Conveyer (93KRACONV0050), Michigan Wheel Loader (SN L-70v61201), Mitsubishi 6Mlb Fork Trk (SNAF89A-00546), Mitsubishi 6Mlb Fork Trk(SNAF89A-00529), etc.

The claimed facility is **owned** by the applicant, Willamette Industries, Inc. and leased to an independent facility operator, Far West Fibers. The facility is located at:

12820 NE Marx Street
Portland, OR 97230

Technical Information

The facility is a wastepaper collection, processing and storage facility which consists of a 50,000 square foot building including receiving, and sorting areas, sorting conveyor system, baler, baler feed conveyor system, storage area for baled material, eight space truck loading dock, and miscellaneous material handling and processing equipment.

Eligibility

ORS 468.155 (1)(a) The **sole purpose** of this **new building, machinery and equipment** is to prevent, control or reduce a substantial quantity of solid waste.

ORS 468.155 (1)(b)(D) The facility provides a material recovery process which obtains useful material from material that would otherwise be solid waste as defined in ORS 459.

Timeliness of Application

The application was not submitted within the timing requirements of ORS 468.165 (6). Far West Fibers, an independent recycling company, began operating the facility on September 27, 1993, over three months before the lease was signed. The Department considers September 27, 1993 as the date construction was completed.

Application Received	**12/26/1995**
Application Substantially Complete	**10/12/1997**
Construction Started	**05/01/1993**
Construction Completed	**9/27/1993**
Facility Placed into Operation	**9/27/1993**

The applicant claims the date of substantial completion of the facility is January 1, 1994, the date the lease was signed. The applicant claims that as the lessor of the facility and the fact that there was no lease between the independent recycling company and the applicant until January 1, 1994, the date of substantial completion of the facility should be determined to be the effective date of the lease. This date is within two years after construction of the facility was substantially completed and the application would have been submitted in a timely manner.

Facility Cost

Claimed Facility Cost	**$2,596,818**
Non-allowable Costs	**- $2,596,818**
Allowable Facility Cost	**$0**

Facility Cost Allocable to Pollution Control

The facility as claimed on the application does not meet the definition of a facility integral to operation of the applicant business based on the four factors listed in OAR 340-16-030(1)(g).

According to ORS.190 (1), the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	The facility is used exclusively to process recyclable material. The percent allocable by using this factor is 100%.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility is 7 years. Since the facility lease is for 20 years and the use of the facility to the applicant is as a leased property the Department recommends that the useful life of the facility be set at 20 years. However, the lease payments from the claimed facility do not have a significant impact on the income of the applicant's business. The average annual cash flow for the facility is determined by the fixed rate in the facility lease. The average annual income from this lease is $135,000. The lease payment includes office and other space not included in the claimed facility. The portion of the lease payment allocable to the claimed facility is correctly stated as 93% or $125,550. This cash flow and the claimed facility cost result in a return on investment factor of 20.68. By using Table 1 in OAR 340, Division 16, a $2,596,818 facility with a useful life of 20 years and an average annual cash flow of $125,550 results in a return on investment of 0%; therefore 100% of the facility cost is properly allocable to pollution control.
ORS 468.190(1)(c) Alternative Methods	The applicant considered other methods for reducing solid waste and determined that this method was environmentally acceptable and economically feasible. It is the Department's determination that the claimed facility is an acceptable method of achieving the material recovery objective.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings or increase in costs. Material generated from this facility is sold to the applicant or other users at fair market value.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors.

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance

The facility is in compliance with Department rules and statutes and with EQC orders.

Reviewers: William R Bree, DEQ
M.C.Vandehey, DEQ

Willamette Industries, Inc.
Executive Offices

1300 S.W. Fifth Ave., Suite 3800
Portland, OR 97201
(503) 227-5581

December 8, 1999

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

Subject: ODEQ Pollution Control Facility Tax Credit Application No. 4570

Dear Commissioners:

Summary of Response

As you may know, in response to ODEQ Application No. 4570, the staff of the Oregon Department of Environmental Quality ("Department") has recommended against certification of the Albany Paper Mill—East Multnomah Recycling ("EMR") pollution control facility. For the following reasons, Willamette Industries, Inc., requests that the EQC certify this facility.

I. Introduction

> "[I]t is the policy of the State of Oregon to assist in the prevention, control and reduction of * * * pollution and solid waste * * * by providing tax relief with respect to Oregon facilities constructed to accomplish such prevention, control and reduction." ORS 468.160.

EMR was built with these express purposes and policies in mind. Without the available tax incentives, the facility simply would not have been constructed.

EMR recycles corrugated cardboard, newspaper, mixed waste paper, and high grade office paper. Between 1994 and 1999, EMR recycled 395,943 tons of solid waste that would otherwise have gone into landfills. The facility recycles 10 percent of all waste recycled in the Portland metropolitan area.

II. EMR Was Not Substantially Complete Until After December 22, 1993

A. Physical Completion

Substantial completion means the "completion of the erection, installation, modification, or construction of all elements of the claimed facility which are essential to perform its purpose." OAR 340-016-0010(11).

The "elements" of EMR included equipment, building construction, and a public recycling area. Two of the 13 essential pieces of equipment listed in the application were a custom DCE dust filter system and a Toledo platform scale, neither of which were installed until after December 22, 1993.

The DCE dust filter system is essential for EMR to perform its purpose. This customized system filters out the substantial quantities of particulate matter emitted as dust during the baling process. Installation of the system was started in March 1994 and completed the following month.

Similarly, the 10-ton Toledo platform scale was not installed until after December 22, 1993. This scale is used to weigh the barrels of loose paper waste and bales of corrugated cardboard in order to calculate payment to the suppliers. For safety reasons, it is necessary that the scale be installed at ground level so that forklift operators can drive directly onto the scale. Accordingly, the Toledo platform scale is essential for EMR to perform its purpose.

B. Accounting Completion

The Department's Pollution Control Facility Tax Credit Application Instructions and Guidelines state:

> For some companies the date of substantial completion may be the date that operations began or it may simply be the date of purchase. For others, *it may be the date the asset was placed on the books or began depreciation.* Department of Environmental Quality Pollution Control Facility Tax Credit Application Instructions and Guidelines at 3 (emphasis added).

No part of EMR was placed on Willamette's books until December 31, 1993. For accounting purposes, Willamette did not begin depreciating any part of EMR until January 1, 1994, when the EMR lease was signed by Willamette and Far West Fibers, Inc.

December 31, 1993, and January 1, 1994, are both within the two-year requirement imposed by ORS 468.165(6). Thus, according to the Department's own regulations and application instructions, Willamette filed its application for pollution control tax credits within two years of the date the facility was substantially complete.

This brief summary is being submitted at the suggestion of the Department staff. A more detailed response will be filed this week, which includes affidavits, invoices, photographs, and other supporting documentation.

Very truly yours,

Jim Aden, Tax Research Manager

Tax Credit Review Report

EQC 9912

Department Action	**Rejected - Untimely Response**
Applicant	**Willamette Industries, Inc.**
Application No.	**4800**
Claimed Facility Cost	**$110,418**
Claimed Percentage Allocable	**100%**
Useful Life	**7 years**

Pollution Control Facility: AIR
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation that operates a particleboard manufacturing plant. Their taxpayer identification number is 93-0312940 and their address is:

Duraflake Division
1300 S.W. Fifth Avenue, Suite 3800
Portland, OR 97201

Facility Identification

The facility will be identified as:

Negative air and screening system

The applicant is the owner of the facility located at:

2550 Old Salem Road NE
Albany, OR 97321

Technical Information

This application is for an 80,000 cfm negative air and screening system installed to capture emissions at the truck doorway in the truck dump area. The system consists of a 10' x 42' air hood and a negative air knife, and ducting. The system is installed above the extended door opening and the duct routes the dusty air from the air hood to the inlet of the #1 and #2 green refiners. The system includes two Siemens 200 Hp fan motors installed to handle the increased load on the fan system.

This system reduces fugitive emissions that would otherwise be released into the atmosphere by approximately 50%. The exact quantity of particulate has not been measured; the estimate is based on the expected performance of the system.

This is an effective system design for capturing fugitive emissions.

Eligibility

ORS 468.155 (1)(a) The **principal purpose** of this **new equipment and installation** is to prevent, control or reduce a substantial quantity of air pollution.
Mutual Agreement and Order No. AQP-WR-94-331 between the DEQ and Willamette Industries required this system be operational on or before March 1, 1996.

ORS 468.155 (1)(b)(B) The disposal or elimination of or redesign to eliminate air contamination sources and the use of air cleaning devices as defined in ORS 468A.005

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**7/21/97**
Additional Information Requested	**10/13/97**
Additional Information Provided	**6/5/98**
Application Substantially Complete	
Construction Started	**5/1/95**
Construction Completed	**10/31/95**
Facility Placed into Operation	**10/31/95**

The applicant did not respond to the reviewer's request for additional information by April 11, 1998. The applicant had 180 days from the date the information was requested to submit additional information. The applicant did not request in writing additional time to submit the information.

Facility Cost

Claimed Facility Cost	**$ 110,418**
Non-allowable Costs	**($ 110,418)**
Allowable Facility Cost	**$0**

Copies of invoices were provided which substantiated most of the cost of the facility. Invoices were not provided for site preparation/installation ($2,774) and for electrical materials and installation ($1,994). KPMG Peat Marwick LLP provided the certified public accountant's statement.

Facility Cost Allocable to Pollution Control

According to ORS 468.190(1), the facility cost exceeds $50,000 and therefore, the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	The applicant does not receive income from the captured emissions, it reduces their loss of product.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 7 years. No gross annual revenues are associated with this facility.
ORS 468.190(1)(c) Alternative Methods	No other alternatives were considered.
ORS 468.190(1)(d) Savings or Increase in Costs	There are no savings or increase in costs from the facility.
ORS 468.190(1)(e) Other Relevant Factors	The duct system is located outdoors; it is not part of a ventilation system.

Considering these factors, the percentage allocable to pollution control is 100%.

Compliance/Other Tax Credits

The facility complies with Department statutes and permit requirements. DEQ permits issued to facility: NPDES No. 100668, May 4, 1990.

Reviewers: Lois L. Payne, SJO Consulting Engineers, Inc.
Dennis E. Cartier, Associate, SJO Consulting Engineers, Inc.
Maggie Vandehey, DEQ

Willamette Industries, Inc.
Executive Offices

1300 S.W. Fifth Ave., Suite 3800
Portland, OR 97201
(503) 227-5581

December 8, 1999

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

Subject: ODEQ Pollution Control Facility Tax Credit Application No. 4800

Dear Commissioners:

Summary of Response

As you are aware, in the matter bearing ODEQ Application No. 4800, the staff of the Oregon Department of Environmental Quality ("Department") has recommended against certification of the Duraflake Truck Dump Negative Air System for pollution control tax credits. For the reasons explained below, Willamette Industries, Inc., requests that the EQC certify the facility.

I. New Department Policy

On October 13, 1997, the Department staff, acting through SJO Consulting Engineers, Inc. ("SJO"), sought "copies of invoices for items listed in Exhibit C of Section VII" of the pollution control tax credit application. Until the October 1997 request was made, it had not been the policy or practice of the Department to require 100 percent invoice documentation for applications for pollution control tax credits.

It is impracticable to submit 100 percent invoice documentation for a pollution control tax credit project. In general, a pollution control device is installed as only a part of a much larger project or facility. Under those circumstances (which are the norm), it is not the practice of subcontractors or engineers to isolate the costs specifically relating to pollution control devices. Pollution control costs are allocated based on methodology developed by the engineers in consultation with the subcontractors and accountants.

A request for 100 percent invoice documentation is inconsistent with and overlooks the requirement that an independent CPA review project costs prior to the filing an application for pollution control tax credits.

II. Department's Disregard of Applicable Regulation

As noted, the Department's October 1997 request for all invoices was a new development. Willamette was justifiably concerned about the added administrative burden, and corresponding costs, associated with this change of policy. Therefore, prior to submitting the requested information, Willamette sought clarification from Department staff.

Further, the staff's unprecedented request for additional documentation violated the very same section of the Oregon Administrative Rules the staff is now seeking to apply in order to reject Willamette's request for certification of a well-qualified facility.

Under the version of OAR 340-016-0020 in effect at the time of the filing of the application, the Department had 30 days after its receipt of the application in which to request additional information from the applicant. The deadline was August 17, 1997, and that deadline came and went without any request by the Department. The Department did not seek additional documentation until October 13, 1997, which was 87 days after the application was submitted and 57 days after its deadline had passed.

* * *

This summary has been furnished at the suggestion of Department staff. A more complete response, including an affidavit and supporting documentation, will be filed this week.

Very truly yours,

Jim Aden, Tax Research Manager

Director's Recommedation:	**REJECT** **Untimely Submittal**
Applicant	**Georgia-Pacific Corporation**
Application No.	**4864**
Claimed Facility Cost	**$538,859**
Claimed % Allocable	**100%**
Useful Life	**10 years**

Tax Credit Review Report

EQC 9912

Pollution Control Facility Tax Credit: Air
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant **manufactures plywood and particleboard resins.** The taxpayer's identification number 58-1576916.

The applicant's address is:

2190 Old Salem Rd, NE
Albany, OR 97321

Facility Identification

The facility is identified as a:

Regenerative Thermal Oxidizer, manufactured by Adwest Technologies, model RETOX 10.0 RCC95.

The claimed facility is **owned** by the applicant and is at:

2190 Old Salem Rd, NE
Albany, OR 97321

Technical Information

The applicant produces formaldehyde and synthetic resins. Hazardous air pollutants (HAPs) and VOC emissions are produced as part of the manufacturing process. To control these emissions a regenerative thermal oxidizer (RTO) manufactured by Adwest Technologies, model RETOX 10.0 RCC95, serial number 294-1.0000-0246, was installed. Prior to the installation of the RTO, the applicant discharged more than 330 tons of air pollutants per year. After the RTO was installed, the emissions were reduced to less than 10 tons per year. Source test results demonstrated the destruction efficiency for formaldehyde is 86%, and for VOC emissions it is over 98%.

Eligibility

468.155 (1)(a)(A) The **principal purpose** of this **new equipment** is to, **control** a substantial quantity of air pollution. The installation of the air pollution control equipment is to comply with EPA and DEQ rules. The applicants Air Contaminant Discharge Permit, #22-1024 requires the control of HAPs and VOC emissions.

Timeliness of Application

The application was not submitted within the timing requirements of ORS 468.165 (6). A letter from the applicant addressed to the DEQ Tax Credit Coordinator, states the RTO was started on January 31, 1995. Over the next 19 months of operation the RTO was down for a total of 31 days. During this time major components of the RTO were replaced or rebuilt. The applicant claims the date of substantial completion of the facility is July 24, 1996, the date all of the repairs were completed. The Department considers January 31, 1995, the date the RTO was placed into operation, as the date of substantial completion.

Application Received	**11/03/1997**
Application Substantially Complete	**11/05/1999**
Construction Started	**12/12/1994**
Construction Completed	**01/31/1995**
Facility Placed into Operation	**01/31/1995**

Facility Cost

Claimed Facility Cost	**$538,859**
Non-allowable Costs	**- $538,859**
Allowable Facility Cost	**$0**

Facility Cost Allocable to Pollution Control

According to ORS.190 (1), the facility cost exceeds $50,000 and therefore, the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 15 years. No gross annual revenues were associated with this facility.
ORS 468.190(1)(c) Alternative Methods	The applicant considered two other alternative methods, catalytic and regenerative incineration.
ORS 468.190(1)(d) Savings or Increase in Costs	Operating costs increase since there was no previous system. They are estimated to be $9000 per year.
ORS 468.190(1)(e) Other Relevant Factors	No other relevant factors were provided.

Considering these factors, the percentage allocable to pollution control is 100% of the eligible facility cost.

Compliance

The applicant states that the facility is in compliance with Department rules and statutes and with EQC orders. DEQ permits issued to facility: Air Contaminant Discharge Permit Number 22-1024, Expiration Date 01/15/2000. Stormwater NPDES Permit number: 1200Z; Expiration Date: 06/22/2002. Process wastewater NPDES Permit number: 101461; Expiration Date: 02/26/2002.

Reviewers: Dennis Cartier, Associate, SJO Consulting Engineers
Lois Payne, PE, SJO Consulting Engineers
Maggie Vandehey, DEQ

Attachment E

Transfers

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Certificate No: 3523
Date of Issue: 11/17/95
Application No: 2329

ISSUED TO:
Simpson Timber Company
Oregon Overlay Division
2301 N. Columbia Blvd.
Portland, Oregon 97217

ATTENTION: David Berg

LOCATION OF POLLUTION CONTROL FACILITY:
2301 N. Columbia Blvd.
Portland

AS: ( ) LESSEE (X) OWNER ( ) INDIV ( ) PARTNER (X) CORP ( ) NON-PROFIT ( ) CO-OP

DESCRIPTION OF POLLUTION CONTROL FACILITY:
The claimed facility consists of a regenerative thermal oxidizer for the destruction of volatile organic compounds (VOCs) emitted from the Line #3 curing oven.

TYPE OF POLLUTION CONTROL FACILITY:
(X) AIR ( ) NOISE ( ) WATER ( ) SOLID WASTE ( ) HAZARDOUS WASTE ( ) USED OIL

DATE FACILITY COMPLETED: 1/9/89 PLACED INTO OPERATION: 2/3/89

ACTUAL COST OF POLLUTION CONTROL FACILITY: $1,431,011.00

PERCENT OF ACTUAL COST PROPERLY ALLOCABLE TO POLLUTION CONTROL: 100%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

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

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed: William W. Wessinger (William W. Wessinger, Chairman)

Approved by the Environmental Quality Commission on the 17th day of November, 1995.

Staff: Brian Fields/AQ

Simpson

November 4, 1999

Oregon Department of Environmental Quality
811 S. W. Sixth Avenue
Portland OR 97204-1390

RE: Simpson Timber Company
Pollution Control Facility Certificate #3523
Sale of certified facility

Gentlemen:

Pursuant to ORS 315.304, this letter is to give notice that we have disposed of the Simpson Timber Company facility located at 2301 N. Columbia Blvd., Portland, Oregon, for which we had previously received a pollution control facility certificate. A copy of the certification form is attached for your information. The sale was completed October 29, 1999 and information regarding the new purchaser is as follows:

DYNO Overlays, Inc.
2144 Milwaukee Way
Tacoma, WA 98421-2706

Should you need additional information, please contact me at (206) 224-5261.

Sincerely,

Nancy L. Colley
Tax Manager

Encl.

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Certificate No: **3876**
Date of Issue: 04/03/1998
Application No: 4783

ISSUED TO: Power Rents, Inc 14020 SW 72nd Ave. Tigard, OR 97224 ATTENTION: Irwin Schimmel,	LOCATION OF POLLUTION CONTROL FACILITY: 3362 Silverton Road, NE Salem OR 97306

Lessee of Facility C corporation Corporate Excise

DESCRIPTION OF POLLUTION CONTROL FACILITY: Recycling Wash Facility for cleaning Construction Equipment.

TYPE OF POLLUTION CONTROL FACILITY: Water

DATE FACILITY COMPLETED: 12/13/1996 PLACED INTO OPERATION: 12/13/1996

ACTUAL COST OF POLLUTION CONTROL FACILITY: $45,146.00

PERCENT OF ACTUAL COST PROPERLY ALLOCABLE TO POLLUTION CONTROL: 100%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

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

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: Any portion of the facility described herein is not eligible to receive tax credit certification as an energy conservation facility or a reclaimed plastic facility [ORS 315.324(12) and ORS 315.356(4) and (5)].

Signed: Carol A. Whipple (Carol Whipple, Chair)

Approved by the Environmental Quality Commission on 04/03/1998

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Certificate No: **3877**
Date of Issue: 04/03/1998
Application No: 4784

ISSUED TO: Power Rents, Inc 14020 SW 72nd Ave. Tigard, OR 97224 ATTENTION: Irwin Schimmel,	LOCATION OF POLLUTION CONTROL FACILITY: 950 Old Salem Road Albany OR 97321

Lessee of Facility C corporation Corporate Excise

DESCRIPTION OF POLLUTION CONTROL FACILITY: Recycling Wash Facility for cleaning Construction Equipment.

TYPE OF POLLUTION CONTROL FACILITY: Water

DATE FACILITY COMPLETED: 07/15/1996 PLACED INTO OPERATION: 07/15/1996

ACTUAL COST OF POLLUTION CONTROL FACILITY: $36,372.00

PERCENT OF ACTUAL COST PROPERLY ALLOCABLE TO POLLUTION CONTROL: 100%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

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

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: Any portion of the facility described herein is not eligible to receive tax credit certification as an energy conservation facility or a reclaimed plastic facility [ORS 315.324(12) and ORS 315.356(4) and (5)].

Signed: Carol A. Whipple (Carol Whipple, Chair)

Approved by the Environmental Quality Commission on 04/03/1998

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Certificate No: **3878**
Date of Issue: 04/03/1998
Application No: 4785

ISSUED TO:	LOCATION OF POLLUTION CONTROL FACILITY:
Power Rents, Inc 14020 SW 72nd Ave. Tigard, OR 97224 ATTENTION: Irwin Schimmel,	14020 SW 72nd Ave. Tigard OR 97224

Lessee of Facility C corporation Corporate Excise

DESCRIPTION OF POLLUTION CONTROL FACILITY: Recycling Wash Facility for cleaning Construction Equipment.

TYPE OF POLLUTION CONTROL FACILITY: Water

DATE FACILITY COMPLETED: 01/01/1997 PLACED INTO OPERATION: 01/01/1997

ACTUAL COST OF POLLUTION CONTROL FACILITY: $112,001.00

PERCENT OF ACTUAL COST PROPERLY ALLOCABLE TO POLLUTION CONTROL: 100%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

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

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: Any portion of the facility described herein is not eligible to receive tax credit certification as an energy conservation facility or a reclaimed plastic facility [ORS 315.324(12) and ORS 315.356(4) and (5)].

Signed: Carol A. Whipple (Carol Whipple, Chair)

Approved by the Environmental Quality Commission on 04/03/1998

United Rentals, Inc.
8205 SW Hunziker Rd
Tigard, OR 97223
Tel: 503 802-1235
Fax: 503 620-2029
www.unitedrentals.com

December 9, 1999

VIA FACSIMILE

503 229-6730

Oregon DEQ
Maggie Bandehay
Tax Coordinator

Dear Ms. Bandehay:

United Rentals, Inc. (United) purchased EGW Machinery, Inc. (EGW) in April 1998. At the time of EGW's acquisition, High Reach, Inc. (High Reach) was a wholly owned subsidiary of EGW. High Reach became the surviving entity.

