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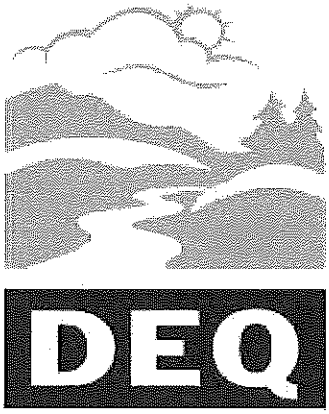
OREGON
ENVIRONMENTAL QUALITY
COMMISSION MEETING
MATERIALS 12/30/1998



State of Oregon
Department of Environmental Quality

A G E N D A

SPECIAL TELEPHONE CONFERENCE CALL MEETING
ENVIRONMENTAL QUALITY COMMISSION MEETING

December 30, 1998
Beginning 2:00 p.m.
DEQ Conference Room 10A
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.

A. Approval of Tax Credits

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.

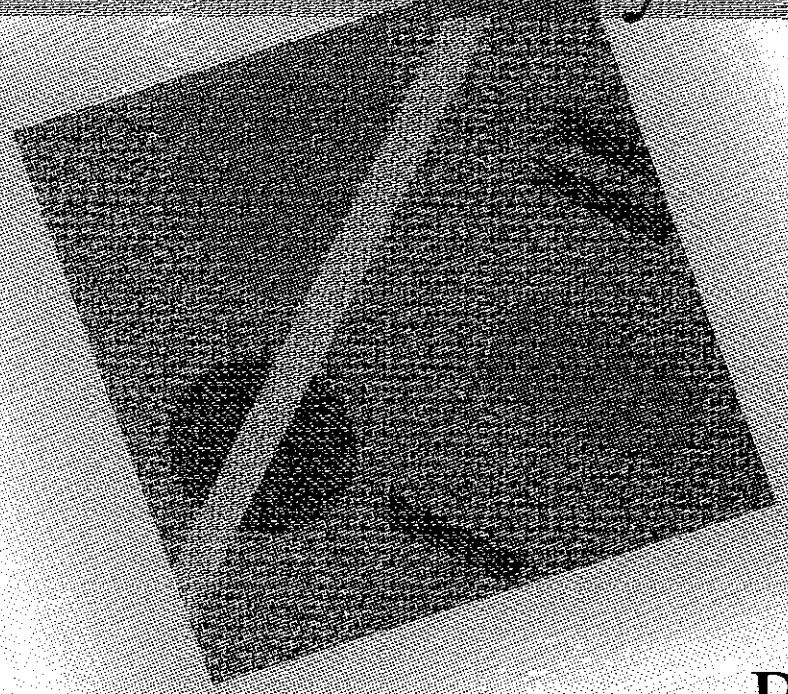
The Commission has set aside January 28-29, 1999, for their next meeting. The meeting will be in Portland, Oregon at DEQ Headquarters.

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.

June 8, 1999

Hyundia's Pollution Control Facility Certification



Doug Burke
Environmental
Engineer, Hyundia

Jeff Shilling
PricewaterhouseCoopers

Salient Points

- DEQ's Position - Creation of "...an internal environment that is safe and conductive to film substrate manufacturing"
- Hyundia's Position - Primary and Most Important Purpose is meeting Pollution Control requirements
- Pollution Control System requires ductwork to reduce air pollution as required by ACDP's

Air Cleaning Device System

- An Air-Cleaning Device System is Composed of the Following:
  - An Air Cleaning Device to Reduce and Remove a Specific Pollutant (VOC or Acids)
  - An Air Handler to the Exhaust Air
  - Duct Work to Control the Exhausted Air Contaminants and Convey them from the Tool to the Abatement Unit
  - A Stack for Discharge to the Atmosphere

Air Contaminant Reduction

- Contaminant Reduction/Removal Strategy
  - Problem
    - No Single "Air Cleaning Device" Will Remove and Reduce All Regulated Contaminants (VOC and Acids)
  - Solution
    - Remove and Reduce Contaminants with Contaminant Specific Air Cleaning Devices
      - Thermal Oxidizer Device - VOC
      - Acid Scrubbers Device - Acids

Air Contaminant Reduction Cont.

- Contaminant Reduction/Removal Strategy
  - Problem
    - High Flow, Low Air Contaminant Concentrations Reduce Reduction and Removal Efficiencies
  - Solution
    - Maximize Air Contaminant Concentrations by Decreasing Flow Rates With Air Contaminant Specific Duct

Alternative Solutions

- Combine VOC or Acid Exhaust into General Exhaust Duct.
  - Problems
    - Combined VOC or Acid Exhausts Increase Dilution of Contaminants
      - Reduced Removal Efficiencies
    - Increase Abatement Units to Handle Increased Flows
      - Four Additional VOC Units; or
      - Three Additional Acid Scrubbers
  - Results in Increased Air Contamination
    - Permit Violations

Alternative Solutions (Cont.)

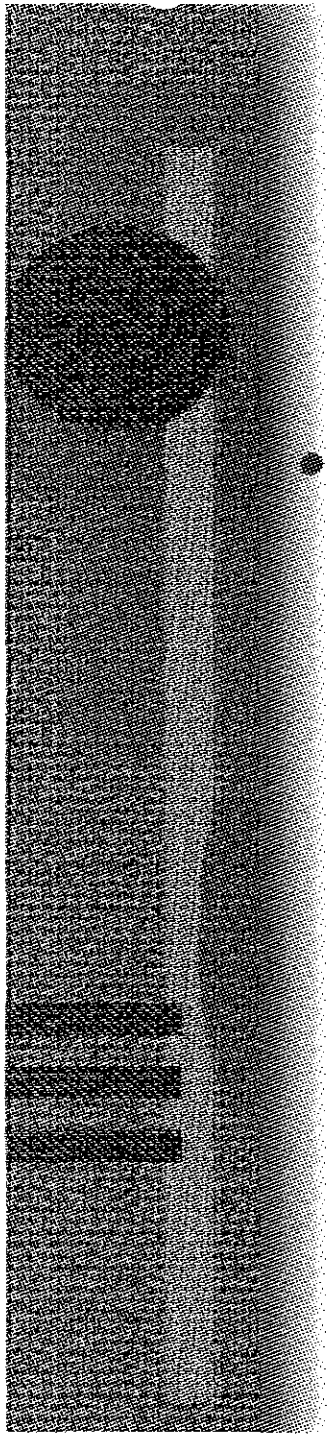
- Exhaust Tools in Separate Exhausts Through Roof
  - Problems:
    - Air Contaminants Are Not Reduced or Removed, or
    - Many Point-Of-Use Air-Control Devices Must Be Used
      - Not Cost Effective
      - Greater Potential for Failure