The FEIN for High Reach, now United Rentals Northwest, Inc., is 92-0257120.

Power Rents was purchased by United Rentals, Inc. in June 1998 and merged into High Reach, Inc. The name of High Reach, Inc. was subsequently changed to United Rentals Northwest, Inc. in October 1998. The same merger scenario is also true for West Main Rentals & Sales and Andersen Oregon Rentals.

You are authorized to transfer any tax credits previously owned by Power Rents to United Rentals Northwest, Inc.

You are also authorized to transfer any tax credits previously owned by West Main Rentals and Sales or Andersen Oregon Rentals to United Rentals Northwest, Inc.

Please do not hesitate to contact me if you have any questions.

Sincerely,

Rowan C. Hollitz
District Controller

CERTIFICATE

State of Oregon

OFFICE OF THE SECRETARY OF STATE
Corporation Division

I, PHIL KEISLING, Secretary of State of Oregon, and Custodian of the Seal of said State, do hereby certify:

That the attached copy of the
Articles of
Merger
filed on
August 13, 1998
for
POWER RENTAL CO.
merging with and into
HIGH REACH, INC.

is a true copy of the original document that has been filed with this office.

In Testimony Whereof, I have hereunto set my hand and affixed hereto the Seal of the State of Oregon.

PHIL KEISLING, Secretary of State

By Debra L. Virag
Debra L. Virag
August 28, 1998

Phone: (503) 986-2200
Fax: (503) 378-4387

Secretary of State
Corporation Division
255 Capitol St NE, Suite 151
Salem, OR 97310-1327

Articles of Amendment—Business/Professional/Nonprofit

Check the appropriate box below:

☒ BUSINESS/PROFESSIONAL CORPORATION
(Complete only 1, 2, 3, 4, 6, 7)

☐ NONPROFIT CORPORATION
(Complete only 1, 2, 3, 5, 6, 7)

For office use only

FILED

SEP 3 0 1998

OREGON
SECRETARY OF STATE

Registry Number: 0 8391716

Attach Additional Sheet If Necessary
Please Type or Print Legibly in Black Ink

1) NAME OF CORPORATION PRIOR TO AMENDMENT: High Reach, Inc.

2) STATE THE ARTICLE NUMBER(S) AND SET FORTH THE ARTICLE(S) AS IT IS AMENDED TO READ. (Attach a separate sheet if necessary.)
Article I The name of this corporation is United Rentals Northwest, Inc.

3) THE AMENDMENT WAS ADOPTED ON: September , 1998
(If more than one amendment was adopted, identify the date of adoption of each amendment.)

BUSINESS/PROFESSIONAL CORPORATION ONLY

4) CHECK THE APPROPRIATE STATEMENT

☒ Shareholder action was required to adopt the amendment(s). The vote was as follows:

Class of shares entitled to vote	Number of shares outstanding	Number of votes entitled to be cast	Number of votes cast FOR	Number of votes cast AGAINST
Common	484	484	484	0

☐ Shareholder action was not required to adopt the amendment(s). The amendment(s) was adopted by the board of directors without shareholder action.

☐ The corporation has not issued any shares of stock. Shareholder action was not required to adopt the amendment(s). The amendment(s) was adopted by the incorporators or by the board of directors.

NONPROFIT CORPORATION ONLY

5) CHECK THE APPROPRIATE STATEMENT

☐ Membership approval was not required. The amendment(s) was approved by a sufficient vote of the board of directors or incorporators.

☐ Membership approval was required. The membership vote was as follows:

Class(es) entitled to vote	Number of memberships entitled to vote	Number of votes entitled to be cast	Number of votes cast FOR	Number of votes cast AGAINST

6) EXECUTION

Print Name: Wm. A. Milne

Signature:

Title: President

7) CONTACT NAME: Laura Haytman

DAYTIME PHONE NUMBER: (203) 618-7135

FEES

Make checks for fees payable to "Corporation Division."

NOTE: Filing fees may be paid with VISA or MasterCard. The card number and expiration date

State of Oregon
Department of Environmental Quality Memorandum

Date: December 13, 1999

To: Environmental Quality Commission

From: Langdon Marsh

Subject: Agenda Item B, Rule adoption for Establishing Review and Acceptance Criteria for New or Innovative Technologies and Materials for Application in the On-site Program.

In 1998, EZ Drain Co. filed a petition with the Circuit Court for Multnomah County for review of a Department's order in relation to the sizing of a product used in on-site sewage disposal trenches and manufactured by EZ Drain Co. In July 1999, the Court remanded the issue to the Department to adopt objective standards for determining the sizing of alternative products by setting standards to be used in evaluating alternative products and to use the standard to re-evaluate all products which have applied for approval as well as using the standard to evaluate all future products.

On September 15, 1999, I authorized the Water Quality Division to proceed to a rulemaking hearing on proposed rules to establish criteria the Department would use in evaluating new or innovative technologies and materials for use in on-site sewage treatment and disposal systems. The rulemaking included a proposal to establish a testing protocol to be used when scientific studies have not been conducted to demonstrate how the technology or material performs. The rulemaking also included two alternatives for implementing the rule in regards to the currently approved products (EZ Drain and Infiltrator).

At the November 19, 1999 Environmental Quality Commission meeting, you were presented with the staff report dated November 12, 1999, relating to review and acceptance of innovative technologies for use in on-site sewage disposal systems.

Just prior to presentation of the report, Department counsel requested the Commission consider re-opening the public comment period so as to allow the opportunity for persons to submit additional comment on the proposal for rulemaking. This request was in response to an inquiry from EZ Drain Company. At that time, legal counsel for EZ Drain Company stipulated they would request the Circuit Court grant an extension of time for rulemaking.

After discussion, a motion was made and seconded to extend the public comment period through December 10, 1999, in order that additional written comment might be received and made a part of the record. The motion was passed without opposition.

Stephanie Hallock, Interim Administrator for the On-Site Sewage Disposal Program, then presented a summary of the staff report to the Commission. The Commission asked several questions about the alternatives and the performance testing protocol. A view was expressed that the performance testing should be conducted by an organization other than the Department.

The Commission agreed to consider taking final action on the proposed rulemaking at their meeting scheduled for December 20, 1999.

Comments received during the public comment extension include:

- Michael Houck, President, EEE ZZZ Lay Drain Company Inc., letter received December 3, 1999.
- James Nichols, President and CEO, Infiltrator Systems Inc., letter received December 10, 1999.
- David, Bartz, Jr, Schwabe Williamson & Wyatt, three letters received December 10, 1999.

Recommendation for Commission Action

It is recommended that the Commission adopt the rules Establishing Review and Acceptance Criteria for New or Innovative Technologies and Materials for Application in the On-site Program as presented in Department Staff Report dated November 12, 1999. This recommendation includes Alternative 3 for implementing the rule in regard to currently approved products.

Attachments

Comments received November 19 through December 10, 1999.

Approved:

Section:

Division:

Report Prepared By: Dennis Illingworth

Phone: (503) 229-5189

Date Prepared: December 10, 1999

EEE ZZZ Lay Drain Company, Inc.

P. O. BOX 639 • PISGAH FOREST, NORTH CAROLINA 28768 • (828) 883-2130 • FAX (828) 884-2348

December 2, 1999

Mr. Dennis Illingworth
Department of Environmental Quality
Water Quality Division
811 S.W. Sixth Avenue
Portland, OR 97204

Dear Mr. Illingworth:

This is in response to your memorandum of 11/22/99 concerning the extension of public comments relating to the proposed rules establishing review and acceptance criteria for new or innovative technologies and materials for application in the on-site program.

In the new rule proposal under OAR 340-071-0117 the department has set out certain requirements for new or innovative technologies to compare with Oregon's prescriptive standards. This new proposal is supposed to show a demonstrative comparable or equivalent performance with Oregon's standard trench through or by such a field study.

Under (h) you purpose to test products in different type soils. My question is: Has the Department verified through their own studies or independent research the standard trench increases the ability for infiltration in different type soils as you have proposed other products must be tested in? Has the standard trench ever been documented to allow wastewater passing through the standard drain media to change the soils ability to perk at any given rate? Why does the Department feel a need to test alternative systems in different type soils?

I don't believe you will find any alternative or conventional system that has the ability to increase or decrease the soil's ability to percolate the wastewater. In a low permeable soil the amount of square footage needs to be increased to accommodate for its inability to perk. Having a requirement such as the one proposed in the new rules to test in different type soils is a total waste of time and money. Without any documented research to support such a test, why would your Department now require such a comparison? It is illogical to test the use of a product in different type soils. The size or square footage

required should be based on the soils texture or percolation rate. The product will not change the soils texture or percolation rate.

You also purpose to require warranties to be issued from any/all prospective applicants. How long does the department warranty the prescriptive standard trench? How do you determine what is to be warranted? How does the department ensure that ALL conventional systems are correctly installed according to the rules? All on-site products are only a component of a system. Our product in particular will allow wastewater to flow and function as designed for an indefinite period of time.

Under 47 "Drain Media" you have stated the sizing parameters of crushed stone and/or synthetic aggregates. What process does the state use to ensure compliance with this rule for the use of crushed stone? Has the state ever conducted a sieve analyst on any site or at any quarry to ensure your rule requirement is being adhered too for the prescriptive standard trench? If so, you should provide any/all documents verifying such testing of the conventional system drain media, if this is now going to be a requirement to receive approval in the State of Oregon.

Under 93 "Peer Review" I would appreciate a list of the so-called experts in the field. Surely you have someone in mind. It would only seem fair to review their abilities and understanding of a conventional system prior to their becoming judges of products they may or may not understand.

Under "5-b" of OAR 340-071-0116 you state the substitute materials will have uniform contact with the bottom and sidewalls. Why? Do you have any research that indicates this type system will or has preformed better simply because it is in uniform contact with the sidewalls and bottom of the trench. Does the State of Oregon have any scientific data to verify this requirement will either enhance or harm the systems ability to function? If so it should be available for review by all concerns parties. If not then why would you now make this a requirement?

Under "5-a" you are requiring new or innovative materials to be capable of passing wastewater towards the infiltrative surfaces at a rate equal to or greater than drain media. What is the flow rate of the prescriptive standard drain media the State of Oregon is using now? This should be readily available now for review.

Under "5-e" You state the top surface of the substitute material for the drain media shall be level across the trench and be in contact with each side of the trench. Why? Has anyone in the Department conducted any type of research to verify such a requirement will enhance the function of the trench, If you have you should share this data with all concerns parties. If you haven't why would you now require innovative technology to meet such a requirement.

This entire re-writing of the rules as structured to find "equilibrium" with innovative or alternative systems in relation to the standard system has many drawbacks and complications. Anyone wishing to enter the State of Oregon's on-site program under

such conditions my find the cost is simply to great and the study to long. So who is really the loser. The market within the State of Oregon doesn't justify the time, effort or expense.

It is my opinion the State of Oregon will be the one to fall to the wayside when it comes to innovative technologies. A much simpler approach to finding out the "equal factor" is to determine the area of the standard trench. Once this has been established your job becomes so much easier. Apply that standard to any/all systems wishing to replace the standard convention system and the market will take care of any inferior product.

I would suggest hiring a well-known engineering firm with the knowledge necessary to complete such a task. Once they submit their numbers have your committee review and approve or disapprove their findings. If you accept their numbers and its approved through the proper channels you no longer need to involve yourselves or defend your actions. All that's left for the department to do is run the product through the formula. It can be just that easy.

Best Regards,

Michael Houck
President
EEE ZZZ Lay Drain Co., Inc.

Oregon

John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Water Quality Division
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5279
FAX (503) 229-6037
TTY (503) 229-6993

MEMORANDUM

Date: November 22, 1999

To: Interested and Affected Public

Subject: Extension of Public Comment Period Concerning Proposed Rules Establishing Review and Acceptance Criteria for New or Innovative Technologies and Materials for Application in the On-Site Program.

On November 19, 1999, the Environmental Quality Commission delayed taking final action on this proposed rulemaking action until December 20, 1999. The Commission directed that the public comment period be re-opened and extended through December 10, 1999, in order that additional written public comment could be received and made a part of the hearing record.

You may request a copy of the proposed rule amendments by calling Dennis Illingworth. His phone number is (503) 229-5189, or toll-free in Oregon 1-800-452-4011.

Written comments may be submitted to the Department by FAX (503-229-6037), or mailed to: Dennis Illingworth, Department of Environmental Quality, Water Quality Division, 811 S.W. Sixth Avenue, Portland, Oregon 97204. All written comment must be received by no later than 5 p.m. on December 10, 1999. All comments received after that date and time can not be included as a part of the written comment for this proposed rulemaking.

INFILTRATOR® SYSTEMS INC

The world leader in chamber technology™

December 10, 1999

BY FACSIMILE (503-229-6037) & HAND DELIVERY

Mr. Dennis Illingworth
Water Quality Division
Oregon Department of Environmental Quality
811 S.W. Sixth Avenue
Portland, Oregon 97204

Re: Comments on the "Proposed Rules Establishing Review and Acceptance Criteria for New or Innovative Technologies and Materials for Application in the On-Site Program"

Dear Mr. Illingworth:

Infiltrator Systems, Inc. (ISI) submits the following comments on the "Proposed Rules Establishing Review and Acceptance Criteria for New or Innovative Technologies and Materials for Application in the On-Site Program." *ISI supports the proposed rules and requests that the Environmental Quality Commission (EQC) adopt them with two critically important modifications:*

1. A slightly modified version of Alternative 2 should be adopted in lieu of Alternative 3. This would allow currently approved products that are working well to continue to be installed without onerous restrictions pending an opportunity to complete the rule's new performance evaluation requirements.

2. The proposed performance evaluation requirements should be modified as suggested by ISI to allow the Department the flexibility to approve more scientifically sound performance evaluation methods. ISI supports the need for product performance evaluations, but the proposed method—which would be extremely time-consuming and expensive to complete—may yield no meaningful results. The Department should have the authority to approve scientifically sound, peer-reviewed performance evaluation methods prepared by manufacturers that can establish the proposed product's performance.

ISI does not support the Department's recommended alternative (Alternative 3) for applying the rule to previously approved products. Nonetheless, if the EQC adopts that alternative, ISI asks that it be modified as described below to clarify that a manufacturer's size recommendation for approved products includes product width as well as length.

Background

To place the proposed rule in perspective, ISI believes that it is important to emphasize the following facts:

Chamber systems for on-site sewage disposal, such as those manufactured by ISI, are an established, cost-effective alternative to traditional stone-filled disposal trenches. ISI's chamber products are approved for use in 46 states and Canada and serve over a half-million homes. In 1995, the Department and the Department's On-Site Technical Review Committee (TRC) reviewed and recommended that the Director approve ISI's Equalizer® 24 (EQ24) chamber system. In December of that year, Director Langdon Marsh approved the EQ24 for use in Oregon at the same trench length as a traditional stone system. Since then, the EQ24 has established an exceptional performance record. More than 15,000 EQ24 systems have been installed in the state, and it has become the *de facto* standard technology, comprising approximately 70 percent of on-site drainfield systems now being installed.

The proposed rule was *not* prompted by any concerns or doubts about the performance of the EQ24 or of competing products that the Director has approved. Indeed, as noted in the attached paper, recent studies have demonstrated the excellent wastewater treatment and hydraulic performance of chamber systems such as the EQ24.

Rather, the rule was prompted by a legal action filed by an ISI competitor, who was dissatisfied that the Director refused to approve the use of its product at a disposal trench length substantially shorter than the required trench length for both stone and the EQ24. Because the Department could not articulate to the court's satisfaction the reasons for denying the request for a shorter trench length, the court directed the Department to adopt approval criteria and apply them to the competitor's product and to all products previously approved by the Director. The court, however, did not direct the Department to adopt any particular approval criteria or direct the Department to either approve or disapprove any product.

Alternative 2 for Applying the Rule to Previously Approved Products Should Be Adopted in Lieu of the Proposed Provisions

Pending the completion of a performance evaluation, the proposed rules would allow products that the Director has previously approved to continue to be installed *at the manufacturer's recommended size* after July 1, 2000, subject, however, to burdensome financial security requirements. This provision is problematic for three reasons:

1. There is no reason to subject previously approved products to expensive financial security requirements. The EQ24 and other approved products have already been thoroughly reviewed by the Department and the TRC and approved by the

Director. In addition, thousands of EQ24 systems have been installed in Oregon and are performing well. Based on discussions with brokers, the long-term bond or equivalent financial security required by the rule would be difficult to obtain and would be enormously expensive. At the current annual rate of ISI systems being installed in Oregon, the proposed requirement would cost $250,000 or more for the first year. As additional systems were installed, the annual cost would increase substantially beyond $250,000 in subsequent years. Given the exceptional performance of the EQ24, this extremely burdensome financial security requirement would have no environmental or human health benefit. It would serve simply to deny homeowners and contractors the use of the products or make them much more expensive.

2. On the other hand, the proposed rule would allow previously approved products to be installed at the manufacturer's recommended size, regardless whether the Department had ever reviewed and approved the size. Size, including trench length, is critical to the performance of a drainfield product. In fact, the dispute that led to the court action against the Department was prompted by its refusal to approve a shorter trench length for an already approved product. Although the proposed rule states that the manufacturer's recommendation would be subject to "Department concurrence," no criteria for giving or withholding concurrence are set forth in the rule. The absence of approval criteria is precisely the problem that the court identified in ruling against the Department in the litigation that led to the proposed rule. Furthermore, the manner in which the rule would be applied appears to have a high potential for arbitrariness. For example, ISI has been told by the Department that the rule would not apply to ISI's Equalizer® 36 (EQ36) because it does not have a "current approval" from the Department. The EQ36 is identical to the approved EQ24 in every respect except that the EQ36 is seven inches wider (*i.e.*, it is an approved product at a different size). A wider version of an approved product, because it has that much more area for distributing effluent to the soil, would necessarily perform better. Nonetheless, under the proposed rule ISI could not sell the EQ36 at any trench length, whereas ISI's competitor could sell its product at the substantially reduced trench length that the Director previously refused to approve.

3. The proposed rule would allow all existing product approvals to continue until July 1, 2000, regardless whether the product met the Department's prescriptive criteria or was engaged in a performance evaluation. Although ISI, which was not a party to the court action against the Department, does not believe that the court had the authority to direct the Department to reconsider product approvals that were not before the court, the proposal may not be consistent with the court's direction to apply the rules expeditiously to previously approved products. In addition, there does not appear to be any reason to delay the application of the rule in this manner. A product either does or does not meet the prescriptive criteria, and a decision whether to undertake a performance evaluation does not require several months.

Proposed Alternative 2 does not share the first two of these problems. It would allow, without further restrictions, the use of previously approved products pending an opportunity to complete the new performance evaluation requirements. It would also not authorize the use of products at sizes that had not been reviewed and approved by the Director. Alternative 2 does share the problem of delayed application of the rule, but ISI submits that that problem could be addressed by revising the alternative in the manner set forth below.

As an extra measure of protection, the rule could include express authority for the Director to suspend or modify an existing product approval pending the completion of the performance evaluation if evidence shows that continued use of the product poses a substantial risk to public health or the environment or if the proponent of the product is not making reasonable and timely efforts to complete the performance evaluation. For approved products that are working well, such a provision would strike an appropriate balance between protecting public health and the environment and encouraging innovative and cost-effective alternatives to traditional gravel systems.

For these reasons, ISI requests that the EQC adopt the following provision, which is similar to Alternative 2, in lieu of the Department's proposed OAR 340-071-0130(2)(b):

(b) Thirty days from the effective date of this rule, each approval for a new or innovative technology or material that was granted by the Director before July 1, 1999, shall be repealed unless:

(A) The Director determines that the technology or material meets the prescriptive standard option described in OAR 340-071-0116; or

(B) An applicant for continued approval of the technology or material notifies the Department in writing that the applicant will seek continued approval of the technology or material by documenting its performance pursuant to OAR 340-071-0116 or OAR 340-071-0117. Within 60 days of this notice, the applicant shall provide the Department documentation of the technology's or material's performance under OAR 340-071-0116 or shall submit for the Department's approval a proposed performance evaluation method, including a schedule for completing the evaluation.

(c) Continued approval of a technology or material pursuant to OAR 340-071-0130(2)(b)(B) shall not extend for more than three years from the effective date of this rule. The Director may suspend or modify an approval continued pursuant to OAR 340-071-0130(2)(b)(B) if:

(A) The Director determines that the performance evaluation or other evidence of performance shows that the technology or material does not meet the performance criteria in OAR 340-071-0116 or OAR 340-071-0117.

(B) The Director determines that the applicant is not making a good faith effort to complete a performance evaluation or is not making reasonable progress in completing the evaluation.

(C) The Director determines that use of the technology or material poses a substantial threat to public health or the environment.

Performance Evaluation Requirements

The proposed rule appears to require a specific performance evaluation method for drainfield systems. Because of the inherent variability in the performance of drainfield systems, the limited number of test systems required by the rule (or that could feasibly be evaluated under the rule) are unlikely to yield results that are statistically valid or otherwise scientifically meaningful. This problem was discussed at some length in the letters submitted to the Department by Drs. Siegrist and Otis. Moreover, the expense and time required to perform the required evaluation would likely preclude or discourage new or innovative products in Oregon. Based on its experience with previous performance evaluations, ISI has calculated that the installation and monitoring costs of the evaluation required by the proposed rule would likely exceed $300,000, and it would take several years to complete.

The performance of drainfield systems should be scientifically evaluated in other ways that will yield better information in less time and at less expense. For example, with a sufficiently large sample, one of the most accurate and efficient means of evaluating the performance of previously approved systems such as the EQ24 would be to compare the actual performance of the systems installed in Oregon against the performance of traditional stone systems in Oregon that meet the Department's prescriptive criteria. A conceptual outline prepared for such a study in another state by a nationally recognized expert in drainfield systems, Dr. Robert Siegrist, is attached.

The Department's rules should not narrowly prescribe performance evaluation methods. The Department should have the flexibility to approve the use of other performance evaluation methods that are scientifically sound and that will yield meaningful results. The Director should also be able to base a decision to approve or disapprove a product on the totality of the relevant scientific evidence available. The decision should not rest entirely on the results of a prescribed test, which may be contradicted or undermined by other evidence available to the Department.