Summary

- An ACDP is Required for Facility Operation
- Pollutants MUST be Controlled Separately at High Concentration for Reduction/Removal
- An Air-Cleaning Device is the Sum of Its Parts
- If Any of the Parts Are Absent the Device Will Not Function

Summary (Cont.)

- Without the Related Duct Work the Air-Cleaning Devices will Fail to meet Regulatory Requirements for Air Contaminant Removal and Reduction
- Creation of an Internal Environment that is Safe and Conductive to Film Substrate Manufacturing can be Provided at Much Lower Cost than Incurred by Hyundai



Conclusion

- The Primary and Most Important Purpose for the Duct is Air Contaminant Reduction

Addenda

Regulatory Requirements

- Regulatory Requirements
  - Air Contaminant Discharge Permit (ACDP) Required for Operation
  - ACDP Issued by the Lane Regional Air Pollution Authority (LRAPA)
  - ACDP Regulates Emissions of Pollutants to Atmosphere

Regulated Pollutants

- Regulated Pollutants
  - Hydrofluoric, Hydrochloric, and Sulfuric Acids
    - Produced during manufacturing from various tools using acid gases and liquids throughout the facility
  - Volatile Organic Compounds (VOC)
    - Produced during manufacturing from various tools using solvents throughout the facility

Pollution Control Facility Certification

- Pollution Control Facility Defined - ORS 468.155 "...prevent control or reduce"
- Regulatory Agency Required - "Principal Purpose"
- "Air Cleaning Device" Defined - ORS 468A.005 - "reduce" vs control
- Control Defined -

  v. 1. To excercise authority or infuence over; direct. 2. To hold in restraint; check. American Heritage Dictionary, 3rd Edition

Environmental Quality Commission

☐ Rule Adoption Item
X Action Item
☐ Information Item

Agenda Item A
December 30, 1998, Meeting

Title: Approval and Denial of Tax Credit Applications

Summary: Staff recommends the following actions regarding tax credits:

App. No.	Applicant	Facility Description	Facility Cost	Percentage Allocable
Approve				
4926	Balzer Painting Inc.	Two Bessimer make-up air handlers and one Beeker drying booth used to dry, water base paint, laquer, or stain on doors, windows or moldings.	$ 131,173	100%
4946	Georgia-Pacific West Corporation	An electrostatic precipitator (ESP)	$ 5,691,400	100%
4948	Georgia-Pacific West Corporation	A waste paper recycling plant which recovers 600 tons/day of post consumer waste paper for use in the manufacture of containerboard.	$ 79,155,790	100%
4993	Lamb-Weston, Inc.	Wastewater treatment system	$ 2,018,468	100%
5075	Hyundai Semiconductor America, Inc.	A volatile organic compound abatement system and an acid exhaust abatement system.	$ 11,052,894	100%
5077	Hyundai Semiconductor America, Inc.	A hydroflouric acid batch neutralization system and an acid waste neutralization system.	$ 5,381,770	100%
5086	Portland General Electric Company	An oil spill containment system.	$ 22,878	100%
5128	Vernon & Galen Kropf	John Deere 9200 tractor, 260 hp Schulte 526 rotary cutter.	$ 149,573	55%
Approve Correction				
5130	Ernest Glaser Farms	200 acres of tiling.	$ 171,314	100%
			$ 103,775,260	
Deny				
4947	Georgia-Pacific West Corporation	Number 5 Power Boiler		

Approve tax credit certification for the as presented above and in Attachment A. Deny issuance of a tax credit certificate for application 4947 and as presented in Attachment A. Correct the approval for certification for application 5130 as presented in Attachment A.

Margaret L. Vandehey / Hale Miller for Helen Lottridge / Richard P. Reed for Langdon Marsh

Report Author / Division Administrator / Director

December 23, 1998

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

State of Oregon
Department of Environmental Quality Memorandum

Date: December 23, 1998

To: Environmental Quality Commission

From: Langdon Marsh, Director

Subject: Agenda Item A, December 30, 1998, EQC Meeting
Tax Credit Applications

Statement of the Need for Action

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

Review Reports for all applications are presented in Attachment A of this staff report.

Approvals

Application 4993

Lamb-Weston, Inc. claimed a water pollution control tax credit facility installed at their Boardman processing plant on application number 4993. Lamb-Weston and Oregon Potato Co. (OPC) entered into an agreement that specifies that OPC will make ten "capital reimbursement" payments over 10 years and an ongoing "operating cost" payment.

> According to ORS 468.170(1), *The actual cost or portion of the actual cost certified shall not exceed the taxpayer's own cash investment in the facility or portion of the facility.*

Staff recommends that the facility be certified at 100% since Lamb-Weston, Inc. will retain ownership of the facility, they made the up-front investment in the facility and they will take all asset depreciation. The payments are made to Lamb-Weston in return for pretreatment of OPC's wastewater prior to discharge to the Port of Morrow system.

Both payments were considered in determining the percentage of the facility cost allocable to pollution control.

Application 5075

Staff presented Hyundai American Semiconductor, Inc.'s application number 5075 before the Commission on December 11, 1998. In the Review Report, staff recommended that ductwork in the amount of $10.8 million not be certified as an eligible cost. After listening to staff and the applicant's representatives, the Commission asked Hyundai to estimate the incremental cost of the ductwork over and

above what was required by OSHA and the Uniform Fire Code. The Department understood that Hyundai was to estimate the cost of the ductwork, tool hook-up, exhaust to establish negative pressure above the roof-line, additional stack length, etc. for a "through the roof" option since this would have been adequate to meet fire and safety requirements. Hyundai engineers were not able to provide this type of analysis in the time provided. Therefore, Jeff Schilling of PricewaterhouseCoopers provided the Post EQC Meeting Information Submittal shown with the revised Review Report in Attachment B.

The Department recommends that the Commission allows Hyundai to remove application number 5075 from consideration at this time. This would allow additional time for the applicant's engineers to provide an estimate according to the Commission's direction. It would also allow the Department deliberative time to review the estimate. If this is not acceptable to the applicant then the Department recommends Commission approval of application number 5075 as presented in Attachment B.

Response to Post EQC Meeting Information Submittal

The Department received the applicant's Post EQC Meeting Information Submittal on December 21, 1998 (shown after the Review Report in Attachment A.) The information provided by the applicant and the method used to determine the incremental cost of ductwork for pollution control were not adequate for the Department to provide a deliberative response to the Commission. However, staff did provide the following line-by-line initial review of the applicant's Post EQC Meeting Information Submittal. A two-way dialogue with the Department's engineers and the Hyundai's engineers did not take place due to the holidays and the lack of lead-time in receiving the submittal.

Item 1 Fab Level One Acid Ductwork Hook-up on Fab Level One ($1,340,000)
This is an increase to the claimed facility cost and is noted on the Review Report.

Item 2 Placement of Exhaust Pumps on Level Two versus Level One ($1,319,436)
This is an increase to the claimed facility cost and is noted on the Review Report

Item 3 Level One Acid Ductwork Laterals ($243,237.78)
According to the drawings submitted with the application, Level 1 is the Fab. By definition, this is the area of the manufacturing plant in which there are processes using hazardous production materials (HPM). The acid exhaust system design is governed by the Uniform Fire Code for this area, not by the applicant's air permit.

Item 4 One to Five Acid Duct Header ($320,000)
The Department engineers thought that might be the header at the inlet to the five scrubbers which was considered an eligible item and is already part of the approved facility.

Item 5/6 Installation Cost for Point of Use Scrubbers (-$330,516)
Installation of the Point of Use Scrubbers was included as an eligible item and is part of the approved facility already. There are not any installation costs identified and there is not an amount listed in the amount of $495,774 on Page 4 of Exhibit D. In subsequent discussions with the applicant's representative, these amounts represent corrections to the original application that were discovered along with the discovery of Items 1 and 2 above. This is noted on the Review Report.

Note 7 The cost estimate included in the original application for 5 stacks, 5 exhaust fans, and acid scrubbers connecting ductwork was all considered eligible and is part of the approved facility. No further information is required.

Background on Ductwork

In tax credit application 5075, the reviewer upheld Department policy direction that most of the internal ductwork was not an eligible cost in this principal purpose facility. The reviewers upheld that the ductwork is not an air cleaning devices as defined in ORS 468A.005 *[ORS 468.155 (1)(b)(B)]*, it was required by OSHA/fire code and it is used to create an environment that is clean, safe and conducive to manufacturing film substrate. The elimination of this type of process ductwork began in 1993-94 with Intel and Wacker. In a quick tally, it seems as though we have denied or asked applicants to remove about $78 million in internal ductwork since that time. Others like IDT have not asked for the credit for ductwork because they didn't think they would receive credit for it.

Application 5077
Staff removed Hyundai American Semiconductor, Inc.'s application number 5077 from the December 11, 1998 agenda in order for the applicant to present additional information regarding the protected piping associated with the facility.

Jeff Schilling of PricewaterhouseCoopers provided the Post EQC Meeting Information Submittal shown with the revised Review Report in Attachment B.

The Department received the applicant's Post EQC Meeting Information Submittal on December 21, 1998 (shown after the Review Report in Attachment A.) Staff recommends the applicant be provided the opportunity to remove application number 5077 from consideration at this time or indicate that they would like the application to be approved as it is presented in Attachment A.
Response to Post EQC Meeting Information Submittal
The Post EQC Meeting Information Submittal is shown after the Review Report in Attachment A. Staff provided the following line-by-line initial review of this submittal. A two-way dialogue with the Department's engineers and the Hyundai's engineers did not take place due to the holidays and lack of lead-time.

Item 1 Chemical waste drains are not eligible as water pollution control facilities. The Fire Code and Building Codes would not allow one drain system for the entire production process, which prohibits mixing incompatible materials. This would then require separate drain lines for each classification of chemicals. A facility such as the Hyundai can have a variety of different acids, caustics, peroxides and organics that might require individual waste piping.

Item 2 Spent solvent piping systems are not eligible as water pollution control facilities. Oregon OSHA requires waste solvents be adequately controlled to prevent an unsafe working condition. Also Fire Codes prohibit the accumulation of flammable solvents in a workstation. The waste piping is the means of meeting these requirements.

Item 3 Double containment is only required to prevent ground water contamination. In the case of Hyundai, the secondary containment that prevents ground water contamination is the building. Diluting spent acid with process wastewater does not prevent ground water contamination. The pollutants are still there.

Item 4 Hyundai stated Change Order Request 19 required waste drains be relocated because of design conflicts between ducting and waste drain lines. Fire and Building Codes required the relocation of the drain lines. (See Note 1)

Item 5 IPA1 and IPA2 waste solvent recovery systems were not claimed or described in the applications submitted to the Department.

Approval Correction

Application 5130

Tax credit application number 5130, was certified for the amount listed on the application ($160,814) on December 11, 1998. Generally, the applicant may request that an application be removed from the agenda at any time prior to the Commission meeting where their facility will be presented for certification if the applicant wishes to present additional information. The applicant made such a request. Due to circumstances beyond the control of the applicant, the tax credit coordinator did not receive the request to amend the application before the Commission had taken action regarding approvals of tax credits.