ISI requests that the EQC adopt the attached modifications to proposed OAR 340-071-0116 and OAR 340-071-0117 to ensure that the Department has the authority to approve the use of other scientifically sound performance evaluation methods and that the Director may base decisions to approve or disapprove a product on all relevant, available, and scientifically valid evidence.

Modifications to Proposed Alternative 3

If, notwithstanding the concerns expressed above, the EQC chooses to adopt the currently proposed provisions for applying the rule to previously approved products, ISI requests that the proposal be modified to clarify that ISI's EQ36 is a recommended size for a previously approved product, the EQ24. The rule proposed by the Department (OAR 340-071-0130(2)(b)(B)) would provide:

> While engaged in the performance evaluation, materials with a current approval from the Director for use as a drain media substitute may be allowed through a construction-installation permit and sized according to appropriate manufacturer's recommendation with Department concurrence, provided . . . .

ISI's EQ24 is currently approved by the Director. ISI's EQ36 is identical to the EQ24 in every respect except width—the EQ36 is seven inches wider. The products have the same height, same design, fit within the same-sized trench, and function in precisely the same manner. Because it is wider, however, the EQ36 has more open bottom area to distribute effluent to the soil, and therefore *necessarily* performs as well as or better than the EQ24 for any given trench length.

Nonetheless, ISI understands that the Department tentatively does not believe that the EQ36 could be used under the proposed language because it is not a product with a "current approval from the Director." ISI submits that this would not only be an unnecessarily narrow interpretation of what constitutes an approved product but would also be inconsistent with the prescriptive criteria for drain media substitutes in proposed OAR 340-071-0116(5). The proposed prescriptive criteria recognize that the width of a drain media substitute is equally important as its length—trenches that are narrower than the standard trench must be compensated for by a proportional increase in trench length. The Department's tentative interpretation of proposed OAR 340-071-0130(2)(b)(B), on the other hand, would allow the use of previously approved products at reduced lengths but not at different widths. As noted above, *the perverse result of this interpretation would be that ISI's EQ36 could not be used at any trench length, even though it inherently performs better for any given trench length than the approved EQ24, whereas ISI's competitor could sell its product for use at the substantially reduced trench length that the Director has previously denied.*

To avoid this arbitrary and perverse result, ISI requests that, if the Department's proposed alternative is adopted, the alternative make clear that previously approved products may be installed at both the manufacturer's recommended length and width. ISI suggests that the provision quoted above be revised to read as follows:


(OAR 340-071-0130(2)(b)(B)) currently provides:

> While engaged in the performance evaluation, materials with a current approval from the Director for use as a drain media substitute may be allowed through a construction-installation permit and sized, with respect to width or length or both, according to appropriate manufacturer's recommendation with Department concurrence, provided . . . .

Conclusion

The EQC's and the Department's statutory obligation is to encourage the use of innovative products for subsurface sewage disposal while protecting public health and safety. ISI respectfully submits that the Department's proposed rule, with the modifications proposed above, fully complies with that obligation.

Thank you for considering these comments.

Sincerely,

James M. Nichols
President and CEO

Attachments

**** Preliminary Concepts ****

Protocol for Evaluating Hydraulic Performance for Comparability Between Chamber and Gravel Onsite Wastewater Systems

Preliminary Concepts By

Sheila Van Cuyk[1] and Robert L. Siegrist[2]

1.0 Introduction

Intermediate-scale laboratory research carried out at the Colorado School of Mines (CSM) compared aggregate-free versus aggregate-laden infiltration surfaced in lysimeters with either 60- or 90- cm of depth of unsaturated sand. The results of this research indicated that the hydraulic and purification performance of aggregate-free soil infiltration systems in comparable to aggregate-laden systems. Additional work was also conducted characterizing 14 mature field systems (systems that have been in operation for more than one year) located in Summit County, CO that have both aggregate-free and aggregate-laden infiltrative surfaces. This work will enable a comparison of the performance between the early life of a system and after maturity is reached while comparing the purification efficiency of aggregate-free versus aggregate-laden systems.

The investigation described here will consist of a large population of systems having either chambered or gravel laden infiltrative surface enabling a general evaluation of the hydraulic performance of each of these system types. Stratified random sampling based on soil and site characteristics will be used on a large population of systems (approximately 50% chambered and 50% gravel). It is proposed that soil type and system siting will have a greater effect on the hydraulic performance of these onsite wastewater systems and there will be no observable difference between chamber or gravel laden systems. In a study of sand lined trenches and conventional systems in North Carolina, Lindbo, et al. (1998) found that 16% of systems less than 5 years old failed (hydraulic failure as measured by surfacing of effluent), while 33% of older systems failed. These investigators noted that the primary factor for either success or failure consisted of design of ground water lowering systems (in region of high ground water table), soil conditions, siting of house and system on lot, and water usage.

2.0 Selection of Homes

Selection of homes to be included in this study will be based on the following criteria:

a. Geographic location. General geographic region to be determined. All homes to be included in the study will be located in 2 or 3 sub-regions each with a different soil type. Ideally, subdivision(s) containing homes with both chamber and gravel systems will be selected in each determined soil type.
b. Age of system. Homes included will be between 2 and 8 years of age.
c. System usage. Homes selected will be occupied year round and are anticipated to receive ~25 to 50% of system design capacity or a minimum of 100 gpd.
d. System features. Systems with a small depth from ground surface to infiltrative surface and easy accessibility will be selected.
e. Homeowner cooperation.

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[2] Associate Professor, Environmental Science & Engineering, Colorado School of Mines, Golden, CO. 80401-1887. Tel. 303.273.3490. Fax. 303.273.3413. Email: rsiegris@mines.edu.

3.0 Monitoring of Homes

Once a pool of representative homes in each sub-region has been selected and homeowner cooperation secured, monitoring will commence in the following manner:

a. Water use records will be obtained.
b. Homeowner survey will be completed. This will address the history of the system (number of occupants, dishwasher, laundry and garbage disposal usage), and past problems such as failures or backups (see Table 1). Management practices will also be noted (e.g. regularly scheduled septic tank pumping).
c. Individual sites will be visited to determine if system failure (surfacing of effluent at the ground level) has occurred.
d. Detailed characterization of the native soil will be conducted and recorded at each home site.
e. Each system will be evaluated for surface performance using the parameters shown in Table 2.

Table 1. Selected characteristics of onsite wastewater systems monitored.

Home	I.S. (Ch/Gr)	# Occupants (Adult/child)	Dwelling Size (BR)	Water Use (gal/mon)	Date Installed	Soil Type
1						
2						
3						
4						
5...						

Table 2. Hydraulic performance data for the systems monitored.

	Chambered		Gravel	
Performance indicator	No. of systems	%	No. of systems	%
Effluent surfacing				
Ponding in one trench				
Ponding in more than 1 trench				
Ponding levels (cm)				
Trench 1				
Trench 2...				
Infiltration rate of I.S. (cm/day)				
Trench 1				
Trench 2...				

Additional monitoring may be conducted for a subset of systems randomly selected from the pool inspected as noted above. This monitoring could include the following:

a. System failure is defined by effluent surfacing at the ground level.
b. Grain size analysis will be conducted using either the sieving or hydrometer method (Black, 1965). Soil color will be recorded using Munsell Color Chart.
c. Depth of ponding will be measured by probing and measuring depth of effluent above the I.S.
d. Infiltration rate will be measured by one of two methods.
   (i) Isolation of portion of infiltrative surface using a 5- to 10-cm diam. PVC piped driven into the infiltrative surface permitting infiltration rate to be measured under a constant head.
   (ii) Falling head measurements will be performed on continuously ponded systems using the WL-40 data logging device provided by ISI.

4.0 Summary of Previous Onsite Field Studies

The following recent studies have been conducted for purposes similar to those underlying the protocol concepts outlined herein. These studies provide a basis for methods to be used as well as a set of benchmarks that could be compared against.

Sand Lined Trench Septic System Performance on Wet, Clayey Soils
Hinson, Hoover and Evans. 1994
- North Carolina, 1991
- Random stratified survey involving 179 systems (represent 4% of total county systems)- surface performance evaluated. (83 conventional and 86 sand lined trench systems.
- Failure rate evaluated

Performance of Sand Lined Trench and Conventional Systems within a Management Entity
Lindbo, Campbell and Hollowell. 1998
- North Carolina, 1996
- Random stratified sample of 10% of systems installed from July 1991 to July 1995 (conventional and sand lined trenches (SLT)).
- Total of 91 systems evaluated including 19 conventional and 72 SLT systems
- Failure rate evaluated

Soil Treatment of Aerobically Treated Domestic Wastewater with Emphasis on Modified Mounds
Converse and Tyler. 1998
- Evaluated 39 systems, full time residences (pretreatment- 37 aerobic units and 2 single pass filters; soil adsorption- 35 mounds, 4 at-grade)
- Soil cores taken at 2 locations within system and 2 controls adjacent to system

Nitrogen and Fecal Coliform Removal in Wisconsin Mound Systems
Converse, Tyler and Litman. 1994
- Evaluated 13 "selected" mound systems (selection criteria not noted)
- Cores at 2 locations within and 2 controls

4.0 References

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Black, C.A. 1965. Methods of Soil Analysis Part 1: Physical and Mineralogical Properties, Including Statistics of Measurement and Sampling. 1965. American Society of Agronomy, Inc. Madison, Wisconsin.

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Converse, J.C. and E.J. Tyler. 1998. Soil Treatment of Aerobically Treated Domestic Wastewater with Emphasis on Modified Mounds. On-site Wastewater Treatment: Proceedings of the 8th International Symposium on Individual and Small Community Sewage Systems, March 8-10, 1998, Orlando, Fl. ASAE, St. Joseph, MI. p. 306-319.

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Siegrist, R.L., S. Van Cuyk, A. Logan, S. Masson, and E. Fischer. 1999. Hydraulic and Purification Behavior in Wastewater Soil Treatment Systems as Affected by Infiltrative Surface Character and Vadose Zone Soil Depth. Proc. Annual Conf. of the National Onsite Wastewater Recycling Association. Jekyll Island, GA. Nov. 3-6, 1999.

Sparks, D.L., A.L. Page, P.A. Helmke, R.H. Loeppert, P.N. Soltanpour, M.A. Tabatabai, C.T. Johnson, and M.E. Sumner (ed.). 1996. Methods of Soil Analysis: Part 3 – Chemical Methods. Soil Sci. Soc. Am. Madison, WI.

Van Cuyk, S., R. Siegrist, A. Logan, S. Masson, E. Fischer, and L. Figueroa. 1999a. Purification of Wastewater in Soil Treatment Systems as Affected by Infiltrative Surface Character and Unsaturated Soil Depth. 72nd Water Environment Federation Exhibition and Technical Conference, October 9-13, 1999, New Orleans, LA.

Proposed Amendments to OAR Chapter 340, Division 071

OAR 340-071-0116(1) The Environmental Quality Commission has established standards within OAR Chapter 340, Divisions 071 and 073, for on-site sewage disposal systems, including the materials used to construct them. Any new or innovative technology or materials to be used in systems within the State of Oregon that differ from the standards described in OAR Chapter 340, Divisions 071 and 073, may be reviewed by the Technical Review Committee consistent with the provisions in sections 2 through 5 of this rule. After consideration of the TRC's advice, the Department may recommend that the Director grant approval, consistent with OAR 340-071-0130(2). The Department shall require convincing documentation of performance as provided in sections (2) and (3) of this rule, or compliance with the prescriptive standard option as provided in sections (4) and (5) of this rule, before recommending a new or innovative technology or material for general use.

(2) Performance evaluation of new or innovative technology or materials. Performance is the preferred standard by which new or innovative technologies and materials are evaluated in the State of Oregon. Performance is established when the Department determines the criteria described in subsections (a) through (e) of this section are met:

(a) Peer-reviewed, third party documentation, usually obtained by field studies, that have produced data that is scientifically defensible and have sufficient replications to be representative. The data must clearly document the manufacturer's claim as to the performance of the product. Field studies may be based on a peer-reviewed evaluation of previously installed on-site disposal systems in Oregon or other locations that have similar soils and climates.

(b) The field studies shall have relevancy to the field conditions encountered within the State of Oregon, such as soil-type and climate, before the Department may recommend the technology or material for statewide use. If the studies are only partly relevant to Oregon field conditions, the Department may limit its recommendation of the technology or material to locations with similar field conditions.

(c) The field studies shall include a control that represents the applicable prescriptive standards within OAR Chapter 340, Divisions 071 and 073, against which the new technology or material is evaluated.

(d) The studies shall clearly define objectives and variables being considered. Objectives shall include performance standards sought. Variables shall include climate, soil, waste characteristics such as flow and strength, and topography.

(e) The field studies shall be sufficient to address system operations at maturity and any temporal variables.

(3) Supplemental to the requirements described in section (2) of this rule, if field studies conducted to demonstrate equivalent or better performance of material used as a substitute for drain media are not based on evaluations of previously installed systems, they shall be conducted substantially in conformance with the testing protocol in OAR 340-071-0117 or such other peer-reviewed testing protocols as the Department may approve.

(4) Prescriptive standard option. . . .

. . . .

OAR 340-071-0117 The Department may consider new or innovative technology or materials for use in on-site systems through a performance evaluation process that is technically justifiable, that has been peer reviewed and agreed upon and is acceptable to the Department, or through the WPCF permit process. The results of the performance evaluation shall be used to determine approval, conditions of approval or denial of the technology or material. Where the WPCF permit process is used, an application must be submitted pursuant to OAR 340-071-0162. Through this permit, a performance history may be established through a field study to demonstrate comparable or equivalent performance to Oregon=s prescriptive standards. Compliance with the following criteria is required:

. . . .

(10) Supplemental to sections 1 through 9 of this rule, a field study involving a substitute material for drain media shall include the following unless the Department approves an alternative, peer-reviewed proposal for different study requirements that will establish the relative performance of the substitute material:

(a) A standard on-site system shall be installed and sized according to tables 4 and 5 of OAR Chapter 340, Division 071, for a given soil group. . . .

INFILTRATOR SYSTEMS INC

The world leader in chamber technology™

December 10, 1999

BY FACSIMILE AND FIRST-CLASS MAIL

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Dear Commissioners:

Attached is a courtesy copy of Infiltrator Systems, Inc.'s additional comments to the Department of Environmental Quality on its "Proposed Rules Establishing Review and Acceptance Criteria for New or Innovative Technologies and Materials for Application in the On-Site Program," which are scheduled to be consider during the Environmental Quality Commission's December 20, 1999, conference call. Thank you very much for the attention that you have devoted to this issue.

Sincerely,

James M. Nichols
President and CEO

Attachment
cc: Mr. Dennis Illingworth, DEQ
Mr. Larry Edelman, DOJ
Mr. Larry Knudsen, DOJ
Mr. Daniel Beardsley, Albers & Co.
Ms. Gail Achterman, Stoel Rives
Mr. Michael Campbell, Stoel Rives

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December 9, 1999

Environmental Quality Commission

Letter No. 1

Re: *E-Z Drain Co. v. State of Oregon*
Proposed Rule -- Alternative Technologies for On-Site Systems
Our File No. 104483 112751

Dear Commissioners:

Did you know that the proposed rules for Alternative Technologies for On-Site Systems would allow the continued installation of a product, the Equalizer, which the Circuit Court for Multnomah County found:

1. Has less infiltrative surface than the E-Z Drain product? and

2. Was approved by the DEQ in an unconstitutional process?

This letter is the cover letter for two letters and exhibits provided on behalf of E-Z Drain. Letter No. 2 addresses several areas where the proposed rules violate the Court's order. Letter No. 3 details procedural defects which continue to pile up in a process which the Circuit Court found was unconstitutional.[1]

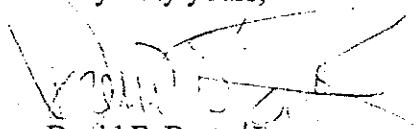
We request your consideration of these materials and your direction to the Department to treat E-Z Drain "fairly," which is what the Court required:

> "The Court's goal is that the agency use that considerable expertise to objectively and therefore fairly set the standards for alternative drainage field products in this state and then objectively and therefore fairly apply those to any and all products that seek to

[1] For example: the Department did not provide you a key letter which the Department wrote to E-Z Drain during the rule development process (see Exhibit B attached to letter No. 2) and a key letter submitted to the Department by E-Z Drain's attorney (See Exhibit E, attached to letter No. 3).

market here." Judgment, p. 4, item (ix) (emphasis added) (attached as Exhibit A to letter No. 2.

Very truly yours,



David F. Bartz, Jr.

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cc: Client
Langdon Marsh
Larry Edelman
State Senator Ferrioli
Department of Environmental Quality
c/o Dennis Illingworth

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December 9, 1999

Environmental Quality Commission

Letter No. 2

Re: *E-Z Drain Co. v. State of Oregon*
Proposed Rule -- Alternative Technologies for On-Site Systems
Our File No. 104483 112751

Dear Commissioners:

On behalf of the E-Z Drain Company we are writing to request that you direct the Department of Environmental Quality (Department) to promulgate new rules for alternative products for on-site systems which will comply with the recent Court ruling. This situation is unique and requires your independent judgment. The Court found that the Department has the information necessary to implement a fair rule and yet, the Department has chosen not to do so.

A. This Rule Making Request is Unique

This situation is unique for three reasons:

1. The Court found that the E-Z Drain product is a better product than its more favorably treated competitor (the Equalizer). The Court found that the E-Z Drain product provides more infiltrative surface than the Equalizer. Judgment, p. 2, item (iii) (attached as Exhibit A). The Department and the Court agree that infiltrative surface is the most critical element for an on-site system. Judgment, p. 1, item (i).

2. The DEQ acknowledges that the E-Z Drain Company is uniquely impacted by this rule. In the rule making packet the Department says "there is one small manufacturing business...that may potentially be affected to some degree." *See* DEQ Rulemaking Packet, Attachment B-2, p. 2. The Department has told E-Z Drain that E-Z Drain is that business. The Court found that E-Z Drain was adversely impacted by the Department's previous process, and yet, we are headed that way again. *See* Judgment, p. 3, item (viii). The proposed rules again single out E-Z Drain for different treatment.

3. This rule making is in direct response to a Court order. The Court found that E-Z Drain had not been treated "fairly" Judgment, p. 3, item (vii). If the rule is not fair, E-Z Drain must again look to the Court.

B. The Court's Judgment.

The Court's judgment required the Department to set standards "fairly" for alternative on-site products and to apply those standards "fairly" to existing and future products. Instead, the Department created a new prescriptive standard that is a departure from its past practice and differs from the testimony the Department provided to the Court.

Please read the Court's own words:

> "The Court's goal is that the agency use that considerable expertise to objectively and therefore fairly set the standards for alternative drain in each field products in this state and then objectively and therefore fairly apply those to any and all products that seek to market here." Judgment, p. 4, item (ix) (emphasis added).

The Court also concluded:

- "E-Z is clearly an aggrieved party. It has been adversely affected in its ability to compete in the market place by the unequal treatment it has received in the approval process." Judgment, p. 3, item (viii) (emphasis added).

- The Department did not apply objective criteria ("length, infiltrative surface, side wall contact, fill or undisturbed side wall, storage capacity, and surge capacity") in evaluating E-Z Drain's products. Judgment, p. 3, item (vi).

- The two similarly situated alternative products were not treated equally. Judgment, p. 3, item (vii).

The Court gave the Department stringent instructions for the remand. The Court ordered that the Department was to base the new rules on the information that was before it. Judgment, p. 4, item (xii). Time was of the essence. Judgment, p. 4. In the remand instructions, the Court said:

> "It [the Department] must define how it measures whether a product is as or more protective than standard stone trench [sic]. It could adopt the criteria such as those used in Mr. Olson's analysis comparing alternative products to the standard or it could decide that the standard was set when the first alternative product (Equalizer) was approved." Judgment, p. 4, item (x).

Two sentences later the Court said:

> "If the stone-filled trench is still the standard, then all products shall be compared to it. If Equalizer is the new standard, then all other products shall be compared to it." Judgment, p. 4, item (xi).

The Court closed with clear instructions for the Department to move forward promptly on the information before it. The Court ORDERED:

> "Based on all the information already at the State's disposal, the Court finds it reasonable for the Agency to complete a new process within 60 days."[1] Judgment, p. 4, item (xii) (emphasis added).

C. The Proposed Rule Violates the Court's Order.

The proposed rule provides (1) a new prescriptive standard for alternative on-site products and (2) a new testing or "performance" protocol.

(1) The Department expects the currently approved products of E-Z Drain to fail the new prescriptive standard (*see* letter from Dennis Illingworth of the DEQ, attached as Exhibit B). The Court did not order the Department to create a new standard that would prohibit E-Z Drain's existing products. Instead, the Court required the Department to promptly apply its existing standard to current products. Judgment p. 4, item (xii).

(2) The testing protocol creates huge practical burdens to market entry. Also, the testing protocol is not a "standard"; it does not create a "standard" against which products can be measured. A brief review of the language shows that the Department has left massive holes in the testing regulation.

1. The Prescriptive Standard

a. The Department knows the current alternative products will not meet the new standard.

The prescriptive standard purports to establish specific, across-the-board criteria for alternative products. A product either meets this criteria or it does not. THE DEQ HAS ALREADY TOLD E-Z DRAIN THAT ITS CURRENT PRODUCT – THE PRODUCT WHICH WAS THE SUBJECT OF THE LAWSUIT – FAILS TO MEET THE NEW PRESCRIPTIVE CRITERIA.

A copy of the Department's September 29, 1999 letter to Alex Mauck of E-Z Drain is attached as Exhibit B.[2] On page 1 of the letter the Department repeats E-Z Drain's question which was, in essence, how will our current products fare under the new prescriptive standard? The Department replied:

---

[1] The Department later requested and received more time to implement the rule. At no time did the DEQ indicate it needed to or was going to create the completely new process that is evident in the proposed rule.

[2] Importantly, this letter was not provided to you or described for you in the rulemaking packet, nor was there any indication in the rulemaking packet that the Department even sent the Illingworth letter. Isn't this a letter you should have seen?

> "Without modification or the addition of loose media, these configurations [the existing E-Z Drain products] would not be approved under the proposed prescriptive standard." (Emphasis in original).

The Department's letter also concludes that the Equalizer products will also fail the new standard. Exhibit B, Illingworth letter, p. 2.

b. The new prescriptive standard is based on rationale dramatically different than the Department has ever used for the on-site program.