Staff recommends the Commission certify the facility for the amount of $171,314, thereby negating their action regarding application 5130 taken on December 11, 1998. Since the certificates have not been issued for the month of December, the certificate does not need to be reissued. This reflects the amended facility cost presented by the applicant along with documentation and the Accountant's Statement.

Conclusions

The recommendations for action on the attached applications are consistent with statutory provisions and administrative rules related to the pollution control, 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 for approval in Attachment A.

The Department recommends the Commission deny certification for the tax credit application number 4947 as presented in Attachment A.

The Department recommends the Commission certify the facility represented on application number 5130 (Attachment A) in the amount of $171,314, thereby negating their action regarding the approval of the application taken on December 11, 1998.

Intended Follow-up Actions

Notify applicants of Environmental Quality Commission actions. Notify Department of Revenue of Issued, Transferred or Revoked certificates. Transmit electronic files to Department of Revenue.

Attachments

A. Review Reports

Reference Documents (available upon request)

1. ORS 468.150 through 468.190.
2. OAR 340-16-005 through 340-16-050.

Approved:

Section: _____

Division: Hale Miller for Helen Lottridge

Report Prepared by: Margaret Vandehey
Phone: (503) 229-6878
Date Prepared: December 23, 1998

Taxshare\981230_EQC_Preparation.doc

Attachment A

Review Reports

Tax Credit Review Report

EQC 12/30/1998

Director's Recommendation: **APPROVE**

Applicant	**Balzer Painting, Inc.**
Application No.	**4926**
Facility Cost	**$131,173**
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 C corporation operating as a painting company. The applicant is the owner of the facility and will be taking tax relief under taxpayer identification number 93-0659491. The applicant's address is:

19405 SW 125th Court
Tualutin, OR 97062

Facility Identification

The certificate will identify the facility as:

Two Bessemaire make-up air handlers and one Bleeker drying booth used to dry water base paint, lacquer, or stain on doors, windows or mouldings.

The facility is located at:

19405 SW 125th Court
Tualutin, OR 97062

Technical Information

The air pollution prevention system consists of two Bessemaire make-up air systems and one Bleeker drying enclosure. These systems are used to speed up the drying process when using water-base sealers or other water-base paint products. Using water-base coatings instead of solvent-base coatings reduces the potential of VOC's from being emitted into the atmosphere.

The two Bessemaire direct gas fired heat/ventilation make-up air systems, Model MUAJHV-13TLA-621, are vertical mount with an outside air intake from duct that is run to the roof. Each unit is rated at 13,000 cfm at 0.4 inches static pressure and 842,400 Btuh at high fire. The units have Model 1-PD900-100 blowers and have ducted connections to the spray booths. The drying unit has a gas-fired recirculating heat system, which provides a 60°F temperature rise from an indirect fired heater. It is sized to provide 336,000 Btuh. The 24-inch diameter tubeaxial recirculating fan provides 4400 cfm at 0.75 inches static pressure. The complete system includes controls, installation of electrical power, exhaust and supply ducting connections, flue piping, a 25Hp air compressor, air-pumps and dryer access doors.

Balzer installed this equipment in lieu of using solvent-base paint products, which release VOC's to the atmosphere. The goal in purchasing and installing the air-handling systems and dryer was to stay under the federal EPA Clean Air Act guidelines (10 tons/year emissions) and thereby avoid having to obtain an air permit. In their present operating condition, they do not exceed the 10 tons per year emissions limit at their site. If they had expanded their production and continued to use solvent-base coating, the estimated emissions would be 2-3 times as much (20-30 tons/year).

Solvent-base coatings dry much quicker than water-base coatings. Time comparisons between solvent-base and water-base are as follows:

	Solvent-Base	**Water-base**	
Primer/sealer:	10 minutes	3 hours	18 times longer
First paint coat:	10 minutes	12 hours	72 times longer
Second paint coat:	10 minutes	12 hours	72 times longer

In order to maintain production speed and get the same throughput, they needed to force cure the water-base coatings. By using the air-handling systems and dryer to heat and thereby force cure the water-base coatings, the drying times are reduced, but it still takes longer than it does for solvent-base coatings:

	Solvent-Base	**Water-base**	
Primer/sealer:	10 minutes	20 minutes	2 times longer
First paint coat:	10 minutes	30 minutes	3 times longer
Second paint coat:	10 minutes	30 minutes	3 times longer

The cost for water-base primer is $2.16/gallon more than lacquer primer, but the two costs for paint are about equal.

Eligibility

ORS 468.155 (1)(a)(B) The **principal purpose** of this **new equipment and installation** is to **prevent**, control or 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	**1/30/98**
Additional Information Requested	**3/3/98**
Additional Information Received	**8/28/98**
Application Substantially Complete	**9/3/98**
Construction Started	**2/1/97**
Construction Completed	**7/31/97**
Facility Placed into Operation	**7/31/97**

Facility Cost

Claimed Facility Cost	$	**218,777**
Salvage Value	$	-15,000
Government Grants	$	-0
Other Tax Credits	$	-0
Ineligible Costs		
Spray booth #1	$	-30,305
Spray booth #2		-34,612
Electrical portion for spray booths		-7,687
Eligible Facility Cost	$	**131,173**

Copies of invoices were provided, marked paid with the check number written on them, which substantiated the cost of the facility. **Jess A. Hamby, C.P.A.**, provided the certified public accountant's statement. The original application erroneously calculated the gross annual income and operating expenses for the entire business, not for the claimed facility. The claimed facility cost of $218,777 included all equipment purchased when Balzer Painting moved to the new location and expanded their production capability. The ineligible costs listed above are detailed in the table below.

Description	**Claimed Cost**	**Eligible Cost**	**Ineligible Cost**
Booth #1	$20,762	$0	$20,762
AMU for Booth #1	$22,447	$22,447	$0
Subtotal	*$43,209*		
AMU & Booth #1 Installation	$19,861	$10,318	$9,543
Total	*$63,070*	*$32,765*	*$30,305*
Booth #2	$24,290	$0	$24,290
AMU for Booth #2	$22,447	$22,447	$0
Subtotal	*$46,737*		
AMU & Booth #2 Installation	$19,861	$9,539	$10,322
AMU Duct for Booth #2	$6,895	$6,895	$0
Total	*$73,493*	*$38,881*	*$34,612*
Drying Booth	$29,036	$29,036	$0
Airless Sprayer for water-base paint	$18,262	$18,262	$0
25 Hp Air compressor	$11,855	$11,855	$0
Electrical (Leasehold Improvements)	$23,062	$15,375	$7,687
Grand Total	***$218,777***	***$146,173***	***$72,604***

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 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: None

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

Tax Credit Review Report

EQC 12/11/1998

Director's Recommendation: **APPROVE**

Applicant	**Georgia-Pacific West Corp.**
Application No.	**4946**
Facility Cost	**$ 5,691,400**
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 C corporation operating as an integrated paperboard manufacturing plant. The applicant is the owner of the facility and will be taking tax relief under taxpayer identification number 58-2142537. The applicant's address is:

Georgia-Pacific West Corp.
1 Butler Bridge Road
PO Box 580
Toledo, OR 97391

Facility Identification

The certificate will identify the facility as:

An electrostatic precipitator (ESP)

The facility is located at:

1 Butler Bridge Road
Toledo, OR 97391

Technical Information

The claimed facility consists of a new and more efficient ESP. As part of the Toledo 2000 project to add to the mill's capacity to handle additional waste paper as raw material for container-board manufacture, one of the recovery boiler electrostatic precipitators was replaced and the boiler was repaired. Controls for both boilers were upgraded.

The waste paper replaced a portion of the wood used as raw material and one of three recovery boilers was shut down. Recovery boilers get the energy to produce steam from the portion of the wood that does not make the pulp fiber used in papermaking.

Conditions No. 15, 17, and 18 of the applicants Air Contaminent Discharge Permit limit particulate emissions and opacity caused by the operation of recovery boiler No. 2. An ESP is considered state of the art for this application.

Eligibility

ORS 468.155 (1)(a) The **principal purpose** of this **new equipment and installation** is to control or reduce a substantial quantity of air pollution. The requirement is imposed by the Department as requirement of the mill's Air Contaminent Discharge Permit No. 21-0005 that expires on April 01, 2000.

OAR 340-16-025(g)(B) **Replacement:** No pollution control tax credit certificate was issued to the facility that this ESP replaced.

ORS 468.155 (1)(b)(B) The air pollution control is accomplished 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	**12/31/97**
Additional Information Requested	**3/17/98**
Additional Information Received	**9/13/98**
Application Substantially Complete	**10/15/98**
Construction Started	**11/1/95**
Construction Completed	**8/28/96**
Facility Placed into Operation	**8/28/96**

Facility Cost

Claimed Cost	**$ 9,911,586**	
Ineligible Direct Costs		
Boiler Controls, insulation, rebuild of boiler	($6,096,386)	
Eligible Direct		3,815,200
Allocated Indirect Costs		1,876,200
Eligible Facility Cost		**$ 5,691,400**

Arthur Andersen provided the certified public accountant's statement. The facility cost exceeds $500,000; therefore, Maggie Vandehey performed an accounting review on behalf of the Department. A listing of committed purchase orders for the total project, invoices and canceled checks substantiated the cost of the facility.

The ineligible costs include work done to improve boiler operation. The primary and most important purpose of these improvements is not pollution control. For example, the boiler controls were upgraded, boiler insulation was added and the boiler required some repair work. These ineligible costs are not part of the air cleaning device but part of the production equipment. This application was reviewed in conjunction with several other applictions that are part of the Toledo 2000 project. The indirect cost were improperly allocated to pollution control and included costs that would have been incurred even if this facility had not been constructed.

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 10 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 facility: Air Contaminent Discharge Permit No. 21-0005, issued 7/1/97.

Reviewers: Mar Seton, P.E., Principal, SJO Consulting Engineers, Inc.
Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Dennis E. Cartier, Associate, SJO Consulting Engineers, Inc.
Dave Kauth, AQ-DEQ
Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 12/30/1998

Director's Recommendation:	**DENY**
Applicant	**Georgia-Pacific West Corp.**
Application No.	**4947**
Claimed Facility Cost	**$3,575,529**
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

The applicant is a C corporation operating as an integrated containerboard manufacturing. The applicant is the owner of the facility and will be taking tax relief under taxpayer identification number 58-2142537. The applicant's address is:

1 Butler Bridge Road
PO Box 580
Toledo, OR 97391

Facility Identification

The facility is described as:

Number 5 Power Boiler

The facility is located at:

1 Butler Bridge Road
Toledo, OR 97391

Technical Information

The claimed facility consists of a power boiler, fueled by natural gas, which was installed to provide additional steam for the production of paper.

The overall mill upgrade project completed in 1996, identified as Toledo 2000, had a number of components. Equipment and facilities were added to increase the waste paper utilization by about 700 tons per day, while reducing kraft-pulping capacity by about 350 tons per day. The kraft process uses chemicals to make pulp from wood, and the chemicals are recovered in a recovery boiler. The portion of the wood which does not make pulp fibers will burn and provide the energy to make the recovery boiler work. Thus, the reduction in kraft pulping reduces the amount of kraft liquor available to burn for steam production. This drop in the mill steam supply required additional fossil fueled boiler capacity to supply the steam needed to dry the paper on the paper machines. Since the paper machine output increased rather than decreased overall as a result of this project, the amount of steam needed also increased.

Eligibility

ORS 468.155 (1)(a) The **principal purpose** of this **new equipment** is not to prevent, control or reduce a substantial quantity of air pollution since it was not installed to comply with an environmental regulation.