You may ask, "how does this new prescriptive standard differ from the current Oregon standard?" The answer to that question can be found in facts that were undisputed before the Court:

(i) The Equalizer and E-Z Drain products do not completely fill the standard trench in the same way that a standard stone trench is filled with drain rock. There are voids between the sidewalls of the trench and the alternative products. These voids are filled with soil. The Infiltrator product uses substantially more fill dirt than the E-Z Drain product. The Department and the Court agree that fill dirt absorbs less, and therefore provides less treatment, than the undisturbed sidewall of a trench. *See* Judgment, p. 2, item (ii).

(ii) As you have been told, the Equalizer product manufacturer says they have installed over 15,000 systems in Oregon. That means there are 15,000 or more systems in Oregon approved by the Department which have significant voids which have up until now been filed with dirt.

(iii) E-Z Drain has only approximately 1500 products installed in Oregon. While the E-Z Drain systems require much less fill than the Equalizer systems there is some fill on the top of the product.

The important departure in the new prescriptive standard is the requirements that the alternative product completely fill the trench from top to bottom and side to side. *See* Proposed OAR 340-071-0116(5)(b)(C) in Proposed Rulemaking Packet, Attachment A, p. 22. This has never before been required of an alternative product in any state, let alone Oregon. This requirement represents a dramatic departure from the Department's past standard and past practices.

It is a departure because the Department has always relied on trench length to be the key element of the on-site treatment system and the Department has never required product fill the trench from side to side and top to bottom.

In fact, the Court found, based on the Department's testimony, that "the only way to increase total infiltrative surface is to increase trench length." Judgment, p. 2, item (ii). This

new rule makes irrelevant any lengthening of the trench. The existing products cannot be lengthened because the Department has created a new, never before used, requirement for alternative on-site products to completely fill the trench.

Did the Court intend for the Department to devise a new standard? A standard that departs from the Department's previous practices, is not based on anything contained in the previous record before the agency, and actually contradicts the Department's testimony?

The answer is, No. *See* Judgment, p. 4, items (x), (xi) and (xii).

2. The Performance Protocol.

The performance protocol violates the Court order for legal reasons and practical reasons. Legally, it does not create a standard and employs vague terms. Practically, it bars small manufacturers from even entering the marketplace because of the massive upfront cost imposed upon small manufacturers of on-site technologies.

a. The "Performance Protocol" is not a standard.

A single reading of the new proposed performance protocol shows that it does not create a standard. The key language is in the part of the rule which implements alternative 3, the alternative proposed by the Department. *See* Proposed OAR 340-071-0130(2)(b) in Proposed Rulemaking Packet, Attachment A, p. 27-28. Alternative 3 provides that on July 1, 2000 all previous approvals shall expire unless (A) they conform to the new prescriptive standard or (B) they are in the process of an evaluation of performance under the new performance protocol. The Proposed Rule states:

> "At the conclusion of the evaluation, which shall not exceed 3 years, the Director may approve the new or innovative technology or material if it meets the criteria." OAR 340-071-0130(2)(b)(B).

What is "the criteria"? It is not defined. "The criteria" might be referring to the test protocol provided in OAR 340-071-0117. But, that subsection -0117, simply requires a product be "acceptable to the Department." It does not identify a standard.

Subsection -0117 of the proposed rule does not establish sizing criteria to apply to proposed alternative products; it establishes a test protocol. The test protocol does not create nor establish a sizing standard. The protocol does not establish how much of an alternative product is needed to compare to a standard stone trench, contrary to the Court's express direction. *See* Judgment, p. 4, the paragraph which includes items (x), (xi) and (xii). Moreover, at the end of those three years, because of the term "may," the test protocol leaves market entry up to the total discretion of the Director, and therefore in doubt.

In short, the testing protocol is not a sizing standard, it is testing protocol. It contains no elements that create certainty on the part of an alternative product manufacturer as to the size at which its products will be approved. The Court held:

> "[T]he agency must put into writing how it measures alternative products to determine sizing." Judgment, p. 3, item (v).
>
> "[A]pplicants have the right to know, before investing time and money, what the Oregon standard is and exactly what factors will be evaluated in measuring the new product as an alternative to that standard." Judgment, p. 2, item (iv).

The Court has found that, in fact, the Department has already developed a standard, but that the Department simply failed to use or apply that standard. *See* Judgment, p. 3, item (vi). This Proposed Rule, and particularly the Proposed Protocol, simply discards the existing standard. In its place, it proposes a three-year test that, at the end, may or may not establish whether a product equals a stone trench. Thus, this proposal rule does NOTHING to provide advance notice of what the standard is or what factors will be evaluated.

b. <u>The "Performance Protocol" contains vague terms.</u>

The language of the test protocol is also standardless and vague. Please read the lead and controlling sentence:

> The Department may consider new or innovative technology or materials for use in on-site systems through a performance evaluation process that is <u>technically justifiable</u>, that has been peer reviewed and agreed upon and <u>is acceptable to the Department</u> [or through a WPC permit process]. OAR 340-071-0117 (emphasis added).

Please look at that final phrase. What is "acceptable to the Department?" Another critical undefined term is "technically justifiable." Neither term is defined. The term <u>cannot</u> be objectively measured.

Also look at OAR 340-071-0017(9), entitled "Final report," which says,

> "Technologies and materials whose performance has been <u>satisfactorily substantiated</u> through a field study may be authorized for a broader use in Oregon. *See* Proposed Rulemaking Packet, Attachment A, p. 25 (emphasis added).

What does "satisfactorily substantiated" mean? The term is not defined. It is unconstitutionally vague.

A rule with undefined, subjective "standards" leaves an applicant without prior knowledge as to how the Department will define those terms. This is especially important in this case, where the Court has already found that the Department treated E-Z Drain unfairly.

c. The Protocol creates a barrier to market entry.

E-Z Drain does not dispute that the Department can legally establish a policy that includes performance analysis. The Court also said so. The problem here is that the Department has established a testing protocol, which allows Equalizer to continue to sell, and market the same product that was approved through an unconstitutional process. In other words, Equalizer would be allowed to continue to market its "approved" product for three more years while it is being tested.

Meanwhile, E-Z Drain, although it would be allowed to install its product on a temporary basis, would have to wait three more years to be approved. The Court ordered the Department to give E-Z Drain a prompt evaluation, not another delay. Therefore, the protocol is unlawful as a practical matter because:

(1) it allows E-Z Drain's competitor to continue to market its products based on an unconstitutionally acquired approval,

(2) it preserves E-Z Drain's unconstitutional second-class status;

(3) it establishes an onerous testing requirement which abandons a fundamental part of the Oregon program: trench length; and

(4) it establishes a barrier to market entry.

These items are discussed below:

(1) Alternative 3, which the Department proposes the Commission adopt, establishes a three-year testing period. Current approved products are allowed to continue to market their products "as approved" while undergoing side-by-side testing. Products that are not yet approved can also be installed, but under a construction permit. They will not be "approved" until the conclusion of the testing – three years away.

This performance testing preserves the "unfair" status quo for three more years. Equalizer will continue to market its product as approved, even though it gained the approval through an unconstitutional process. E-Z Drain's only approved products were those which put it at a constitutionally impermissible disadvantage. This is what the Court has already found.

(2) The Commission should not ignore the practical implications of E-Z Drain being denied approval for three more years. The Court required that the Department promptly apply its standard to all products. Judgment, p. 4, item (xiii). E-Z Drain will be denied prompt evaluation. Remember, the Court already found that E-Z Drain had "been

adversely affected in its ability to compete in the market place by the unequal treatment as received in the [Department's] approval process." Judgment, p. 3, item (viii).

(3) The testing program is onerous. Look at what the testing the program requires. It requires side-by-side tests in various soil types throughout Oregon -- 3 sites in each of the three Oregon soil types in both Western Oregon and Eastern Oregon. A total of at least 18 side by side tests is required. This is a fundamental change in the Department's program. To make such a change in this rule making is an unconstitutional barrier to E-Z Drain. Up until now, the Department has not required such particularized testing of any new product.

The Department has operated the on-site program for dozens of years. During that time, the Department has developed tables 4 and 5. *See* OAR 340-071-0220(2). These tables establish the proper length of a disposal trench with standard drain rock. Although there are many soil types throughout Oregon, the tables account for those differences by requiring various trench lengths. For example, a certain soil in Baker County will require a trench length described by the tables, and a certain soil in Coos County will likely require a different trench length according to the same tables.

The Department has extensive knowledge about how Oregon soils react to onsite sewage. The current rules lengthen and shorten trenches on standard systems based on these soil types. These soil types are the same as will be used by alternative products and standard products alike. There is no need to require testing in each of these different soil types. The Department knows that on the basis of a "standard" it can project the performance of an on-site system in different soil types throughout the State of Oregon. The requirement that alternative products be tested in all the different soil types is unnecessary. The requirement is arbitrary, and is an unconstitutional flaw in the Department's new proposal.

(4) Finally, the three year testing at several different sites supervised by three independent consultants creates an unreasonable and unconstitutional barrier to market entry. E-Z Drain has estimated the cost of installation, maintenance, monitoring and scientific evaluation of the test required in the performance standard will be between 1.28 million dollars and 1.38 million dollars. *See* Exhibits F and G, attached to Letter No. 3. These numbers are well-considered and will be the same numbers we will provide to the Court.[3]

It is most interesting to see the Department's requirement of three independent consultants. There was uncontradicted testimony in the trial that the Department conducted a "nationwide" search for a consultant to assist the Department in evaluating on-site systems. The Department could find no one. The Court notes, "the

[3] A fundamental flaw in this rule is the total lack of analysis of the financial requirement the testing imposes on new products and small business. Oregon law requires more ORS 183.335(2)(b)(E); *Dika v. Department of Insurance and Finance,* 312 Or 106, 110-11, 817 P2d 287 (1991) (rule overturned because agency made only a general finding that certain entities would be affected).

State itself was unable to find anyone willing to do such testing" Judgement, at p. 4, item (xiii). Now the Department requires applicants to provide three of what it could not find at all.

Are seven-digit costs what the Court envisioned when it required the Department to "fairly" set standards and apply them to E-Z Drain?

D. <u>The Department has the Fair Answer in Front of It; This Commission Should Encourage the Department to Follow it.</u>

In the 4,000 pages plus pages of the administrative record on the E-Z Drain approval there are two memoranda from the Department's most senior on-site staff person which analyzes the two key alternative products against the Oregon standard as it existed from the beginning through July, 1999. The memoranda are attached as Exhibits C & D.

In essence, the memoranda say that each of the products, E-Z Drain and Equalizer, fall short of the Oregon standard of the stone trench to one degree or another. The memoranda recommend that the trench size be lengthened to account for the degree of short fall. The Court made the same conclusions. Judgment, p. 2, item (ii). In the case of E-Z Drain, the product must be extended a few percentage points. In the case of the Equalizer product, the product length must be extended by 30 percent.

The uncontroverted testimony before the Court was that Sherman Olson is the most senior staffer in the on-site program at the Department. The uncontroverted testimony was that Mr. Olson did not participate in the final developments of the Department's unconstitutional approval process in 1997. At that time, Mr. Olson's recommendations were rejected by his superiors at the Department. On the other hand, Mr. Olson was the lead witness for the Department in defense of its rule making process. Mr. Olson was put forward as the expert for the Department in on-site sewage systems and alternative products. The Court recognized Mr. Olson's expertise in its order. *See* Judgment, p. 3 the paragraph with item (vi).

The Department has before it the two options that the Court recognized and <u>which the Court ordered the Department to use</u>:

1. The Olson formula based on the standard stone trench; or

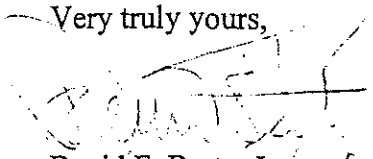
2. The Equalizer "standard." Judgment, p. 4.

Please remember that the Court found that the E-Z Drain product has more infiltrative surface than the Equalizer product. Judgment, p. 2, item (iii).

CONCLUSION

The proposed rule is in direct defiance of the Court's Judgment. The Department has a workable standard in place. *See* Olson Memorandum (Exhibits C & D). The Commission should require the Department to drop its attempt to write a new standard and require fair implementation of the existing on-site standard.

Very truly yours,



David F. Bartz, Jr.

DFB:nh

cc: Client
Langdon Marsh
Larry Edelman
Department of Environmental Quality
c/o Dennis Illingworth

EXHIBIT A

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF MULTNOMAH

EZ DRAIN CO., an Oregon limited liability company, Plaintiff, v. STATE OF OREGON, DEPARTMENT OF ENVIRONMENTAL QUALITY, Respondent.	)	Case No. 9809-06683 **JUDGMENT**

On May 27 through June 2, and June 28, 1999, this matter came before the Court for judicial review of DEQ's final order concerning sizing of the EZ Drain products. The petitioner was represented by David Bartz; DEQ was represented by Assistant Attorney General, Karen Moynahan. The parties also submitted trial and closing memoranda. After considering all of the evidence and being fully advised in the premises, the Court finds the following facts to be true about the mechanism of septic system drainage trenches in Oregon:

The standard is the stone-filled trench which is 24 inches wide, and 12 inches deep, thereby providing six feet of surface contact per lineal foot. It is filled with a four inch perforated pipe, surrounded with 12 inches of washed stone.

DEQ has determined that this system is optimal to protect the environment and people of Oregon, and is therefore, the standard against which to compare all other products.

In recent years alternative products have come on the market which seek to replace the stone and pipe incorporated in the standard. EZ and Equalizer are alternate products which have been submitted to DEQ for approval.

Oregon has nine different types of soil and the standard must fit a variety of conditions.

No treatment of the water occurs in the trench itself. Treatment occurs only as the water infiltrates the soil. Therefore, maximum infiltration is necessary for maximum treatment.

A biomat forms over time which slows down infiltration. The biomat forms primarily on the bottom of the trench, although some may form on the sides. The sidewalls therefore become the primary infiltrative surface. The top of the trench is an infiltrative surface only when the trench is full.

Once soil is disturbed, its structure changes. It becomes less able to absorb effluent. An undisturbed side wall is able to absorb more than a side wall of fill [disturbed] dirt. Since the depth and width of the trench are fixed, the only way to increase total infiltrative surface is to increase trench length. (ii)

The existence and importance of stone masking is in dispute and is not recognized in the Oregon standard.

EZ has more infiltrative surface than Equalizer. (iii)

After considering all the facts and being fully advised in the premises, the Court makes the following findings of fact concerning DEQ's process for the approval of alternative products for septic drainage trenches:

There is no requirement that DEQ permit any alternative products if they do not meet Oregon standards.

The Oregon standards do not take into account the economic benefit or detriment to any applicant.

The approvals of the two alternative products at issue in this case were not based on any independent 3rd party studies or evaluations.

DEQ staff did not prepare agency analyses or recommendations of the products prior to TRC recommendations or agency approvals.

After considering all of the evidence and the arguments of the attorneys, the Court draws the following conclusions of law concerning the approval process:

DEQ must assume that other applicants will come before the agency for approval. Those applicants have the right to know, before investing time and money, what the Oregon standard is and exactly what factors will be evaluated in measuring the new product as an alternative to that standard. (iv)

The TRC is an advisory body to the agency.

Approvals can't be dependent on who the members of the TRC or the department are.

The agency must make its final decision based on the use of standards that can be quantified. The decision is therefore an objective rather than a subjective one. This is clearly possible as shown by the memos of Mr. Olsen on pages 119-122,169-172,173-179 and of Mr. Marsh on pages 180-188.

A request for approval inherently includes a request for appropriate sizing. The issue is how the product does the job of the standard stone trench.A foot-to-foot approval is a finding that one foot of product does the work of one foot of the standard.

Despite any request from an applicant, DEQ must make its own independent sizing determination.

The agency must put into writing how it measures alternative products to determine sizing. (v)

Trial testimony was very clear that DEQ has the expertise to explain, as it did to this Court, how a standard trench works. Both Mr Farrell and Mr Olsen wrote memos analyzing the process. The components of their analysis are: length, infiltrative surface, side-wall contact, fill or undisturbed side wall, storage capacity, and surge capacity. These objective criteria are the basis by which the agency must measure any product approvals. This Court does not find substantial evidence on the record that the agency decisions have been made after the application of these objective criteria. (vi)

Have EZ and Infiltrator been treated equally? There is insufficient evidence on the record for the Court to conclude that they have. (vii)

EZ is clearly an aggrieved party. It has been adversely affected in its ability to compete in the marketplace by the unequal treatment it has received in the approval process. (viii) Upon reevaluation following this Court's Order of Remand, it may or may not be better able to compete, but then it will be as a result of the free market place, not as a result of agency action.

The parties are similarly situated - each is an alternative product to be used in place of the standard stone-filled trench. Each performs the same function although their shapes and materials are different. The State attempts to distinguish them by saying that only EZ asked to be sized at less than a stone trench. That mis-characterizes the requests and more importantly the role of the agency. DEQ is charged to "protect the public health and general welfare of the people of Oregon and to maintain the quality of public water." The agency's obligation is to determine whether any alternative product meets the protective standards . Surely an inherent part of that decision is to determine how much of the product it takes to equal the performance of the standard. How can any approval process not include a sizing determination?

What about agency judgment and discretion? Clearly there are areas in which the agency must use its best professional judgment and expertise. One of these areas is in the setting of objective criteria used to evaluate the standard versus the alternative product ie, stone masking, the effect of fill instead of undisturbed sidewall, whether the top of the trench counts as important in filtrative capacity, the effect of a biomat on the bottom and sides. Once these judgments are made as to what the criteria will be, the agency must objectively and evenly apply the criteria to all applicants without subjective judgments. How else will applicants know that

their business has been given a fair opportunity to compete. How else will prospective applicants determine whether they should even apply to compete here.

This Court has no wish to take over the function of the Agency . DEQ clearly has a vast amount of experience and expertise. All this Court knows about drainage fields is contained in the record of this case. The Court's goal is that the agency use that considerable expertise to objectively and therefore fairly set the standards for alternative drainage field products in this state and that it then objectively and therefore fairly apply those to any and all products that seek to market here. (ix)

The issue of independent testing may come up on remand . The agency could as policy make independent testing a requirement for approval. Such a requirement could in effect prevent any alternative products from being approved since the state itself was unable to find anyone willing to do such testing. It then becomes difficult to imagine that any applicant could find such an expert since the requirement of EZ was that the testing be conducted by an "independent third party" (not paid by the applicant). But if the agency chooses to make testing a requirement , it can as long as all applicants have such a requirement. To require EZ alone to provide such testing in order to be properly sized is clearly unequal treatment of a similarly situated party. If imposed, such a requirement must clearly spell out what must be tested, for how long, and under what conditions. (xiii)

IT IS HEREBY ORDERED AND ADJUDGED that this case be remanded to DEQ. On remand, the agency must first determine what standard it wants to use. It must define how it measures whether a product is as or more protective than standard stone trench. It could adopt the criteria such as those used in Mr. Olsen's analysis comparing alternative products to the standard or it could decide that the standard was set when the first alternative product (Equalizer) was approved. Then, after the standard has been determined and put into writing, DEQ must use that standard to reevaluate all alternative products which have applied for approval, and it must use that standard to evaluate all future applications. [The Court uses the term "approval" to include sizing]. If the stone-filled trench is still the standard, then all products shall be compared to it. If Equalizer is the new standard, then all other products shall be compared to it. As part of the evaluations the sizing determinations must be written. Time is of the essence here for the present products, for future applicants and for Oregon homeowners who need effective and cost effective septic systems. Based on all of the information already at the State's disposal, the Court finds it reasonable for the Agency to complete a new process within 60 days. (x) (xi) (xii)

The Court DENIES petitioner's request for attorney's fees. Although the Court has ruled against the agency, it does not find that the agency was totally without basis for its judgment in this, a new field of technology.

Dated: July 19, 1999

Linda L Bergman
Circuit Court Judge

EXHIBIT B

Oregon
John A. Kitzhaber, M.D., Governor

Department of Environmental Quality
Water Quality Division
811 SW Sixth Avenue
Portland, OR 97204-1390
(503) 229-5279
FAX (503) 229-6037
TTY (503) 229-6993

September 29, 1999

Alex Mauck
E-Z Drain Co.
931 NE Harlow Place
Troutdale OR 97060

Dear Mr. Mauck:

The Department has received your letter of September 23, 1999 in which several questions were asked regarding the proposed rules for Innovative Technologies or materials.

Below are your questions with the answer following each question. Please note that many of your questions are related to one answer.

Question 1.
Without modification or addition of loose media, how would
a) 2012-2 12" Horizontal configuration be sized?
b) 2003 10" Triangular configuration be sized?
c) 2003 10" Horizontal configuration be sized?

Answer #1. The proposed rules allow for two approaches to approval of an innovative technology or material for use in on-site systems. The two approaches are:

1) A performance evaluation as outlined in the draft as OAR 340-071-0116 (2) and (3) or,

2) A prescriptive standard as outlined in the draft as OAR 340-071-0116 (4) and (5).

The configurations you have noted above could be considered at the manufacturer's recommendation for sizing under the performance evaluation approach. This would require a completed study or a new study in Oregon, with either the completed study or new study meeting the criteria as outlined in the proposed rules.

Without modification or the addition of loose media, these configurations would not be approved under the proposed prescriptive standard. The product appears to meet the proposed 340-071-0116(5)(a). However as currently configured, the product would not meet, at least 0116(5)(B) which would require "that the drain media shall be placed within the trench, and be in uniform contact with the trench bottom and sidewalls" and 0116(5)(E) which would require "the top surface of the substitute material for drain media shall be level across the trench and be in contact with each side of the trench."

Question # 2
How would my steep slope and seepage trench configuration be affected and sized?
Please refer to answer #1.

Question 3.
How would our tile de-watering and curtain drain approvals be affected and sized?
Answer to #3. Unaffected by this proposal. Tile de-watering and curtain drain configurations are not for disposal trench use.

Question 4.
How would our 2001 conventional sand filter system be affected and sized?
Please refer to answer #1.

Question 5.

How would our pressurized distribution approvals be affected and sized?
Please refer to answer #1.

Question 6.
How would Infiltrator EQ 24 be sized without addition of loose media?
Although configurations are significantly different between this product and yours, the answer to this question is essentially the same as the answer to question #1.

Question 7.
How would the half pipe "Gravel-less Absorption Method" OAR 340-71-290(7) be affected?
Answer to #7. Unaffected by this proposal. This method is currently set by rule.

If you have any further questions, please let me know.

Sincerely,

Dennis C. Illingworth, Program Manager
On-site Sewage Disposal Program

EXHIBIT C

State of Oregon
Department of Environmental Quality Memorandum

Date: September 5, 1997

To: Technical Review Committee

From: Sherman Olson, On-Site Sewage Treatment and Disposal Program:WQ

Subject: Review of Equalizer 24 to Oregon Benchmarks

Oregon Benchmarks:

Sewage effluent from a septic tank or other treatment unit is discharged into an absorption facility (disposal trenches, seepage trenches and seepage beds) where additional treatment occurs as the wastewater moves into the soil within the zone of aeration through the forces of gravity and capillary attraction.

The Environmental Quality Commission (EQC) has established by administrative rule standards that prescribe the minimum requirements for the design and construction of soil absorption facilities. The Oregon disposal facility benchmarks are derived from these standards, and are attached to this memorandum for reference.

Typically, an absorption facility consists of one or more shallow disposal trenches constructed with vertical walls within native soil. The trench is two (2) feet wide and contains drain media one (1) foot deep. The drain media is level across the upper surface, and is in contact with the vertical trench walls and trench bottom.

In a system installed in soil with less than rapid permeability (soil texture finer than sand loam) using serial distribution, a linear foot of disposal trench contains six (6) square feet of contact surface for wastewater to move through. The contact surfaces consist of the bottom, sides and top of the drain media envelope, each surface having two square feet of area per foot of trench length. In a mature system the sidewall area is considered to be the most active surface for wastewater to pass through. However, even though a biological clog mat will develop across the bottom surface, it still makes a significant contribution to the passage of wastewater from the trench. The top surface passes wastewater through capillarity, only when wastewater has completely filled the trench and the wastewater is in contact with the soil above the drain media. We suspect its contribution to the overall effectiveness of the disposal trench is the least of the three surfaces, non-the-less it is a surface to be accounted for when determining equivalence.

In a system installed in soil with rapid or very rapid permeability (soil textures of sandy loam and coarser), pressurized distribution may be used to apply low volume intermittent doses of effluent throughout the absorption facility. This distribution technique promotes both the unsaturated flow of wastewater through a biomat-free trench bottom and aerobic conditions within the trenches. Although a linear foot of disposal trench contains six (6) square feet of contact surface (2 square feet each for bottom, sidewall and top surfaces), the trench bottom surface area is identified as the effective seepage area. The sidewall surfaces will not become active absorptive surfaces until a biomat forms on the trench bottom. The top surfaces are not considered to be viable absorptive surfaces because the trench would have reached and surpassed a failure threshold.

Infiltrator Systems, Inc. has suggested that the bottom and sidewall infiltrative surfaces within a disposal trench are significantly reduced in their effectiveness due to a masking phenomena caused by the contact of stone drain media. The Department has examined this issue and concluded that, based on the existing scientific information from independent research sources, masking is not considered a significant factor affecting the movement of effluent from the disposal facility.

Infiltrator Systems, Inc. manufactures the Equalizer 24 product as a replacement for drain media and pipe within a disposal trench. It has an open base, louvers on the sloping sides, and the top is closed.

Assumptions for trench installation in soil finer than sandy loam:

1) Benchmark criteria for standard disposal trench is applicable (not a seepage trench or seepage bed);
2) The disposal facility is located on a sloping site where a serial distribution method is employed to convey effluent from trench to trench;
3) Soil the trench is excavated into is not rapidly drained (by rule the sidewall is the primary absorption surface, however top and bottom contact surfaces within the trench may contribute to the overall passage of wastewater from the trench);
4) Calculations are based on 225 linear feet of trench length. This represents the size of a typical system designed to serve a single family dwelling;
5) Within the Equalizer 24, the maximum depth of the wastewater in a full trench is not higher than the top louver, at 9-1/4 inches from the trench bottom;
6) The sum of the sidewall, top, and bottom soil contact areas equals the total absorptive surface area.

EXHIBIT 1 PAGE 120

Comparison:

Parameter	Benchmark	Equalizer 24
Trench Width	2'	2'
Effective Sidewall Seepage Depth	1'	.77'
Effective Sidewall Seepage Area	450 ft^2	347 ft^2
Bottom Area	450 ft^2	225 ft^2
Top Area	450 ft^2	0 ft^2
Total Absorptive Surface	1350 ft^2	572 ft^2
Storage Volume	1122 gal.	900 gal.

Comments: Infiltrator Systems did not provide the Department with data showing a performance-based comparison with a typical disposal trench system of the type used in Oregon. The Equalizer 24 is a rigid chamber, wider at the base than at the top, and has a fixed shape. In Oregon it is placed within a 24 inch wide trench, but the external chamber width is 15 inches. The Sidewinder shape provides a sidewall surface of approximately 2 ft^2 per running foot, however it is entirely in contact with fill soils. In this state, fill soils may be placed only as backfill to cover the system, while the drain media is in contact with the relatively undisturbed trench sidewalls and bottom. Fill soils placed along a portion of the effective sidewall with modified structure may have unpredictable effect on the hydraulic properties of the trench in different soil types that can interfere with the subsequent movement of wastewater. For this reason, the Department is not convinced that the additional contact surface area attributed to the Sidewinder design merits consideration as enhancing sidewall area at this time.

Assumptions for pressurized trench installation in sandy loam and coarser soil:

1) Benchmark criteria for standard disposal trench is applicable (not a seepage trench or seepage bed);
2) A pressurized distribution method is employed to convey effluent throughout the absorption facility in low volume intermittent doses;
3) Soil the trench is excavated into is rapidly drained (by rule the trench bottom is the primary absorption surface;
4) Calculations are based on 150 linear feet of trench length. This represents the size of a

typical system utilizing trenches designed to serve a single family dwelling at a location where the effective soil depth and depth to temporary groundwater are at least 48 inches below the land surface;

5) The active absorptive surface is the bottom area only.

Comparison:

Parameter	Benchmark	Equalizer 24
Trench Width	2'	2'
Bottom Area	300 ft^2	150 ft^2

Comments: Infiltrator Systems did not provide the department with data showing a performance-based comparison with a typical disposal trench system of the type used in Oregon. The Equalizer 24 is a rigid chamber, wider at the base than at the top, and has a fixed shape. In Oregon it is placed within a 24 inch wide trench. The average internal width at the base of the chamber is 1 foot.

CONCLUSIONS AND RECOMMENDATION: The Equalizer 24 chamber has 77% of the sidewall surface seepage area, and 50% of the bottom surface seepage area, when compared to a standard disposal trench using stone drain media. There is no identifiable top surface seepage area. Because the shape of the product does not conform with and fill the excavation within which it is placed, soil fill will be in contact with all of the Equalizer 24 sidewall. The permeability of the fill is not expected to be equal to the permeability of an undisturbed trench sidewall. However, due to many variables, it is not possible to estimate the loss of permeability caused by the fill. It is recommended that the length of the Equalizer 24 chamber system be increased by a factor of 1.3 so as to provide 100% of the effective sidewall seepage area that would otherwise be present in a standard disposal trench using stone drain media. If used in trenches placed in rapid and very rapidly drained soils requiring the use of pressurized distribution, the trench length should be increased by a factor of 2 so as to provide 100% of the bottom seepage area that would be present in a standard disposal trench using stone drain media.

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EXHIBIT D

State of Oregon

Department of Environmental Quality Memorandum

Date: July 3, 1997

To: Technical Review Committee

From: Sherman Olson, On-Site Sewage Treatment and Disposal Program:WQ

Subject: Review of E Z Drain Product Co. Product Configurations to Oregon Benchmarks

Mr. Alex Mauck has requested that the Department amend the current product approval for his company's expanded polystyrene product configurations by reducing the trench length from what would normally be required if stone drain media were used within the trench by the following amounts: 1) 2003 triangular configuration, 30% reduction; 2) 2012 configuration, 25% reduction. The following analysis examines the technical merits of the reduction in consideration of the Oregon disposal facility benchmarks.

Oregon Benchmarks:

Sewage effluent from a septic tank or other treatment unit is discharged into an absorption facility (disposal trenches, seepage trenches and seepage beds) where additional treatment occurs as the wastewater moves into the soil within the zone of aeration through the forces of gravity and capillary attraction.

The Environmental Quality Commission (EQC) has established by administrative rule standards that prescribe the minimum requirements for the design and construction of soil absorption facilities. The Oregon disposal facility benchmarks are derived from these standards, and are attached to this memorandum for reference.

Typically, an absorption facility consists of one or more shallow disposal trenches constructed with vertical walls within native soil. The trench is two (2) feet wide and contains drain media one (1) foot deep. The drain media is level across the upper surface, and is in contact with the vertical trench walls and trench bottom. In a system using serial distribution, a linear foot of disposal trench contains six (6) square feet of contact surface for wastewater to move through. The contact surfaces consist of the bottom, sides and top of the drain media envelope, each surface having two square feet of area per foot of trench length. In a mature system the sidewall area is considered to be the most active surface for wastewater to pass through. However, even though a biological clog mat will develop across the bottom surface, it may still make a significant contribution to the passage of wastewater from the trench. The top surface passes

wastewater through capillarity, only when wastewater has completely filled the trench and the wastewater is in contact with the soil above the drain media. We suspect its contribution to the overall effectiveness of the disposal trench is the least of the three surfaces, non-the-less it is a surface to be accounted for when determining equivalence.

Of special note, the E Z Drain Co. has surmised that its products, when used within absorption facilities, offer superior performance to facilities using stone drain media. E Z Drain Co. alleges that the bottom infiltrative surface within the trench is significantly reduced in effectiveness due to a masking phenomena caused by the contact of stone drain media with the trench bottom under conditions of saturated flow. The Department has examined this issue and concluded that masking has not been demonstrated to be a significant predictable factor affecting the movement of effluent from disposal facilities in the field.

E Z Drain Co. Product Description:

E Z Drain Co. manufactures and assembles products designed to replace stone drain media and pipe within an absorption facility. The products consist of expanded polystyrene aggregate contained within high strength polyethylene netting, and may contain 4 inch diameter perforated polyethylene piping within the assembled product. The product is cylindrical, with a diameter of 10 inches or 12 inches, and 10 feet long. When present, the piping is centered within the 10 inch cylinder, or placed off-center within the 12 inch cylinder. When used within an absorption facility, the cylinders may be arranged in various configurations to approximate compliance with the Oregon benchmarks.

Technical Analysis:

2003 Triangular Configuration: Three 10 inch diameter cylinders placed within a trench 24" wide such that the two lower cylinders are in contact with the trench sides and bottom, and the third cylinder containing pipe is above and in contact with the lower two cylinders.

Assumptions:

1) Benchmark criteria for standard disposal trench is applicable in determining equivalence because this configuration is not a seepage trench or a seepage bed;
2) The disposal facility is located on a sloping site where a serial distribution method is employed to convey effluent from trench to trench;
3) Soil the trenches are excavated into is not rapidly drained (by rule the sidewall is the primary absorption surface, however the top and bottom contact surfaces within the trench will

contribute to the overall passage of wastewater from the trench);

4) Calculations are based on 225 linear feet of trench length. This represents the size of a typical system designed to serve a single family dwelling;

5) For the E Z Drain Co. product, it is assumed the cylinders remain perfectly round. It is assumed that soil will not fill into the void areas below the spring line. Sidewall contact seepage area per foot of trench is calculated as 2 times the sum of the sidewall depth as measured from the trench bottom to the springline plus 1/8 the circumference of a lower cylinder plus 0.086 of the circumference of the top cylinder. The top surface area is calculated based 1/4 the circumference of the upper contact surface of each of two cylinders.

6) The sum of the sidewall, top, and bottom soil contact areas equals the total absorptive surface area. However, the effective seepage area for disposal trenches is defined to be the sidewall area.

7) The maximum ponding depth within the trench is limited to 12". With a greater ponding depth, the comparison would be with seepage trench criteria.

Comparison:

Parameter	Benchmark	E Z Drain
Trench Width	2'	2'.
Effective Sidewall Seepage Depth	1'	.967'
Effective Sidewall Seepage Area	450 ft^2	436 ft^2
Bottom Area	450 ft^2	450 ft^2
Top Area	450 ft^2	295 ft^2
Total Absorptive Surface	1350 ft^2	1181 ft^2
Storage Volume	1209 gal.	Est. 1,300 gal.

Comments: E Z Drain Co. has not provided the Department with data showing a performance-based comparison between this product and a typical disposal trench system of the type used in Oregon. With use of the E Z Drain Co. product, a

portion of the sidewall seepage area will be in contact with fill soils instead of being in direct contact with an undisturbed sidewall. This does not occur with the use of drain media. Fill soils along a portion of the effective sidewall may modify soil structure and interfere with the lateral movement of wastewater away from the trench.

CONCLUSIONS AND RECOMMENDATION: The E Z Drain product placed in the 2003 triangular configuration does not have equivalent seepage surface areas when compared to a standard disposal trench using stone drain media. The sidewall area is approximately 97% that of a standard trench. Because the shape of the product does not conform with and fill the excavation within which it is placed, soil fill will be in contact with a significant portion of the 2003 sidewall. The permeability of the fill is not expected to be equal to the permeability of an undisturbed trench sidewall. However, due to many variables, it is not possible to estimate the loss of permeability caused by the fill. It is recommended that the length of the 2003 horizontal configuration be increased so as to provide 100% of the effective sidewall seepage area that would otherwise be present in a standard disposal trench using stone drain media.

2003 Horizontal Configuration: Three 10 inch diameter cylinders placed side-by-side within a trench 30" wide, one of the cylinders contains pipe.

Assumptions:

1) Benchmark criteria for standard disposal trench is applicable in determining equivalence because this configuration is not a seepage trench or a seepage bed;
2) The disposal facility is located on a sloping site where a serial distribution method is employed to convey effluent from trench to trench;
3) Soil the trenches are excavated into is not rapidly drained (by rule the sidewall is the primary absorption surface, however the top and bottom contact surfaces within the trench will contribute to the overall passage of wastewater from the trench);
4) Calculations are based on 225 linear feet of trench length. This represents the size of a typical system designed to serve a single family dwelling;
5) For the E Z Drain Co. product, it is assumed the cylinders remain perfectly round. It is assumed that soil will not fill into the void areas below the spring line. Sidewall contact seepage area per foot of trench is calculated as 2 times the sum of the sidewall depth as measured from the trench bottom to the springline plus 1/8th the

circumference of the cylinder. The top surface area is calculated based on the upper contact surface of the cylinders.

6) The sum of the sidewall, top, and bottom soil contact areas equals the total absorptive surface area. However, the effective seepage area for disposal trenches is defined to be the sidewall area.

Comparison:

Parameter	Benchmark	E Z Drain
Trench Width	2'	2-1/2'
Effective Sidewall Seepage Depth	1'	.744 ft
Effective Sidewall Seepage Area	450 ft^2	335 ft^2
Bottom Area	450 ft^2	450 ft^2
Top Area	450 ft^2	442 ft^2
Total Absorptive Surface	1350 ft^2	1227 ft^2
Storage Volume	1209 gal.	1086gal.

Comments: E Z Drain Co. has not provided the Department with data showing a performance-based comparison between this product and a typical disposal trench system of the type used in Oregon. With use of the E Z Drain Co. product, a portion of the sidewall seepage area will be in contact with fill soils instead of being in direct contact with an undisturbed sidewall. This does not occur with the use of drain media. Fill soils along a portion of the effective sidewall may modify soil structure and interfere with the lateral movement of wastewater away from the trench.

CONCLUSIONS AND RECOMMENDATION: The E Z Drain product placed in the 2003 horizontal configuration does not have equivalent seepage surface areas when compared to a standard disposal trench using stone drain media. The sidewall area is approximately 3/4 that of a standard trench. Because the shape of the product does not conform with and fill the excavation within which it is placed, soil fill will be in contact with all or a significant portion of the 2003 sidewall. The permeability of the fill is not expected to be equal to the permeability of an undisturbed trench sidewall. However, due to many variables, it is not

possible to estimate the loss of permeability caused by the fill. It is recommended that the length of the 2003 horizontal configuration be increased so as to provide 100% of the effective sidewall seepage area that would otherwise be present in a standard disposal trench using stone drain media.

2012 Horizontal Configuration:

Assumptions:

1) Benchmark criteria for standard disposal trench is applicable because the configuration is not a seepage trench or a seepage bed;
2) The disposal facility is located on a sloping site where a serial distribution method is employed to convey effluent from trench to trench;
3) Soil the trench is excavated into is not rapidly drained (by rule the sidewall is the primary absorption surface, however top and bottom contact surfaces within the trench may contribute to the overall passage of wastewater from the trench);
4) Calculations are based on 225 linear feet of trench length. This represents the size of a typical system designed to serve a single family dwelling;
5) For the E Z Drain Co. product, it is assumed the cylinders remain perfectly round. It is assumed that soil will not fill into the void areas below the spring line. Sidewall contact seepage area per foot of trench is calculated as 2 times the sum of the sidewall depth to the springline plus 1/8th the circumference of the cylinder. The top surface area is calculated based on the upper contact surface of the cylinders.
6) The sum of the sidewall, top, and bottom soil contact areas equals the total absorptive surface area. However, the effective seepage area for disposal trenches is defined to be the sidewall area.

Comparison:

Parameter	Benchmark	E Z Drain
Trench Width	2'	2'
Effective Sidewall Seepage Depth	1 ft	.893 ft
Effective Sidewall Seepage Area	450 ft^2	402 ft^2
Bottom Area	450 ft^2	450 ft^2

Top Area	450 ft^2	353 ft^2
Total Absorptive Surface	1350 ft^2	1205 ft^2
Storage Volume	1209 gal.	1382 gal.

Comments: E Z Drain Co. has not provided the Department with data showing a performance-based comparison between this product and a typical disposal trench system of the type used in Oregon. With use of the E Z Drain Co. product, a portion of the sidewall seepage area will be in contact with fill soils instead of being in direct contact with an undisturbed sidewall. This does not occur with the use of drain media. Fill soils placed along a portion of the effective sidewall may modify soil structure and interfere with the lateral movement of wastewater away from the trench.

CONCLUSIONS AND RECOMMENDATION: The E Z Drain product placed in the 2012 horizontal configuration does not have equivalent seepage surface areas when compared to a standard disposal trench using stone drain media. The sidewall area is approximately 9/10 that of a standard trench. Because the shape of the product does not conform with and fill the excavation within which it is placed, soil fill will be in contact with all or a significant portion of the 2012 sidewall. The permeability of the fill is not expected to be equal to the permeability of an undisturbed trench sidewall. However, due to many variables, it is not possible to estimate the loss of permeability caused by the fill. It is recommended that the length of the 2012 horizontal configuration be increased so as to provide 100% of the effective sidewall seepage area that would otherwise be present in a standard disposal trench using stone drain media.

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December 9, 1999

Environmental Quality Commission

Letter No. 3

Re: *E-Z Drain Co. v. State of Oregon*
Proposed Rule -- Alternative Technologies for On-Site Systems
Our File No. 104483 112751

Dear Commissioners:

This letter is directed to the process questions that are triggered should the Commission promulgate the rule as proposed. If the Commission adopts the rule proposed by the Department, the State will have willfully violated the Court's order. The Court found that the Department prevented E-Z Drain's market entry in violation of the Oregon and United States Constitutions. *See* Judgment, p. 3. Adoption of the rule with the problems we have identified in letter No. 2 compounds the original constitutional violations.

This letter will explain the multiple times that the Department has had an opportunity to reconsider its position and take a constitutional avenue.

A. The Extra Comment Time.

We will begin first with discussing why we have this additional public comment.

It was only on November 13, 1999 (four business days before the scheduled meeting of the Commission) that we received the rulemaking packet. That was the first time we learned that the Department would propose Alternative 3. Also at that time, we learned that the Department would not be providing you with the letters provided by commenters on the proposed rule. Importantly, it was also at that time we learned that the Department had excluded from the record at least two key letters that had been made in the rulemaking process. An important letter is a letter from this office dated September 7, 1999. A copy of that letter is attached as Exhibit E and should be included in the record.

(i) The First Excluded Letter.

Please let us explain briefly why the September 7, 1999 letter is so important. Soon after the Court set a revised schedule at the Department's request, the Department held meetings of the rule advisory committee and the technical advisory committee for onsite systems. On August 19, 1999, the Department provided E-Z Drain with a copy of its draft rule proposal.

E-Z Drain was instructed, by the Attorney General, to communicate with the Attorney General and not with individuals in the Department.[1]

In reviewing the draft proposal, E-Z Drain found several significant problems. These were described in the attached September 7 letter to the Attorney General. In fact, and this is not disputed, the rulemaking packet as it was sent out to the public on September 15 contained several items that had been changed. Some of the changed items reflect comments provided in the attached September 7, 1999 letter. Nevertheless, the Department has maintained that the September 7, 1999 letter is not part of the rulemaking record.

Throughout the trial, the Department stressed in its testimony and argument that it is the Environmental Quality Commission, and not the Department, which adopts rules. Certainly that is a correct description of the black letter law.

If the Commission is the body that independently promulgates rules, it is absolutely essential that the Commission be given complete information. Failing to give you this letter deprived you of an important piece of information and the comments by the very party that was the subject of the lawsuit that required the new rules. Such a piece of information is critical to your evaluation.

ii. The Second Excluded Letter.

The Department provided you, the rule making body, no notice about a letter which the Department sent to E-Z Drain which confirmed that under the new prescriptive standard none of the current approved products could be installed in Oregon. This is the Dennis Illingworth letter, attached as Exhibit C. This is an important piece of information, since under the Department's proposed rule, the existing E-Z Drain product cannot be approved. The Equalizer product also fails to meet the prescriptive standard, yet the proposed rule allows it to be installed for three more years.

B. Other Process Defects.

There are other procedural problems that point to the Department's willfulness in continuing to violate the constitutional rights of E-Z Drain:

1. **The record has not been fully represented to the EQC in the Department's summaries of public comments.** Summarizing written comments is not mandatory. *See* ORS 183.332(3)(b). Given the complexity of this matter, and the relatively few number of comments, providing original copies of the written comments to the Commissioners would have been not only helpful, but prudent. In this case, the written summaries did not fully or accurately detail the comments of the parties. For example, E-Z Drain did provide alternative language for the Department to consider. The Department also has a fully supported research paper submitted by an independent geotechnical engineer that suggests a sizing formula for the

[1] One of the issues in the underlying court case was which of the competitors had more or better access to the Department during the approval process that the Court found to be unconstitutional.

Department alternative systems. The Department has not made known why this paper has been ignored.