ORS 468.155 (2)(b)(B) The **sole purpose** of the No. 5 Power Boiler is **not** to provide pollution control exclusively. The facility was installed to increase production.

The Department reviewed No. 5 Power Boiler as it relates to the solid waste application number 4948. This boiler is used 24% of the time for to the paper making process on #3 paper machine. Modifications to the paper machine and the addition of a larger quantity of wetter paper fibers required that new steam supply be provided to deal with the demands of the recycled paper production. Part of the new boiler's capacity is replacement for the old boiler that was fired by the waste products of the virgin fiber kraft cooking process. That process was replaced by the new old corrugated cardboard pulping capacity.

The steam from the new boiler is used for other processes throughout the mill. The solid waste facility presented on application number 4948 is a sole purpose facility. Therefore, the No. 5 Power Boiler is not eligible because it is not exclusively used to recycle or directly facilitate the recycling of a substantial quantity of old corrugated containers and thereby reduce that amount of solid waste.

Timeliness of Application

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

Application Received	**12/31/97**
Additional Information Requested	**3/17/98**
Additional Information Received	**9/13/98**
Application Substantially Complete	**10/15/98**
Construction Started	**2/1/96**
Construction Completed	**2/28/96**
Facility Placed into Operation	**2/28/96**

Facility Cost

Facility Cost	**$3,575,529**
Ineligible Costs	$3,575,529
Eligible Facility Cost	**0**

A computer printout listing committed purchase orders by vendor for the total project was provided which substantiated the cost of the facility. **Arthur Andersen** provided the certified public accountant's statement.

Facility Cost Allocable to Pollution Control

Because this facility is ineligible, the percentage allocable to pollution control was not evaluated.

Reviewers: SJO Consulting Engineers, Inc: Mar Seton, P.E., Principal; Lois L. Payne, P.E., Dennis E. Cartier, Associate.
DEQ: Dave Kauth, AQ; Maggie Vandehey, DEQ

Tax Credit Review Report

EQC 12/30/1998

Director's Recommendation: **APPROVE**

Applicant	**Georgia-Pacific West Corp.**
Application No.	**4948**
Facility Cost	**$79,155,790**
Percentage Allocable	**100%**
Useful Life	**10 years**

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

Applicant Identification

The applicant is a C corporation operating as an integrated containerboard manufacturing facility taking tax relief under taxpayer identification number 58-2142537. The applicant is the owner of the facility. The applicant's address is:

1 Butler Bridge Road
PO Box 580
Toledo, OR 97391

Facility Identification

The certificate will identify the facility as:

A waste paper recycling plant which recovers 600 tons/day of post consumer waste paper for use in the manufacture of containerboard.

The facility is located at:

1 Butler Bridge Road
Toledo, OR 97391

Technical Information

The claimed facility is additions to and remodeling of portions of a pulp and paper mill that manufactures linerboard and corregating medium used in the manufacture of corrugated boxes. This mill uses post consumer waste paper including old corrugated containers as part of its feedstock. The claimed facility is modifications to the mill to reduce the amount of virgin fiber and increase the amount of recycled fiber used by the mill. The changes also result in a substantial increase in the total amount of pulp used by the mill. The applicant invested over $116 million to shut down 350 tons per day of their kraft pulping capacity (out of 1200 tons per day) to install and make modifications to be able to consume over 600 tons per day of post consumer waste paper as raw material.

The following elements are eligible for solid waste/recycling pollution control facility tax credit.

1. New "old corrugated containers" (OCC) Warehouse

The new tonnage of waste paper, 600 tons/day, to be handled by the mill required the addition of about 40,000 square feet of warehouse space that is used solely for the storage of old corrugated containers prior to recycling.

2. New OCC Plant #2

A new old corrugated container processing, pulping, plant was constructed to handle the additional feedstock. The process can be briefly described in the following steps:

a. Pulping the old corrugated containers with water in a vat containing a powerful agitator/grinder.
b. Cleaning the pulp by a series of separation steps including coarse screening, centrifugal separation, and fine screening.
c. Thickening the pulp so it can be stored for use in the paper mill.
d. Reject materials generated in these processes are separated and collected for disposal.

3. Modifications of Stock Prep for #3 Paper Machine

The use of more waste paper as raw material required modifications and additions to the existing stock preparation equipment. The equipment refines the feed to the paper machine by grinding and blending. Since waste fibers were initially ground when they were first made into paper, they need a different treatment in stock preparation to produce a suitable pulp for the machine. This equipment includes the refining and blending of the waste paper pulp to meet different requirements for different grades of container board. The OCC pulp is also blended with different mixes of softwood and hardwood pulps to make different products.

4. Rebuild and modification of #3 Paper Machine

The fibers from post consumer waste have less strength than fibers from virgin wood and they are harder to dewater on the paper machine. The applicant made significant changes to the #3 paper machine specifically to handle increased amounts of recycled fiber stock. These changes included increasing the pressing and drying capacity of the #3 paper machine to increase the tonnage of container board produced each day by using recycled fibers. Prior to these modifications the #3 paper machine was operational and adequate to produce paper board from waste paper and virgin kraft pulp. All modifications to the machine and changes in its process and capacity were directly related to the replacement of some virgin pulp with a larger quantity of recycled pulp, thereby increasing the production from the machine and the consumption of the wastepaper.

Eligibility

ORS 468.155 (1)(b) The **sole purpose** of the previously listed components is to recycle or directly facilitate the recycling of a substantial quantity of old corrugated containers and thereby reduce that amount of solid waste.