Moreover, neither the rulemaking packet nor the Department's presentation of the rule made clear that one of the constructive suggestions supported by E-Z Drain is for the Department to adopt the sizing standard proposed by Sherman Olson of the Department. *See* Letter No. 2, Exhibits C and D. This alternative was not presented to the Commissioners either.

The rulemaking packet did not tell you that some of the commenters opposing the rule have important positions in the on site industry and are unconnected with either of the competing companies. The rulemaking packet did not tell you that commenters Steve Wertz and Dan Bush are on the DEQ's alternative products rule and technical advisory committees, respectively. Richard Polson runs the on-site program in Clackamas County. He is adamantly opposed to the Proposed Rule.

2. **The DEQ did not prepare the TRC for its sole meeting.** The members of the rule advisory and technical review committees were not provided copies of the Court's Judgment prior to the only meeting held to consider the new rules.

3. **The TRC was not given the chance to review Alternative 3, the Department's recommended option.** No meeting of the rule advisory committee or the technical review committee was ever conducted after the Department actually proposed new rules. In other words, after receiving a Court order finding that previous approvals had been unconstitutional and required a new "fair" process, the Department conducted in August, 1999, only one meeting of the two important advisory committees prior to a rule being proposed. The Department never again convened those groups in the ensuing three-month rule development process.

A Department representative told you at your November 19 meeting that that the Department did not hold a meeting of a suggested blue-ribbon panel because there was no time. What of the two months the rules were out for public comment? The Department has not sought meaningful comment from local experts.

4. **The fiscal impact statement is incomplete, and does not address the fiscal impact of complying with the performance standard.** ORS 183.335(2)(b)(E) requires that the fiscal impact statement accompany a rule and include an agency utilization of "available information to project any significant economic effect of that action on businesses which shall include a cost of compliance effect on small businesses affected." The Department conceded they have made no such economic analysis. The rulemaking packets contain no analysis of financial impact. Yes, it acknowledges that E-Z Drain is a small business impacted by the rule. *See* Proposed Rulemaking Packet, Attachment B-2, p. 2

Under ORS 183.540, if the economic analysis shows that the rule will have a significant "adverse effect upon small business" then the agency shall:

- reduce the economic impact of the rule;

- clarify or consolidate or simplify the rule;
- utilize objective criteria for standards, or;
- exempt small businesses from any or all of the requirements of the rule.

The Oregon Court of Appeals has overturned a rule that simply declare that certain entities would be economically affected by the proposed rule. *See Dika v. Department of Insurance and Finance,* 312 Or 106, 110 – 11, 817 P2d 287 (1991). E-Z Drain estimates that the cost of compliance with the performance standards is from 1.28 million dollars to 1.38 million dollars. *See* Exhibit G, attached. These costs will push E-Z Drain out of the market. On the prescriptive side, the Department has acknowledged that E-Z Drain's products cannot be installed as designed and therefore E-Z Drain will be barred from the market. *See* Letter No. 2, ex. B. Either way, the impact on E-Z Drain is severe.

CONCLUSION

E-Z Drain has assembled these issues in a separate letter because it continues to be concerned most with the substance and not the process. It simply wants what it has been seeking since 1995: appropriate approval of its products; products which have been approved and operated successfully throughout the United States for 17 plus years; and products that the Circuit Court found provide more infiltrative surface than the Equalizer product that the Department approved over 5 years ago.

The Court required the Department to treat E-Z Drain fairly. The Department has not treated E-Z Drain fairly. The Commission should require the Department to apply the existing standards to the E-Z Drain product.

Very truly yours,

David F. Bartz, Jr.

DFB:lcr
cc: Client
Langdon Marsh
Larry Edelman
Department of Environmental Quality
c/o Dennis Illingworth

EXHIBIT E

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September 7, 1999

VIA FACSIMILE

Mr. Larry Edelman
Oregon Department of Justice
1515 SW Fifth Avenue, Suite 410
Portland, OR 97201

Re: Proposed Rule for New or Innovative On-Site Technologies and Materials
Our File No. 104483/112751

Dear Larry:

I am writing to you about the Proposed Rule for New or Innovative On-Site Technologies and Materials that has been drafted in response to Judge Bergman's order in *E-Z Drain Co. v. State of Oregon*. We have copies of: (1) the proposed rule, (2) Infiltrator Systems, Inc.'s ("ISI") comments on the proposed rule, and (3) a redline version of ISI's proposed amendments to the proposed rule.

We understand that the proposed rule has been reviewed by the TRC and the On-Site Rule Advisory Committee at their August 26, 1999 meetings. We also understand that DEQ does not expect to convene those committees again before submitting the proposed rule to the Environmental Quality Commission (EQC).

The proposed rule does not implement the Court's order. This letter will illustrate the rule's deficiencies in an effort to give the DEQ the opportunity to draft a rule that does not violate the Judgment handed down by the Court (attached).

The Court Ordered the DEQ to Establish Objective, Quantifiable Criteria to Size Alternative Products, and then to Apply that Criteria

The Court ordered the DEQ to do two things: establish objective, quantifiable criteria to size alternative products, and then to apply that criteria to EZ Drain and Equalizer 24:

> [1] [T]he agency must first determine what standard it wants to use. It must define how it measures whether a product is as or more protective than [a] standard stone trench. It could adopt the criteria such as those used in Mr. Olson's analysis comparing alternative products to the standard or it could decide that the

> standard was set when the first alternative product (Equalizer) was approved. [2] Then, after the standard has been determined and put into writing, DEQ must use that standard to reevaluate all alternative products which have applied for approval . . . .

Judgment at 4.

The Court clarified its use of the term "standard" by noting that any such standard must be "quantified." The DEQ must put into writing "how it measures alternative products to determine sizing." Judgment at 3. As noted by the Court, an request for approval is inherently a request for "appropriate sizing." Judgment at 4. The standard to determine this sizing must state "how much of [a] product it takes to equal the performance of the standard." Judgment at 3.

The Court's focus on objective, quantifiable criteria allows all applicants to know before asking for an approval "that their business [will] been given a fair opportunity to compete." Judgment at 3 – 4. Under Oregon law, all parties are entitled to know beforehand what objective standards the DEQ will apply to size their products. The proposed rule does not do this.

The DEQ must establish a sizing standard against which Equalizer 24 (EQ 24) and EZ Drain will be measured. The Court used Sherman Olson's benchmark memo as an example of what the Court expected. DEQ's proposed rule, with its nearly exclusive emphasis on performance-based studies instead of quantifiable, objective criteria, does not comply with the Court's order.

Moreover, the rule's emphasis on testing rather than sizing seems to disregard the Court's concerns with "third party" studies. *See* Judgment at 4. If studies are to be used at all, they must have pre-established protocols to give notice to an applicant as to the specifics of the required test. The proposed rule, again, does not do this. These failings will be discussed more below.

Three Problems with DEQ's Proposed Rule

There are at least three reasons the rule's performance-based emphasis violates the Court's order: (1) the performance-based "standards" are not quantifiable, objective, prescriptive sizing standards; (2) the performance-based "standards" continue EZ Drain's disadvantage in the marketplace, and; (3) the performance- based "standards" are insufficiently defined.

The Performance-Based "Standards" Obviate Objective, Prescriptive Standards

The DEQ's proposed method to evaluate alternative on-site technologies relies almost exclusively on performance-based studies. If the performance-based criteria "*cannot be met*," only then will the DEQ apply quantifiable, objective sizing criteria to an applicant's product. The term, or concept, "*cannot be met*" is not defined. As stated by the Court, applicants have a

right to know what they must do to gain approval of their products. Judgment at 2. Under the proposed rule, applicants will have to guess as to the meaning of the "*cannot be met*" standard.

Further, the proposed rule virtually closes the door on prescriptive standards. The only way an applicant can possible prove that the performance-based standards "cannot be met" would be to fail trying to achieve them. Because DEQ has not specified what it means by a study, we can only speculate that to fail under the DEQ's prescriptive prong could mean years of delay and thousand and thousands of dollars lost. As noted by the court, a need exists in Oregon for "effective and cost effective" alternative onsite systems and products. *See* Judgment at 4. The proposed rule jeopardizes the ability of any party to meet this need.

Performance-based standards are not what the Court ordered the DEQ to promulgate. Performance-based standards do not establish how the DEQ determines sizing. *See* Judgment at 3. Moreover, the performance-based standards have no mechanism to ensure that an applicant's product will be sized or measured uniformly, and that ensures constitutional parity between various alternative products. *See* Judgment at 3 – 4.

The Court at page 3 made it very clear what criteria the DEQ "must measure" alternative products with. Importantly, the Court's findings were based on those factors that the DEQ identified in the administrative record and in court as being most important. Those criteria are:

- Length
- Infiltrative Surface
- Side-wall contact
- Fill or undisturbed side wall
- Storage capacity
- Surge capacity

The proposed "performance-based" rule contains none of these criteria.

The Performance-Based "Standards" Continue EZ Drain's Disadvantage in the Marketplace

Infiltrator Systems, Inc. (ISI) has suggest additions to the proposed rule. Two of ISI's ideas would function to keep EZ Drain at an unconstitutional disadvantage in the marketplace: (1) to allow ISI to use the products it has "previously installed" in Oregon to meet the criteria for performance-based studies; and (2) to continue all prior approvals while ISI and EZ Drain complete their performance-based studies.

First, ISI should not be allowed to use its previously installed products to "count" as a field study. As the Court found, the Equalizer 24 (EQ24) products were installed pursuant to an flawed approval process. The EQ24 has sold thousands of systems in Oregon because the EQ24 was given an unfair advantage when it was first approved. *See* Judgment at 3. This advantage has never been corrected by the agency. Therefore, the "track record" upon which ISI intends to rely in meeting the proposed performance-based standards was ill gotten.

EZ Drain, unlike ISI, has been unable to install any reduced-sized systems in Oregon for reasons the Court found unconstitutional. *See* Judgment at 3. Therefore, it has no performance record of a system as undersized as EQ24 that it can show to DEQ. To allow ISI to use its illegally approved products would allow ISI to capitalize on the unconstitutionally unfair treatment it has enjoyed over EZ Drain.

Second, ISI asks that its current sizing approvals remain in affect pending the completion of any performance-based study the proposed rule contemplates. This is absurd. As stated by the Court,

> EZ is clearly an aggrieved party. It has been adversely affected in its ability to compete in the marketplace by the unequal treatment it has received in the approval process.

If ISI's suggestion is adopted, the DEQ will knowingly be discriminating against EZ Drain in contravention to the Court's express and date-specific order to end the discrimination.

The Performance- Based "Standards" Are Insufficiently Defined

Furthermore, the performance-based standards that the DEQ proposes do not have the kind of specificity that the Court ordered. On page 4 of the Judgment, after the Court expresses its concerns with the practicality and of the kind of performance-based studies the DEQ is contemplating, the Court notes that any performance-based standards should, at a minimum, have at least three components:

> If imposed, such a [performance-based] requirement must clearly spell out [1] what must be tested, [2] for how long, and [3] under what conditions.

The proposed rule fails on all three of these counts.

At trial, both EZ Drain and DEQ put on evidence demonstrating how difficult it is to finance, commence, execute, and document a "third-party" study. The DEQ's Bijan Pour testified that an example of an independent field-test was a 5.5 million dollar study slated to take five years to finish. The Court heard other examples of well-intentioned academic studies that ended up being inconclusive, flawed, incomplete, aborted, and so forth.

Conclusion – Follow the Court Order

This rule is a matter of critical importance to EZ Drain. If DEQ proposed the rule in a form of its present state, the DEQ will be disobeying the Court's order and causing EZ Drain to be further aggrieved. Therefore, your thoughtful consideration of these comments is vital to the success of the rulemaking process. Because of the Court-imposed schedule, your reply to our concerns by September 10th is requested.

EZ Drain wants to continue to work cooperatively with the Department. I feel it is important that the lines of communication be kept open. Please feel free to call me if you would like to discuss further the matters in this letter.

Thank you.

Very truly yours,

David F. Bartz, Jr.

DFB:kdo

cc: E-Z Drain (via facsimile)
Karen Moynahan, DOJ (via facsimile)

IN THE CIRCUIT COURT OF THE STATE OF OREGON

FOR THE COUNTY OF MULTNOMAH

EZ DRAIN CO., an Oregon limited liability company, Plaintiff, v. STATE OF OREGON, DEPARTMENT OF ENVIRONMENTAL QUALITY, Respondent.	)	Case No. 9809-06683 **JUDGMENT**

On May 27 through June 2, and June 28, 1999, this matter came before the Court for judicial review of DEQ's final order concerning sizing of the EZ Drain products. The petitioner was represented by David Bartz; DEQ was represented by Assistant Attorney General, Karen Moynahan. The parties also submitted trial and closing memoranda. After considering all of the evidence and being fully advised in the premises, the Court finds the following facts to be true about the mechanism of septic system drainage trenches in Oregon:

The standard is the stone-filled trench which is 24 inches wide, and 12 inches deep, thereby providing six feet of surface contact per lineal foot. It is filled with a four inch perforated pipe, surrounded with 12 inches of washed stone.

DEQ has determined that this system is optimal to protect the environment and people of Oregon, and is therefore, the standard against which to compare all other products.

In recent years alternative products have come on the market which seek to replace the stone and pipe incorporated in the standard. EZ and Equalizer are alternate products which have been submitted to DEQ for approval.

Oregon has nine different types of soil and the standard must fit a variety of conditions.

No treatment of the water occurs in the trench itself. Treatment occurs only as the water infiltrates the soil. Therefore, maximum infiltration is necessary for maximum treatment.

A biomat forms over time which slows down infiltration. The biomat forms primarily on the bottom of the trench, although some may form on the sides. The sidewalls therefore become the primary infiltrative surface. The top of the trench is an infiltrative surface only when the trench is full.

Once soil is disturbed, its structure changes. It becomes less able to absorb effluent. An undisturbed side wall is able to absorb more than a side wall of fill [disturbed] dirt. Since the depth and width of the trench are fixed, the only way to increase total infiltrative surface is to increase trench length.

The existence and importance of stone masking is in dispute and is not recognized in the Oregon standard.

EZ has more infiltrative surface than Equalizer.

After considering all the facts and being fully advised in the premises, the Court makes the following findings of fact concerning DEQ's process for the approval of alternative products for septic drainage trenches:

There is no requirement that DEQ permit any alternative products if they do not meet Oregon standards.

The Oregon standards do not take into account the economic benefit or detriment to any applicant.

The approvals of the two alternative products at issue in this case were not based on any independent 3rd party studies or evaluations.

DEQ staff did not prepare agency analyses or recommendations of the products prior to TRC recommendations or agency approvals.

After considering all of the evidence and the arguments of the attorneys, the Court draws the following conclusions of law concerning the approval process:

DEQ must assume that other applicants will come before the agency for approval. Those applicants have the right to know, before investing time and money, what the Oregon standard is and exactly what factors will be evaluated in measuring the new product as an alternative to that standard.

The TRC is an advisory body to the agency.

Approvals can't be dependent on who the members of the TRC or the department are.

The agency must make its final decision based on the use of standards that can be quantified. The decision is therefore an objective rather than a subjective one. This is clearly possible as shown by the memos of Mr. Olsen on pages 119-122,169-172,173-179 and of Mr. Marsh on pages 180-188.

A request for approval inherently includes a request for appropriate sizing. The issue is how the product does the job of the standard stone trench.A foot-to-foot approval is a finding that one foot of product does the work of one foot of the standard.

Despite any request from an applicant, DEQ must make its own independent sizing determination.

The agency must put into writing how it measures alternative products to determine sizing.

Trial testimony was very clear that DEQ has the expertise to explain, as it did to this Court, how a standard trench works. Both Mr Farrell and Mr Olsen wrote memos analyzing the process. The components of their analysis are: length, infiltrative surface, side-wall contact, fill or undisturbed side wall, storage capacity, and surge capacity. These objective criteria are the basis by which the agency must measure any product approvals. This Court does not find substantial evidence on the record that the agency decisions have been made after the application of these objective criteria.

Have EZ and Infiltrator been treated equally? There is insufficient evidence on the record for the Court to conclude that they have.

EZ is clearly an aggrieved party. It has been adversely affected in its ability to compete in the marketplace by the unequal treatment it has received in the approval process. Upon reevaluation following this Court's Order of Remand, it may or may not be better able to compete, but then it will be as a result of the free market place, not as a result of agency action.

The parties are similarly situated - each is an alternative product to be used in place of the standard stone-filled trench. Each performs the same function although their shapes and materials are different. The State attempts to distinguish them by saying that only EZ asked to be sized at less than a stone trench. That mis-characterizes the requests and more importantly the role of the agency. DEQ is charged to "protect the public health and general welfare of the people of Oregon and to maintain the quality of public water." The agency's obligation is to determine whether any alternative product meets the protective standards . Surely an inherent part of that decision is to determine how much of the product it takes to equal the performance of the standard. How can any approval process not include a sizing determination?

What about agency judgment and discretion? Clearly there are areas in which the agency must use its best professional judgment and expertise. One of these areas is in the setting of objective criteria used to evaluate the standard versus the alternative product ie, stone masking, the effect of fill instead of undisturbed sidewall, whether the top of the trench counts as important in filtrative capacity, the effect of a biomat on the bottom and sides. Once these judgments are made as to what the criteria will be, the agency must objectively and evenly apply the criteria to all applicants without subjective judgments. How else will applicants know that

their business has been given a fair opportunity to compete. How else will prospective applicants determine whether they should even apply to compete here.

This Court has no wish to take over the function of the Agency . DEQ clearly has a vast amount of experience and expertise. All this Court knows about drainage fields is contained in the record of this case. The Court's goal is that the agency use that considerable expertise to objectively and therefore fairly set the standards for alternative drainage field products in this state and that it then objectively and therefore fairly apply those to any and all products that seek to market here.

The issue of independent testing may come up on remand . The agency could as policy make independent testing a requirement for approval. Such a requirement could in effect prevent any alternative products from being approved since the state itself was unable to find anyone willing to do such testing. It then becomes difficult to imagine that any applicant could find such an expert since the requirement of EZ was that the testing be conducted by an "independent third party" (not paid by the applicant). But if the agency chooses to make testing a requirement , it can as long as all applicants have such a requirement. To require EZ alone to provide such testing in order to be properly sized is clearly unequal treatment of a similarly situated party. If imposed, such a requirement must clearly spell out what must be tested, for how long, and under what conditions.

IT IS HEREBY ORDERED AND ADJUDGED that this case be remanded to DEQ. On remand, the agency must first determine what standard it wants to use. It must define how it measures whether a product is as or more protective than standard stone trench. It could adopt the criteria such as those used in Mr. Olsen's analysis comparing alternative products to the standard or it could decide that the standard was set when the first alternative product (Equalizer) was approved. Then, after the standard has been determined and put into writing, DEQ must use that standard to reevaluate all alternative products which have applied for approval, and it must use that standard to evaluate all future applications. [The Court uses the term "approval" to include sizing]. If the stone-filled trench is still the standard, then all products shall be compared to it. If Equalizer is the new standard, then all other products shall be compared to it. As part of the evaluations the sizing determinations must be written. Time is of the essence here for the present products, for future applicants and for Oregon homeowners who need effective and cost effective septic systems. Based on all of the information already at the State's disposal, the Court finds it reasonable for the Agency to complete a new process within 60 days.

The Court DENIES petitioner's request for attorney's fees. Although the Court has ruled against the agency, it does not find that the agency was totally without basis for its judgment in this, a new field of technology.