Timeliness of Application

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

Application Received	**12/31/97**
Additional Information Requested	**3/17/98**
Additional Information Received	**9/13/98**
Additional Information Received	**10/12/98**
Application Substantially Complete	**10/15/98**
Construction Started	**5/1/95**
Construction Completed	**4/5/96**
Facility Placed into Operation	**4/5/96**

Facility Cost

Project Elements	Facilty Costs Eligible	Ineligible	
Claimed Facility Cost			**$ 115,826,746**
Stores relocation		$ 75,164	
Mill general		$ 1,557,376	
Railroads		$ 795,453	
Waste treatment		$ 461,722	
Underground fire protection		$ 245,046	
Power distribution		$ 645,766	
#5 Power Boiler		$ 2,396,506	
Hog Fuel Boiler		$ 1,035,238	
#3 Paper Machine rebuild	$ 29,908,584		
Recovery boilers		$ 9,018,054	
#1 OCC plant modifications		$ 416,450	
New #2 OCC plant	$ 17,913,572		
New OCC storage warehouse	$ 3,303,225		
Stock prep. #3 Paper Machine	$ 3,960,054		
Demolition/relocation		$ 2,995,563	
Temporary facilities		$ 99,824	
Freight		$ 90,290	
Testing and inspection		$ 249,578	
Capital spare parts		$ 1,541,135	
Erection supervision and startup		$ 543,741	
Working Capital spare parts		$ 393,839	
Working Capital other		$ 2,959,000	
Subtotal Direct	**$ 55,085,435**	**$ 25,519,745**	
Indirect Prorate	68.34%	31.66%	
Subtotal Indirect	**$ 24,070,355**	**$ 11,151,211**	
Adjusted Facility Cost	**$ 79,155,790**	$ 36,670,956	$ 115,826,746

Total Indirect	
Contractor indirects & fees	$ 21,799,804
Engineering	$ 12,144,371
GP admin. Division	$ 786,338
GP admin. Corporate	$ 491,053
Sub-Total Indirect	**$ 35,221,566**

Arthur Anderson provided the certified public accountant's statement. The facility cost exceeds $500,000; therefore, Maggie Vandehey performed an accounting review on behalf of the Department. A listing of committed purchase orders by vendor for the total project substantiated the cost of the facility.

There were extensive contractor indirect costs, engineering costs, and corporate support costs charged to the full project. The Department prorated those cost to the eligible portion of the project at the same ratio as total eligible vs. ineligible project costs.

Facility Cost Allocable to Pollution Control

The facility cost exceeds $50,000. Therefore, in accordance with ORS 468.190(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	As required this recycling facility produced a product of real economic 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. There are no gross annual revenues associated with this facility or for the Toledo Mill for the next five years using the calculations provided in rule.
ORS 468.190(1)(c) Alternative Methods	No alternative investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	All savings or increases in costs were considered in calculation of the return on investment.
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: Mar Seton, P.E., Principal, SJO Consulting Engineers, Inc.
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 12/11/98

Director's Recommendation:	**APPROVE**
Applicant	**Lamb-Weston, Inc.**
Application No.	**4993**
Facility Cost	**$2,018,468**
Percentage Allocable	**100%**
Useful Life	**10 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 plant producing a variety of frozen potato products taking tax relief under taxpayer identification number 47-0717390. The applicant's address is:

PO Box 379
Boardman, OR 97818

Facility Identification

The certificate will identify the facility as:

Wastewater treatment system consisting of an Eimco Model 600R Delta-Stak clarifier, a 88-foot Eimco concrete conventional clarifier, Penn Valley 4-inch sludge pump, Eimco vauum filter #82892-01, Waukesha SP100 cake transfer pump, waste hopper bins, oil tank, pumps, piping, electrical controls, building and related structures.

The facility is located at:

Boardman Plant
Columbia Ave. & Olson Road
Boardman, OR

Technical Information

The claimed facility is a wastewater treatment system consisting of clarifiers, a vacuum filter, transfer pump, waste hopper bins, an oil tank, pumps, piping, electrical controls, building and related structures.

Potatoes brought in by trucks are washed and the resulting muddy water is pumped into the Delta-Stak clarifier. The treated water is recycled for washing the potatoes and the dirt (sludge) is disposed of to the Port of Morrow irrigation fields. Wastewater from the potato processing and equipment washdown is collected into the drainage trenches, which discharge to a central sump. The wastewater is pumped to a fine mesh screen where solids are screened and then flows by gravity to the 88-foot

Eimco concrete clarifier. The treated wastewater is discharged by gravity to the Port of Morrow industrial wastewater sewer. The treated wastewater is metered and sampled for Total Suspended Solids (TSS) and pH.

Floating animal and vegetable oil is skimmed and pumped to an oil tank. The settled sludge (solids) is pumped to the Eimco vacuum filter system for further dewatering and the filter cake is collected in hopper bins for livestock feed. The solids from the fine mesh screen are also used as livestock feed.

Lamb Weston has an agreement with Oregon Potato Company to treat their potato processing wastewater and combine it with its discharge to the Port of Morrow sewer. The wastewater from OPC is discharged direct to the 88-foot Eimco clarifier.

Eligibility

ORS 468.155 (1)(a)	The **sole purpose** of the **new equipment and installation** claimed facility is to control a substantial quantity of water pollution.
ORS 468.155 (1)(b)(A)	This control 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	**4/17/98**
Application Substantially Complete	**10/26/98**
Construction Started	**7/1/96**
Construction Completed	**2/1/97**
Facility Placed into Operation	**2/1/97**

Facility Cost

Facility Cost		**$2,225,992**
Ineligible Costs		-
Replacement of metal roof	- 4,800	
Replacement of girts, base angel and framing	- 15,974	
Concrete near railroad tracks	- 6,500	
Raise existing waste fry tank	- 14,830	
Replacement of two hoppers	- 67,950	
Asphalt	- 97,470	
		($207,524)
Eligible Facility Cost		**$2,018,468**

A cost breakdown accompanied the application. Symonds, Evans & Larson, P.C. performed the accounting review on behalf of the Department and identified the ineligible costs upon inspecting vendor invoices, contractor billings and copies of cecks.