Dated: July 19, 1999

Linda L Bergman
Circuit Court Judge

EXHIBIT F

DEQ Proposed Performance Evaluation

Estimated Costs

Description	Qty	Item Cost	Yrs	Subtotal Per System	Qty	Total Systems Cost
PERMITS						
Filing Fee	1	$ 50.00		$ 50.00	18	$ 900.00
Permit Processing Fee	1	$ 400.00		$ 400.00	18	$ 7,200.00
Site Evaluation - DEQ	1	$ 350.00		$ 350.00	18	$ 6,300.00
Plan Review	1	$ 100.00		$ 100.00	18	$ 1,800.00
Annual Compliance Determination Fee	1	$ 250.00	3	$ 750.00	18	$ 13,500.00
Design Fee (includes travel)	1	$ 4,000.00		$ 4,000.00	18	$ 72,000.00
Site Evaluation - Designer	1	$ 400.00		$ 400.00	18	$ 7,200.00
***System Installation**	1	$ 10,000.00		$ 10,000.00		
Setup Fee Per System	1	$ 300.00		$ 300.00		
Required Warranty & Bonding	1	$ 1,600.00	3	$ 4,800.00		
***Cost Includes:** Mobilization, clearing, landscaping, 1,500 gallon 2-compartment tank, hydro-splitter, pump, vault, floats, control panel, junction box, risers, effluent filter, test cells, drainfield, electrical & misc connections						
System Installation & Setup Subtotal				**$ 15,100.00**	**18**	**$ 271,800.00**
Landowner Test Site Lease Agrmnt	1	$ 2,500.00		$ 2,500.00	18	$ 45,000.00
Consultant Inspection Fee per trip	2	$ 1,000.00		$ 2,000.00	18	$ 36,000.00
Monthly Monitoring		$ 3,600.00	3	$ 10,800.00	18	$ 194,400.00
Lab Work: BOD, TSS, DO, AMM, Nitrate, PH, Temp		$ 4,200.00	3	$ 12,600.00	18	$ 226,800.00
Misc Maintenance: pump calibration, vault cleaning, etc.		$ 250.00	3	$ 750.00	18	$ 13,500.00
Misc Department Evaluation		$ 3,600.00	3	$ 10,800.00	18	$ 194,400.00
Consultant Reporting		$ 1,200.00	3	$ 3,600.00	18	$ 64,800.00
Subtotal				$ 64,200.00	18	$ 1,155,600.00
University or other approved protocol Designer	1	$ 4,000.00		$ 4,000.00	1	$ 4,000.00
Peer Review (3 person @ $1,500 each)	1	$ 4,500.00		$ 4,500.00	1	$ 4,500.00
Subtotal				$ 72,700.00		$ 1,164,100.00
10% Misc Cost				$ 7,270.00		$ 116,410.00
Total Estimated Cost + Misc Cost				**$ 79,970.00**		**$ 1,280,510.00**

12/9/99

E-Z Drain Co., LLC ~ 931 NE Harlow Place ~ Troutdale, OR 97060
(503) 492-2500 ~ Fax (503) 492-0208

EXHIBIT G

DEQ Proposed Performance Evaluation

Estimated Costs

Description	Qty	Item Cost	Yrs	Subtotal Per System	Qty	Total Systems Cost
PERMITS						
Filing Fee	1	$ 50.00		$ 50.00	18	$ 900.00
Permit Processing Fee	1	$ 400.00		$ 400.00	18	$ 7,200.00
Site Evaluation - DEQ	1	$ 350.00		$ 350.00	18	$ 6,300.00
Plan Review	1	$ 100.00		$ 100.00	18	$ 1,800.00
Annual Compliance Determination Fee	1	$ 250.00	3	$ 750.00	18	$ 13,500.00
Design Fee (includes travel)	1	$ 4,000.00		$ 4,000.00	18	$ 72,000.00
Site Evaluation - Designer	1	$ 400.00		$ 400.00	18	$ 7,200.00
***System Installation**	1	$ 20,000.00		$ 20,000.00		
Setup Fee Per System	1	$ 300.00		$ 300.00		
Required Warranty & Bonding	1	$ 1,600.00	3	$ 4,800.00		
***Cost Includes:** Mobilization, clearing, landscaping, 1,500 gallon 2-compartment tank, hydro-splitter, pump, vault, floats, control panel, junction box, risers, effluent filter, test cells, drainfield, electrical & misc connections						
System Installation & Setup Subtotal				**$ 25,100.00**	**18**	**$ 451,800.00**
Landowner Test Site Lease Agrmnt	1	$ 5,000.00		$ 5,000.00	18	$ 90,000.00
Consultant Inspection Fee per trip	2	$ 1,000.00		$ 2,000.00	18	$ 36,000.00
Monthly Monitoring		$ 3,600.00	3	$ 10,800.00	18	$ 194,400.00
Lab Work: BOD, TSS, DO, AMM, Nitrate, PH, Temp		$ 4,200.00	3	$ 12,600.00	18	$ 226,800.00
Misc Maintenance: pump calibration, vault cleaning, etc.		$ 250.00	3	$ 750.00	18	$ 13,500.00
Misc Department Evaluation		$ 3,600.00	3	$ 10,800.00	18	$ 194,400.00
Consultant Reporting		$ 1,200.00	3	$ 3,600.00	18	$ 64,800.00
Subtotal				$ 76,700.00	18	$ 1,380,600.00
University or other approved protocol Designer	1	$ 4,000.00		$ 4,000.00	1	$ 4,000.00
Peer Review (3 person @ $1,500 each)	1	$ 4,500.00		$ 4,500.00	1	$ 4,500.00
Subtotal				$ 85,200.00		$ 1,389,100.00
10% Misc Cost				$ 8,520.00		$ 138,910.00
Total Estimated Cost + Misc Cost				**$ 93,720.00**		**$ 1,384,600.00**

12/9/99

E-Z Drain Co., LLC ~ 931 NE Harlow Place ~ Troutdale, OR 97060
(503) 492-2500 ~ Fax (503) 492-0208

Environmental Quality Commission

☐Rule Adoption Item
X Action Item
☐Information Item

Agenda Item C
December 20, 1999 Meeting

Title: Tidewater Barge Lines Tax Credit Applications

Summary: Staff recommends approval of the double hull portion of application number 4417:

	Certified Cost	*Value*
Pollution Control Facility Tax Credit Application Number 4417 – Double Hull Portion	*$697,500*	*$184,838*

Approve issuance of tax credit certificate for the application presented in Attachment B.

Report Author | Division Administrator | Director

December 14, 1999

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

State of Oregon
Department of Environmental Quality Memorandum

Date: December 13, 1999

To: Environmental Quality Commission

From: Langdon Marsh, Director

Subject: Agenda Item C, December 20, 1999, EQC Meeting
Tax Credit Applications

Statement of the Need for Action
Presentation of this staff report is contingent upon the Environmental Quality Commission's acceptance of the settlement offer presented in the case of Tidewater Barge Lines v. Environmental Quality Commission.

Tidewater Barge Lines, Inc. presented their contingent offer upon certification of the double hull of petroleum barge *The Pioneer* as a pollution control facility this calendar year.

- The original Review Reports (11/17/95 and 12/28/95), the 12/28/95 Director's Letter, 12/28/95 EQC Minutes, and Certificate Number 3549 Issued 12/28/95 are presented in Attachment A of this staff report.
- The revised Review Report presented for Approval is presented in Attachment B.

Background
On November 17, 1995, staff presented Tidewater Barge Lines application number 4417 to the Environmental Quality Commission for approval. The applicant claimed a vapor recovery system and the double hull of the petroleum vessel, *The Pioneer*, for certification as a pollution control facility. The Commission asked staff to report on other benefits that could accrue to the applicant as a result of the double hull.

On December 28, 1995, staff presented the application with additional information regarding other benefits with a recommendation to approve both the vapor recovery system and the double hull.

The Commission approved the vapor recovery system but denied the double hull after a discussion regarding the other benefits that could accrue to the applicant as a result of the claimed facility.

Tidewater Barge Lines, Inc. appealed the Commission's denial of the double hull portion of the application to the Circuit Court of Marion County. The circuit court dismissed the appeal on procedural grounds. Tidewater appealed through to the Oregon Supreme Court for review and was granted a review of the petition. To this point, the merits of the application have not been reviewed.

On October 1,1999, the Commission granted certification to two Tidewater petroleum vessels – *The Prospector* and *The Tri-Cities Voyager*. The applicant presented supplemental information for these two vessels that showed any other benefits that accrued to the applicant were incidental. On December 3, 1999, the applicant submitted similar supplemental information that showed that other benefits that accrued to the applicant as result of the double hull of *The Pioneer* were incidental. Therefore, staff recommends certification of *The Pioneer's* double hull as a pollution control facility according to the settlement offer presented by Tidewater Barge Lines.

Conclusions

The recommendations for action on the attached applications are consistent with statutory provisions and administrative rules related to the pollution control facility.

Recommendation for Commission Action

The Department recommends the Commission approve certification for the tax credit applications as presented in Attachment B of the Department's Staff Report.

Intended Follow-up Actions

The certificate will be issued with a unique certificate number separate from certificate number 3549. Staff will notify the applicant of the Environmental Quality Commission's action. Staff will notify Department of Revenue of the issuance.

Attachments

A. Historical Documents
B. Approval Documents

Reference Documents (available upon request)

1. ORS 468.150 through 468.190.
2. OAR 340-016-0005 through 340-016-0050.

Approved:

Section:

Division:

Report Prepared by: Margaret Vandehey
Phone: (503) 229-6878
Date Prepared: December 14, 1999

Attachment A

Historical Documents

REVIEW REPORT
11/17/95

Application No.T-4417

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Tidewater Barge Lines, Inc.
5 Beach Drive
Vancouver WA 98661

The applicant owns and operates a barge, The Pioneer, anchored in the Portland Oregon harbor.

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

2. Description of Facility

The claimed facilities are 1) the double hull of a steel petroleum barge and 2) a vapor recovery system on the same barge.

The double hull is constructed on plate steel and related steel support beams. It forms a void (containment area) between the cargo tanks and the water. Exterior hull damage caused by collision or grounding does not reach the cargo tanks since the void created by the double hull creates a buffer for the cargo tanks.

The vapor recovery system traps all gases resulting from evaportation of petroleum products, particularly during loading and unloading operations. The gases are returned to the customer for condensation to liquid form. The system eliminates the direct venting of petroleum vapors into the atmosphere. All vapors are captured and returned shoreside where the petroleum gases are removed prior to venting the clean air back to the atmosphere.

Claimed Facility Cost: $1,012,000
Double Hull Costs : ($ 775,000)
Vapor Recovery Costs : ($ 237,000)

Accountant's Certification was provided.

Eligible costs: $1,012,000.

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 in April 1994 and the application for certification was found to be complete on May 31, 1995, within 2 years of substantial completion of the facility.

4. Evaluation of Application

a. The facility is eligible because the sole purpose of the facility is to prevent a substantial quantity of water and air pollution.
There are no DEQ compliance issues for this facility as it is a new barge.

b. Eligible Cost Findings

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

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

The facility does not recover or convert waste products into a salable or usable commodity. The percent allocable determined by using this factor would be 100%.

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

There is no annual return on this facility.

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

There are no known alternatives. Specific requirements are outlined in the Oil Pollution Act of 1990 for the double hulled construction and vapor recovery systems for petroleum vessels.

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.

Although the Tidewater Barge Lines is an Oregon corporation, the Pioneer barge is registered in Washington state. The barge transports petroleum product to and from Washington and Oregon. According to information provided by the applicant, approximately 53% of the tonnage hauled by the barge is to ports within the state of Oregon while 47% is transported to ports located in the state of Washington. Because the requirement for double hulling barges is a federal one, not required by the state of Oregon, an allocation of the costs is being applied based upon the estimated time that the barge spends in Oregon waters.

This allocation method is not being applied to the vapor recover facility. The vapor recovery system controls the emission of volatile organic compound to the atmosphere. Portland is a non-attainment zone for the atmospheric pollutant ozone and the primary air quality benefit of the facility accrues to the Portland airshed.

The eligible cost of the facility is $1,012,000.

As a result of applying this methodology, the actual cost of the facility properly allocable to pollution control is 64%.

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 federal Environmental Protection Agency to prevent water and air pollution.

c. The facility complies with DEQ statutes and rules.

The portion of the facility cost that is properly allocable to pollution control is 64%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $1,012,000 with 64% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4417.

Elliot J. Zais:ejz
T-4417
(503) 229-5292
WQTCSR-1/95

REVIEW REPORT
12/28/95

Application No.T-4417

State of Oregon
Department of Environmental Quality

TAX RELIEF APPLICATION REVIEW REPORT

---

1. Applicant

Tidewater Barge Lines, Inc.
5 Beach Drive
Vancouver WA 98661

The applicant owns and operates a barge, The Pioneer, anchored in the Portland Oregon harbor.

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The vapor recovery system traps all gases resulting from evaportation of petroleum products, particularly during loading and unloading operations. The gases are returned to the customer for condensation to liquid form. The system eliminates the direct venting of petroleum vapors into the atmosphere. All vapors are captured and returned shoreside where the petroleum gases are removed prior to venting the clean air back to the atmosphere.

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Accountant's Certification was provided.

Eligible costs: $1,012,000.

3. Procedural Requirements

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

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4. Evaluation of Application

a. The facility is eligible because the sole purpose of the facility is to prevent a substantial quantity of water and air pollution.
There are no DEQ compliance issues for this facility as it is a new barge.

b. Eligible Cost Findings

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

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

The facility does not recover or convert waste products into a salable or usable commodity. The percent allocable determined by using this factor would be 100%.

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

There is no annual return on this facility.

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

There are no known alternatives. Specific requirements are outlined in the Oil Pollution Act of 1990 for the double hulled construction and vapor recovery systems for petroleum vessels.

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.

Although the Tidewater Barge Lines is an Oregon corporation, the Pioneer barge is registered in Washington state. The barge transports petroleum product to and from Washington and Oregon. According to information provided by the applicant, approximately 53% of the tonnage hauled by the barge is to ports within the state of Oregon while 47% is transported to ports located in the state of Washington. Because the requirement for double hulling barges is a federal one, not required by the state of Oregon, an allocation of the costs is being applied based upon the estimated time that the barge spends in Oregon waters.

This allocation method is not being applied to the vapor recover facility. The vapor recovery system controls the emission of volatile organic compound to the atmosphere. Portland is a non-attainment zone for the atmospheric pollutant ozone and the primary air quality benefit of the facility accrues to the Portland airshed.

The eligible cost of the facility is $1,012,000.

As a result of applying this methodology, the actual cost of the facility properly allocable to pollution control is 64%.

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 federal Environmental Protection Agency to prevent water and air pollution.

c. The facility complies with DEQ statutes and rules.

The portion of the facility cost that is properly allocable to pollution control is 64%.

6. Director's Recommendation

Based upon these findings, it is recommended that a Pollution Control Facility Certificate bearing the cost of $1,012,000 with 64% allocated to pollution control, be issued for the facility claimed in Tax Credit Application No. T-4417.

Elliot J. Zais:ejz
T-4417
(503) 229-5292
WQTCSR-1/95

MINUTES,
12/28/95

Approved _____
Approved with Corrections _____

Minutes are not final until approved by the EQC

Environmental Quality Commission
December 28, 1995
Telephone Conference Call

The Environmental Quality Commission telephone conference call was convened at 9:00 a.m. on Thursday, December 28, 1995. The following Commissioners were connected for the call:

William Wessinger, Chair
Henry Lorenzen, Member
Linda McMahan, Member
Tony Van Vliet, Member
Carol Whipple, Member

Also present by phone were Michael Huston, Assistant Attorney General, Oregon Department of Justice, Langdon Marsh, Director, DEQ, and DEQ staff members.

Chair Wessinger called the meeting to order at 9:00 a.m. The purpose of this meeting was to review Tax Credit Applications requiring decisions prior to January 1, 1996.

A. Approval of tax credits

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

Application No.	Applicant	Description
TC 4432.	Consolidated Metco, Inc. $47,635	A Water Pollution Control facility consisting of a natural gas fired Landa wastewater evaporator for the elimination of industrial wastewater.
TC 4478	Sabroso Company $23,519	A Water Pollution Control facility consisting of a 15hp pump, a 750 gallon storage tank, filters, electrical controls and associated plumbing, which functions to allow the reuse of wastewater and to prevent wastewater discharge to the city sewer.

Application No.	Applicant	Description
TC 4548	Farrelly & Farrelly LLC $135,723/88%	An Underground Storage Tank (UST) facility consisting of three (3) doublewall fiberglass tanks and piping, spill containment basins, a tank gauge system with overfill alarm, turbine leak detectors, sumps, monitoring wells and stage II vapor recovery equipment.
TC 4554	United Disposal Service $13,046	A Solid Waste Recycling facility consisting of 16 screen front-load containers with lids (model M78SFL) and 4 screen front-load containers without lids for recycling cardboard and six (6) 3-yard roll-dump containers.
TC 4556	United Disposal Service $6,415	A Solid Waste Recycling facility consisting of five (5) 1-yard roll-dump containers with casters (model M210), two (2) 2-yard roll-dump containers with casters (model M220) and one (1) 20 yard drop box for recycling scrap material.
TC 4559	United Disposal Service $8,772	A Solid Waste Recycling facility consisting of 8 1.5-yard roll-dump containers with casters (model M215), two (2) 4-yard roll-dump containers with casters (model M240) and four (4) pulltarp systems for covering recycling trucks.

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

Application No.	Applicant	Description
TC 4417	Tidewater Barge, Inc. $237,000	An Air Pollution control facility consisting of the second hull of a double-hulled barge and a vapor recovery system to prevent petroleum and vapor contamination of Oregon waters and air.

TIDEWATER

Application No.	Applicant	Description
TC 4447	Intel Corporation $518,155	An Air Pollution Control facility consisting of a wet scrubber tower, delivery systems for processing air and water pollutants and control instrumentation.
TC 4523	Quality Trading Co. $1,390,483	An Air Pollution Control "field burning" facility consisting of equipment, buildings and land for processing and storing grass straw.

Following discussion regarding percentages allocable to pollution control, Commissioner Lorenzen moved to approve Tax Credit Applications #4432, #4478, #4480, #4487, #4498, #4509, #4535, #4539, #4540, #4542, #4544, #4548, #4554, #4556 and #4559, acknowledging Commissioner Van Vliet's objections to Tax Credit Applications #4432, #4487, #4535, #4539 and #4542. Commissioner McMahan seconded the motion and it was unanimously approved.

At the meeting of November 17, 1995, the Commission deferred taking action on the water pollution portion of TC 4417, Tidewater Barge Lines, pending a determination by the Office of the Attorney General regarding the eligibility of the costs incurred for double-hulling a petroleum barge. Following discussion by Assistant Attorney General Michael Huston, James Weisgerber of Tidewater Barge Lines, and the Commission, Commissioner Lorenzen moved to deny the water pollution, double hull portion of Tax Credit Application #4417. Commissioner Whipple seconded the motion, and a role call vote was taken. Commissioners Lorenzen, McMahan, Van Vliet and Whipple voted to approve the motion and Chair Wessinger voted against. The motion was passed.

Quality Trading Company, on Tax Credit Application #4523, applied for tax credit which included facilities that were certified for tax relief under a previous owner. The Department recommended revoking the tax credit certificates that covered these facilities. However, the previous owner was in the business of processing straw for resale and the facilities were considered to be integral to the operation of his business. The new owners are not in the grass seed straw business, and the Department recommended that the certificates to be transferred reflect the value of the previously certified facilities less the amount of tax credit actually taken by the previous certificate holder. The applicant also included five acres of land in their claim for tax credit relief.

CERTIFICATE

STATE OF OREGON
DEPARTMENT OF ENVIRONMENTAL QUALITY

POLLUTION CONTROL FACILITY CERTIFICATE

Certificate No: 3549
Date of Issue: 12/28/95
Application No: 4417

ISSUED TO:
Tidewater Barge Lines, Inc.
5 Beach Drive
Vancouver, Washington 98661

ATTENTION:

LOCATION OF POLLUTION CONTROL FACILITY:
Portland Harbor

AS: ( ) LESSEE (X) OWNER ( ) INDIV ( ) PARTNER (X) CORP ( ) NON-PROFIT ( ) CO-OP

DESCRIPTION OF POLLUTION CONTROL FACILITY:
Facility consists of a vapor recovery system for a petroleum barge.

TYPE OF POLLUTION CONTROL FACILITY:
(X) AIR ( ) NOISE ( ) WATER ( ) SOLID WASTE ( ) HAZARDOUS WASTE ( ) USED OIL

DATE FACILITY COMPLETED: 4/1/94 PLACED INTO OPERATION: 4/1/94

ACTUAL COST OF POLLUTION CONTROL FACILITY: $237,000.00

PERCENT OF ACTUAL COST PROPERLY ALLOCABLE TO POLLUTION CONTROL: 100%

Based upon the information contained in the application referenced above, the Environmental Quality Commission certifies that the facility described herein was erected, constructed or installed in accordance with the requirements of subsection (1) of ORS 468.165, and is designed for, and is being operated or will operate to a substantial extent for the purpose of preventing, controlling or reducing air, water or noise pollution or solid waste, hazardous wastes or used oil, and that it is necessary to satisfy the intents and purposes of ORS Chapters 454, 459, 467 and 468 and rules adopted thereunder.

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

1. The facility shall be continuously operated at maximum efficiency for the designed purpose of preventing, controlling, and reducing the type of pollution as indicated above.
2. The Department of Environmental Quality shall be immediately notified of any proposed change in use or method of operation of the facility and if, for any reason, the facility ceases to operate for its intended pollution control purpose.
3. Any reports or monitoring data requested by the Department of Environmental Quality shall be promptly provided.

NOTE: The facility described herein is not eligible to receive tax credit certification as an Energy Conservation Facility under the provisions of Chapter 512, Oregon Law 1979, if the person issued the Certificate elects to take the tax credit relief under ORS 316.097 or 317.072.

Signed: _____ (William W. Wessinger, Chairman)

Approved by the Environmental Quality Commission on the 17th day of November, 1995.

Staff: EJZ/WQ

DIRECTOR'S LETTER
12/28/95

Tidewater Barge Lines

At the meeting of November 17, 1995, the Environmental Quality Commission deferred taking action on tax credit application 4417, Tidewater Barge Lines, pending a determination by the representative of the Office of the Attorney General on the eligibility of the costs incurred by the applicant for double-hulling a petroleum barge. The double-hulling of all like vessels is required under the Oil Pollution Control Act of 1990.

It is the Department's understanding, based upon conversations with the Attorney General's Office, that there is no provision in the statutes governing the Pollution Control Facilities Tax Credit Program that would preclude a transportation facility of this nature from being granted tax credit relief. Nevertheless, the facility is not eligible under the "principal purpose" criterion because it is not required to be installed under regulations of the EPA, the DEQ or an Oregon regional air authority; therefore, it must qualify as a "sole purpose" facility under the Rules. A sole purpose facility is defined as one having the exclusive purpose of preventing or controlling a significant amount of pollution.

The Department believes that the facility qualifies as a sole purpose facility and that there is no other viable business purpose for the double-hulling of the petroleum barge. It can be argued that the firm may accrue benefits from investing in double-hulling e.g., improved safety for the vessel and crew in case of collision or grounding, lower insurance costs or the potential for avoiding the loss of product as the result of an accident. However, the double-hulling also increases the draft of the vessel, reduces its capacity and perhaps, increases the risk of explosion on board. Based upon the information available, the Department believes that the applicant would not have undertaken to invest in the facility were it not required to do so by law and that the only business function of the facility is to prevent the spill of petroleum product into Oregon inland waterways and adjacent waters.

Quality Trading Company

The Quality Trading Company, a Limited Liability Corporation (LLC), has applied for a tax credit which includes facilities that were certified for tax relief under a previous owner. The Department is recommending the revocation of the tax credit certificates that cover these facilities. However, the previous owner was in the business of processing straw for resale and the facilities were therefore considered to be integral to the operation of his business. As a result, the costs of these facilities were only partially allocable to pollution control. The new owners are not in the grass seed straw business. We therefore recommend that the certificates to be transferred reflect the value of the previously certified facilities less the amount of tax credit actually taken by the previous certificate holder but that the cost be allocated 100% to pollution control.

Attachment B

Approval Documents

Tax Credit Review Report

EQC 9912

Director's Recommendation:	**Approve**
Applicant	**Tidewater Barge Lines, Inc.**
Application No.	**4417**
Facility Cost	**$697,500**
Percentage Allocable	**53%**
Useful Life	**10 years**

Pollution Control Facility: Water
Final Certification
ORS 468.150 -- 468.190
OAR 340-016-0005 -- 340-016-0050

Applicant Identification

The applicant is a C corporation and is operating as a tow boat company. The applicant's taxpayer identification number is 93-0278300. The applicant's address is:

63050 NW Old Lower River Road
Vancouver, WA 98660

Facility Identification

The facility is identified as:

Double hull for *The Pioneer* to create a void between the cargo area and water.

The facility is portable and used in Oregon and Washington waters and may sometimes be located at:

Portland Harbor
Portland, OR

Technical Information

The facility is the newly constructed double hulling of the steel petroleum barge, *The Pioneer.* The double hull is constructed of plate steel and steel beams that create a void between the cargo tanks and the water. Thus providing some assurance that a puncture or damage to the exterior hull will not reach the cargo tanks.

Specific requirements for double-hulled construction are outlined in the Oil Pollution Act of 1990.

Eligibility

ORS 468.155 (1)(a) The **principal purpose** of this **new installation** was **not** required by DEQ or EPA in order to prevent, control or reduce a substantial quantity of water pollution.

The applicant provided supplemental evidence showing that improved safety of the vessel and crew, lower insurance costs, and the protection of petroleum products being carried were not motivating factors for the double hulling of the barge. Similarly, the applicant maintains that reduction of the risk of financial liability in the event of an oil spill was not a motivating factor, and the Department has no specific evidence to the contrary. Consequently, staff has determined that the **sole purpose** and "exclusive purpose" of double-hulling of *The Pioneer* **is to prevent or control water pollution** as required by the United States Coast Guard.

OAR-016-0025 (2)(g) Installation or construction of facilities; which will be used to detect, deter, or prevent spills or unauthorized releases.

Timeliness of Application

The application was submitted within the timing requirements of ORS 468.165 (6).

Application Received	**3/16/98**
Application Substantially Complete	**11/3/98**
Additional Information Provided	**6/18/99**
Construction Started	**6/1/95**
Construction Completed	**3/27/96**
Facility Placed into Operation	**3/27/96**

Facility Cost

Facility Cost	**$697,500**
Ineligible Costs	0
Eligible Facility Cost	**$697,500**

Copies of the invoice and checks were attached to the application substantiating the total cost of the barge. The accounting review was performed by Bolt, Carlisle and Smith.

Facility Cost Allocable to Pollution Control

Since the facility cost exceeds $50,000, according to ORS.190 (1) the following factors were used to determine the percentage of the facility cost allocable to pollution control.

Factor	Applied to This Facility
ORS 468.190(1)(a) Salable or Usable Commodity	No salable or useable commodity.
ORS 468.190(1)(b) Return on Investment	The useful life of the facility used for the return on investment consideration is 30 years. No gross annual revenues associated with this facility.
ORS 468.190(1)(c) Alternative Methods	No alternative investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	No savings or increase in costs.
ORS 468.190(1)(e) Other Relevant Factors	This facility is portable and used in Oregon and Washington waters. Revenue analysis shows that 53% of the tonnage hauled by *The Pioneer* is to ports within the state of Oregon. Therefore, only **53%** of the benefits would be allocable to pollution control.

Compliance

The facility is in compliance with Department rules and statutes and with EQC orders.

Reviewers: Elliot Zais, DEQ
Margaret C.Vandehey, DEQ

Administrative Note: See the Review Report for Application Number 4417 and Certificate Number 3549 both dated 12/28/1995 for vapor recovery information.

Approved_____
Approved with Corrections__X__

Minutes are not final until approved by the EQC

Environmental Quality Commission
Minutes of the Two Hundred and Eighty-first Meeting

December 20, 1999
Special Phone Meeting

On December 20, 1999, a special phone meeting of the Environmental Quality Commission (EQC) was held at the Department of Environmental Quality (DEQ) headquarters, 811 SW Sixth, Portland, Oregon. The following Environmental Quality Commission members were present by phone:

Melinda Eden, Chair
Deirdre Malarkey, Member
Tony Van Vliet, Member
Mark Reeve, Member

Present in person were Harvey Bennett, EQC Member, Larry Knudsen, Assistant Attorney General, Oregon Department of Justice (DOJ); Langdon Marsh, Director, Department of Environmental Quality; and other staff from DEQ.

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

The Environmental Quality Commission held an executive session at 8:30 a.m. The Commission discussed pending litigation regarding EZ Drain Company v. State of Oregon, Department of Environmental Quality, Case No. 9809-06683 and Tidewater Barge Lines v. Department of Environmental Quality, Case No. A98545. The executive session was held pursuant to ORS 192.660(1)(h).

Chair Eden called the meeting to order at 9:10 a.m.

A. Approval of Tax Credits

Maggie Vandehey presented Agenda Item A and its Addendum, which included 39 tax credit applications for action under the Pollution Control Facility Tax Credit Program (37) and the Pollution Prevention Tax Credit Program (2).

The Department calls attention to specific applications in the staff report for one of three reasons:

- The applicant disagrees with the staff's recommendation,
- The Commission's action may set a new policy direction, or
- The reviewers can benefit from a clear policy statement.

Approvals

Ms. Vandehey presented the applications for certification approval. Two applications were from dry cleaners presented according to the Pollution Prevention statutes and rules. The remaining applications were presented according to the Pollution Control Facility Tax Credit statutes and rules. She also described deviations from the published Agenda Item for applications #4792, #4927, and #5223.

The Commission first discussed applications from Willamette Industries. Commissioner Van Vliet declared a conflict of interest because he owns shares in Willamette Industries, Inc.

Willamette Industries presented additional information for application #4792 documenting the fact that a non-allowable

amount of $9,892 for fire protection was actually for spark detection in the baghouse – an allowable cost. The facility cost recommended for certification should be adjusted to $71,523.

Willamette Industries sent a letter dated December 8, 1999, disagreeing with staff's recommendation on application #4927. They claimed a pneumatic conveying system as part of the air pollution control facility. Staff did not allow the cost because its primary function is material handling within the manufacturing process, and it does not meet the definition of an air-cleaning device as required by statute.

Commissioner Van Vliet asked if Willamette Industries was in violation of any pollution laws at the time of the upgrade to the facility. Jim Aden of Willamette Industries indicated he could not speak to that specific question though his general knowledge was they were in compliance at the Eugene facility before it went from particleboard to medium density fiberboard (MDF) and, thus, was not in violation. Ms. Vandehey said staff had reviewed the December 8, 1999, letter and it did not change the recommendation.

Commissioner Van Vliet noted the facility on application #4934 was a replacement and asked Willamette Industries if they would have installed the facility if they were not getting a tax credit. Ms. Vandehey clarified that only one component (ET-1) was a replacement, not the entire claimed facility. The applicant discussed the new dryers and their function. Chair Eden asked if the replacement cost was removed from the facility cost. Ms. Vandehey stated that the entire amount was not subtracted only the non-allowable amount according to statute and rule.

Commissioner Van Vliet asked Willamette Industries if the facility in application #4978 was installed due to a requirement imposed by LRAPA and if they were in violation. Maureen Weathers of Willamette Industries indicated there was an SFO.

Commissioner Van Vliet referenced the non-allowable costs in application #4986, specifically what appeared to be an inflated facility cost. Ms. Weathers indicated the claimed facility was part of a larger project and there may have been a misinterpretation in terms of what was claimed and what was not. Willamette Industries did not dispute the reviewer's representation of the allowable versus non-allowable costs since the final facility cost was correct.

Ms. Vandehey asked the Commission to remove Cascade General, Inc.'s application #5223 from the staff report for consideration at this time.

Commissioner Reeve asked how the cost savings are accounted for in Arden, Inc.'s application #5243 and if there is a threshold that the Department has to surpass before there is an impact on the percent allocable. It was explained that the cost savings are considered in the return-on-investment calculation; however, in this application the cost savings did not make an impact on the percentage allocable to pollution control.

Regarding application #5274 from Leroy and Lowell Kroft, Chair Eden asked if it was true that the animal feed has no value, if it was not being sold to somebody, or if somebody was not being charged for hauling it off? The reviewer for this application did not place a value on it. Chair Eden asked staff to verify this in the future for grass-seed-cleaning facilities, explaining that in her experience it does have an animal-feed value. Ms. Vandehey agreed to this direction.

In considering application #5329 from Bryce Cruickshank, Commissioner Bennett asked how facilities that market materials report their profit. Ms. Vandehey said it was reported in their annual cash flow, which is part of the return on investment (ROI) consideration. If the ROI is high enough then the percentage allocable to pollution control will be reduced. She clarified that this was the method for facilities costing over $50,000.

Commissioner Van Vliet described two factors that have implications on how people are going to look at tax credits in the future.

1) If costs are thrown into the pot that are not allowable or do not contribute to pollution control
2) If applicants claim a facility that would have ordinarily been installed without any tax credits

Ms. Vandehey discussed the trend for accounting firms to solicit companies to develop their tax credit applications and partially basing their fee on the tax credit they could obtain. This over-inflated cost is a challenge for the reviewers.

Ms. Vandehey committed to developing a clearer presentation when Chair Eden stated the calculation on UST applications is confusing.

Commissioner Reeve moved to approve items in Attachment B recommended for approval with the exception of the Willamette Industries applications and application #5233. Commissioner Bennett seconded the motion and Director Marsh polled the Commission: Commissioner Bennett, yes; Commissioner Malarkey, yes; Commissioner Van Vliet, yes; Commissioner Reeve, yes; and Chair Eden, yes. The motion carried with five "yes" votes.

Commissioner Reeve moved to approve the Willamette Industries applications as recommended by the Department with the changes in the figures on application #4792. Commissioner Malarkey seconded the motion and Director Marsh polled the Commission: Commissioner Reeve, yes; Commissioner Malarkey, yes; Commissioner Bennett, yes; Chair Eden, yes; and Commissioner Van Vliet, abstained. The motion carried with four "yes" votes.

DENIALS

There had been no contacts from the applicants regarding the denials. Commissioner Van Vliet moved to deny applications #4714 and #4845 as recommended by staff. Commissioner Reeve seconded the motion and Director Marsh polled the Commission: Commissioner Van Vliet, yes; Commissioner Reeve, yes; Commissioner Malarkey, yes; Commissioner Bennett, yes; and Chair Eden, yes. The motion carried with five "yes" votes.

REJECTIONS

Ms. Vandehey stated the Department recommends the Commission reject application #4570 from Willamette Industries and application #4864 from Georgia Pacific because the applicants submitted the applications over two years after their facility was substantially completed.

Willamette Industries does not agree with the Department's recommendation to reject application #4570. She added the tax credit statute does not allow staff to allow an exception to the deadline for filing an application. Staff is very supportive of the role this facility plays in lightening the load on our landfills; however, the merits of the facility or if the facility would have been otherwise eligible is not the question. The question is: "Was it complete to perform its purpose?"

Prior to their December 8, 1999 letter (shown with the Review Report) the applicant argued that the facility was not substantially complete until the lease was signed, regardless of whether the lessee was operating the facility. In that letter Willamette Industries also argues that the facility was not substantially complete until the dust filter system was installed. However, the fact that the dust filter was not installed until later did not prevent the facility from operating. The applicant mentions that the Toledo Platform Scale was essential for the material recovery facility to perform its function. The scales are used to calculate payments to suppliers. Ms. Vandehey stated this new argument did not change the Department recommendation, stressing that staff and Willamette Industries agree the facility was operating for its intended purpose before December 26, 1993. Staff does not consider that the dust filter and the scales prevented the facility from operating prior to their installation.

Commissioner Eden asked what were the overriding factors in making the determination about whether construction of the facility is substantially completed? When did it begin operating verses when the lease was signed? Counsel advised the Commission that the statute and the applicable rule require the Commission reject the application if they determine it was substantially complete. That determination involves determining whether or not there was any part of it that was essential to the function or operation that was missing. In the past, the Commission has taken the view that if a facility can be operated then essential components are not missing. This was the position the Department recommended the Commission continue to take. Counsel advised that ultimately it is up to the Commission how to interpret and apply their rule. Chair Eden asked staff if the Department followed the rule in asking for additional material in time. Ms. Vandehey affirmed that staff did not ask for the additional information within the 30 days set out in the rule.

Counsel interjected that it may be helpful for the Commission to understand that the two different deadlines function differently, and the remedies for not meeting a deadline are different. If the Department fails to act in a timely manner, the remedy is to get a writ ordering the Department to act. Counsel explained the Commission cannot grant all tax credits merely because the Department fails to act in a timely fashion as this would be inconsistent with the statute. The question about what to do when the applicant fails to provide the information is a different issue. Historically and legally, the Department has taken the position that if the applicant fails to act in a timely manner, the remedy is to reject the application.

Commissioner Bennett asked if the rules had changed between 1993 and the present. He also asked if there were benefits of one set of rules over the other. Staff indicated new rules went into effect on May 1, 1998, expanding the Department's deadline to request additional information to 60 days and reducing the applicant's deadline to provide the additional information to 60 days. However, the submittal deadline did not change. The fees increased with the May 1998 rules and applicants with applications in process could choose to apply under the May 1998 rule.

Commissioner Reeve asked Willamette Industries about what happened in September 1993 and how the facility was operated. Rece Bly of Miller Nash, LLP, appearing on behalf of Willamette Industries talked about the date the lease was signed and that all essential elements for the facility were not completed until after December 30, 1993. Commission Eden asked Mr. Bly to provide a discussion of the fact that the facility was operating in September 1993. Mr. Bly stated the law does not speak in terms of operating the facility. Mr. Bly also indicated that the filter system is needed for the safety of the forklift operators. It was designed into the facility for the safety of the people working in the facility and to keep the dust off the equipment. When asked if the forklifts were operating in the building in September 1993, Mr. Bly said, "There were forklifts and it wasn't the way it was suppose to be. It didn't comply with the way the thing had been designed. They were struggling to get it up and get it the way it was suppose to be and took them an extra couple three months to get it up and running. There were forklifts but it wasn't running the way it had to and if we hadn't done what we did OSHA or somebody else would have been smashing us for operating un-safely. This is an important thing this filter. Just because you can operate it in a substandard way doesn't mean you *lose* a tax credit."

Commissioner Bennett asked about the role of the scales and when billing began. Mr. Bly said the scales determine how much to pay suppliers. He said that from Willamette's perspective, billing began January 1, 1994, because that is when the lease first went into place.

Mr. Bly said, "...There seems to be some confusion on staff's part. And first of all let me tell you that staff is not unanimous on this. Last week the man handling this file, Mr. Bree, recommended that this be approved, as it should be. This facility should be certified and he so opined last week in a memorandum. So its important that the Commission be aware of that."

Commissioner Van Vliet reiterated that he had a conflict of interest but stated this facility is probably as close to a pollution control facility of any of the tax credits presented today. Because one of the people working on the review said it should have been approved would mean it would be very difficult to defend the rejection. Ms. Vandehey said she was not aware Mr. Bree had presented an opinion to Willamette Industries and that staff had not had an opportunity to discuss this. Commissioner Reeve asked if the Commissioners had a record of the memorandum or opinion from Mr. Bree? The Commissioners confirmed they had not seen the memorandum or opinion.

The Commission explored setting the application over until a later meeting. Mr. Bly emphatically disagreed since the Department had over four years to make the decision to approve the application. Director Marsh reminded the Commission that the Department had tried to schedule this review for other meetings but Willamette Industries has not been available to come to the table. Ms. Vandehey addressed the inability to make a decision to approve the tax credit since staff did not look at the individual elements of the claimed facility because of the timing issues. Staff brought the recommendation to reject the application based upon the timing issue and did not complete an accounting review. Chair Eden said she was torn on this because of the fact that the facility began operating in September of '93. She voiced concern over the ramifications for any other decisions that might come before the Commission on the issue of what is substantially complete. On the other hand, all facilities don't get up and running 100 percent, and of all the tax credits before the Commission at this meeting, this is the facility that in a merit system deserves it. She stated that the timing issue is an unfortunate one.

A discussion of the ability of the facility to bill ensued. Commissioner Reeve asked Mr. Bly if the business was able to bill when it was operating from September to December 1993? Mr. Bly said Willamette Industries was not able to bill and did not bill for this leasehold facility until January 1, 1994, because they did not have a lease in place. Counsel clarified the question as not whether Willamette Industries could bill but whether or not the lessee that was operating the facility was able to bill. Chair Eden asked if the lessee was paid? Mr. Bly restated that Willamette Industries is the applicant and the facility was not done in Willamette's mind and wasn't ready for any kind of billing to a tenant until January 1, 1994. Counsel stated the billing dialog had been constructive because what staff is considering is the functionality in what is essential for the operator of the facility to operate the facility. Commissioner Reeve stated he believed that the statutory definition of substantially complete is clear. He thought the application should be rejected on the basis that the facility was operating; therefore it was substantially complete.

Commissioner Reeve moved to reject application #4570. Chair Eden seconded the motion and Director Marsh polled the Commission: Commissioner Van Vliet, Abstained: Commissioner Malarkey, no; Commissioner Bennett, no, Commissioner Reeve, yes; Chair Eden, yes. The motion failed. As a result of the vote, Counsel said the application should be treated as a set over where the Department would be prepared to provide testimony or submit affidavits. This tax credit application will be included in the tax credit staff report for the February 10-11, 2000, EQC meeting. If there is a memo written by Bill Bree as referenced by Mr. Bly, the Commission would like to see it before February.

A motion was made by Commissioner Reeve to reject Georgia Pacific application #4864. Commissioner Van Vliet seconded the motion and Director Marsh Polled the Commission: Commissioner Van Vliet, yes; Commissioner Reeve; Commissioner Malarkey; Commissioner Bennett, yes; and Chair Eden, yes. The motion carried with five "yes" votes.

Transfers

Commissioner Van Vliet moved to transfer the certificates listed in Attachment E and the Addendum of the staff report. Commissioner Bennett seconded the motion and Director Marsh polled the Commission: Commissioner Van Vliet, yes; Commissioner Malarkey, yes; Commissioner Bennett, yes; Commissioner Reeve, yes; and Chair Eden, yes. The motion carried with five "yes" votes.

Action	App. No.	Applicant	Certified Cost	Percentage	Type	Value
Approve	4789	Willamette Industries, Inc.	$1,045,564	100%	Air	$522,782
Approve	4792	Willamette Industries, Inc.	$71,523	100%	Air	$30,816
Approve	4905	Willamette Industries, Inc.	$91,098	100%	Water	$45,549
Approve	4906	Willamette Industries, Inc.	$35,904	100%	Water	$17,952
Approve	4927	Willamette Industries, Inc.	$1,155,228	100%	Air	$577,614
Approve	4934	Willamette Industries, Inc.	$1,398,042	100%	Air	$699,021
Approve	4978	Willamette Industries, Inc.	$1,423,208	100%	Air	$711,604
Approve	4986	Willamette Industries, Inc.	$402,848	100%	Air	$201,424
Approve	5020	Willamette Industries, Inc.	$542,210	100%	Water	$271,105
Approve	5191	Russell Oil Company	$23,320	100%	USTs	$11,660
PULLED	5223	Cascade General, Inc.	$1,935,351	100%	Water	$967,676
Approve	5227	Willamette Industries, Inc.	$118,175	100%	Air	$59,087
Approve	5243	Arden, Inc.	$201,782	100%	Air	$100,891
Approve	5255	CO-GEN II, LLC	$687,653	100%	Air	$343,827
Approve	5256	CO-GEN Co., LLC	$588,507	100%	Air	$294,254
Approve	5274	Leroy & Lowell Kropf	$81,742	100%	Air	$40,871
Approve	5291	Truax Harris Energy LLC	$194,027	89%	USTs	$86,342
Approve	5292	Truax Harris Energy LLC	$317,343	94%	USTs	$149,151
Approve	5293	Nadim & Lama Yaqoub	$87,767	88%	USTs	$38,617
Approve	5294	Exxon of Woodburn LLC	$277,277	93%	USTs	$128,934
Approve	5305	John Tea	$36,000	100%	Dry Clean	$18,000
Approve	5306	Tomlin's Auto Service	$37,697	100%	USTs	$18,849
Approve	5307	Delbert Folk	$68,195	99%	USTs	$33,757
Approve	5323	Bob VanValin Enterprises, Inc.	$67,089	100%	USTs	$33,545
Approve	5324	Chan T. Him	$35,000	100%	Dry Clean	$17,500
Approve	5325	Larry A. Isom	$5,500	100%	Field	$2,750
Approve	5329	Bryce D. Cruickshank	$115,724	92%	Field	$53,233
Approve	5334	Larry M. and Mary Lou Neher	$47,995	100%	Field	$23,998
Approve	5337	Clough Oil Company	$78,988	100%	USTs	$39,494
Approve	5339	Jim R. Titus and Freda J. Titus	$138,404	100%	USTs	$69,202
Approve	5340	Clough Oil Company	$26,019	100%	USTs	$13,009

Approve	5341	Larry Craig	$83,794	87%	USTs	$36,450
Approve	5342	Ferrell's Fuel Network, Inc.	$88,613	99%	USTs	$43,863
Deny	4714	Portland General Electric	$4,859	100%	Water	$2,430
Deny	4845	Integrated Device Technology	$801,096	100%	Air	$400,548
SET	4570	Willamette Industries, Inc.	$2,596,818	100%	Solid Waste	$1,298,409
Reject	4800	Willamette Industries, Inc.	$110,418	100%	Air	$55,209
Reject	4864	Georgia-Pacific Corp.	$538,859	100%	Air	$269,430

C. Tidewater Barge Lines Tax Credit Applications

Larry Knudsen discussed the issue before the Commission as a choice of whether to issue a tax credit to Tidewater Barge as settlement of a pending Court of Appeals case. He advised the Commission that if they made that motion, he would ask that it be subject to the execution of a written formal settlement agreement between Tidewater and the EQC. The settlement needed to provide for the dismissal of the court case upon acceptance of the certificate by the Department of Revenue. He also advised the Commission to authorize the Director to sign the settlement agreement and certificate on their behalf.

Commissioner Van Vliet made a motion to accept the offer of settlement and Director Marsh be authorized to sign the settlement and certificate on the Commission's behalf. Commissioner Bennett seconded the motion and Director Marsh polled the Commission: Commissioner Bennett, yes; Commissioner Malarkey, yes; Commissioner Bennett, yes; Commissioner Reeve, yes; and Chair Eden, yes. The motion carried with five "yes" votes.

B. Rule Adoption of Proposed Rules Establishing Review and Acceptance Criteria for New or Innovative Technologies and Materials for Application in the On-Site Program.

Stephanie Hallock, Interim Administrator for the On-Site Sewage Disposal Program, and Dennis Illingworth On-site program staff presented a summary of the staff report. Written testimony that had been submitted during the extension of public comment was reviewed. The Commission asked questions about the alternatives and the performance testing protocol. Commissioner Malarkey pointed out a spelling error in the proposed rules. Counsel recommended an implementation date of March 1, 2000.

A motion was made by Commissioner Van Vliet to adopt the proposed rule package as presented with the spelling correction and implementation date of March 1, 2000. Commissioner Malarkey seconded the motion and Director Marsh polled the Commission: Commissioner Bennett, yes; Commissioner Malarkey, yes; Commissioner Reeve, yes; Commissioner Van Vliet, yes; and Chair Eden, yes. The motion carried with five "yes" votes.

There being no further business, the meeting was adjourned at 11:30 a.m.