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	Solids from the fine mesh screens and the filter cake from the vacuum filter are sold to feedlots for livestock feed. The animal/vegetable oil recovered from the wastewater treatment system is sold as yellow grease to a renderer.
ORS 468.190(1)(b) Return on Investment	The applicant claims that the revenue realized from the solids and filter cake sold to the feedlots is equal to the delivery expense. Lamb-Weston and Oregon Potato Co. entered into an agreement that specifies OPC will make ten "capital reimbursement" payments over 10 years and an ongoing "operating cost" payment. Considering the revenue and expenditures, including the water savings and the OPC payments, there was not a positive return on investment.
ORS 468.190(1)(c) Alternative Methods	The alternative considered was for the Port of Morrow to construct and operate the wastewater treatment system. However, the Port of Morrow lacked the expertise to operate the treatment system. In addition, the capital and operating costs to the Port would have been passed on to Lamb Weston and other Port residents.
ORS 468.190(1)(d) Savings or Increase in Costs	The wash water treated by the Delta-Stak clarifier is recycled for washing potatoes. This recycling system saves approximately 50 million gallons of water annually.
ORS 468.190(1)(e) Other Relevant Factors	Lamb-Weston entered into an agreement with Oregon Potato Company (OPC) to treat their wastewater prior to discharge to the Port of Morrow. According to ORS 468.170 (1), "...The actual cost or portion of the actual cost certified shall not exceed the taxpayer's own cash investment in the facility or portion of the facility..." The two payments are made to Lamb-Weston in return for pretreatment of OPC's wastewater prior to discharge to the Port of Morrow system. Staff recommends that the facility be certified at 100% since Lamb-Weston, Inc. will retain ownership of the facility, they made the up-front investment in the facility and they will depreciate the asset. Lamb-Weston currently processes 79% and Oregon Potato Company processes 21% of the wastewater through the facility.

Compliance

The Port of Morrow requires industrial wastewater discharge to its sewer system an effluent limit of 2030 mg/l for total suspended solids, TSS. Prior to the construction of the claimed facility Lamb Weston has been discharging effluent with TSS exceeding the ordinance limitations. The Port has advised Lamb Weston of its excellencies but did not take enforcement action. Lamb Weston voluntarily constructed the claimed facility and it is currently discharging at about 727 mg/l of total suspended solids. The claimed facility is in compliance with the Port of Morrow requirements for industrial wastewater discharge limitations.

Reviewers: R. C. Dulay
Maggie Vandehey
Symonds, Evans & Larson, P.C.

Tax Credit Review Report

EQC 12/30/1998

Director's Recommendation: **APPROVE**

Applicant **Hyundai Semiconductor America, Inc.**
Application No. **5075**
Facility Cost **$ 11,052,894**
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 C corporation operating a film substrate manufacturing facility taking tax relief under taxpayer identification number 94-3084354. The applicant is the owner of the facility. The applicant's address is:

Hyundai Semiconductor America, Inc.
1830 Willow Creek Circle
Eugene, Oregon 97402

Facility Identification

The certificate will identify the facility as:

A Volatile Organic Compound (VOC) Abatement System and an Acid Exhaust Abatement System

The facility is located at:

1830 Willow Creek Circle
Eugene, OR 97402

Technical Information

The claimed facility consists of two air treatment systems:

1. **Volatile Organic Compound (VOC) Abatement System.** The VOC abatement system is designed to treat solvent exhaust generated primarily by the Photolithography and Doping processes. The system cost includes all labor, equipment, and materials necessary to completely install two 45,000 cfm exhaust fans, a rotary concentrator, a thermal oxidizer, and a backup Granulated Activated Carbon (GAC) filter unit. Under normal operation a minimum of 97% of the VOC compounds are removed from the air stream and thermally decomposed to carbon dioxide and water.

   The Rotary Concentrator and Thermal Oxidizer, designed and constructed by Durr Industries, and the GAC filter, provided by Fox Engineering, are acceptable systems for controlling preventing VOC air pollution.

2. **Acid Exhaust Abatement System**. The acid exhaust abatement system is designed to treat acid exhaust generated by the Oxidation, Dry Etching, Wet Etching, Doping, Layering, Chemical Mechanical Planarization, and parts cleaning processes. The system cost includes all labor, equipment, and materials necessary to completely install the following components:
   i) One hundred three Point of Use (POU) scrubbers to satisfy the requirements of the tools that were installed;
   ii) Five 60,000 cfm acid exhaust wet scrubber units, each of which include an exhaust fan, a vertical packed scrubber, and two vertical circulation sump pumps; and
   iii) One scrubber caustic system consisting of a scrubber caustic day tank and five caustic metering pumps,

   The various combinations of Ecosys Corporation POU scrubbers used for the specific tools in conjunction with the Beverly Pacific acid exhaust wet scrubbers are acceptable systems for controlling air pollution.

Eligibility

ORS 468.155 (1)(a)(A) The **principal purpose** of this **new installation** of these two systems is to control a substantial quantity of air pollution.
This is required by Air Contaminant Discharge Permit (ACDP) #203531, issued 5/24/96, by Lane Regional Air Pollution Authority.

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	**07/24/1998**
Application Substantially Complete	**10/16/1998**
Construction Started	**05/06/1996**
Construction Completed	**12/15/1996**
Facility Placed into Operation	**12/16/1996**

Facility Cost

Claimed Facility Cost	**$ 24,273,834**
Ineligible Costs (see table below)	**($,13,220,940)**
Eligible Facility Cost	**$ 11,052,894**

Pricewaterhouse Coopers, LLP. provided the accounting review on behalf of the applicant. The costs for the installation of the two systems exceeds $500,000; therefore Maggie Vandehey performed an accounting review on behalf of the Department. Invoices and cost summaries substantiated the cost of the facility.

The claimed direct costs included itemized expenses from Meissner & Wurst, the general contractor, that are not eligible because: 1) they do not prevent, control, or reduce pollution; or 2) the primary and most important purpose was not pollution control but to create an internal environment that is safe and conducive to film substrate manufacturing. The allocated costs for this claimed facility were calculated as a percentage of all pollution control equipment claimed under applications numbered 5075, 5076 and 5077.

	Claimed	Ineligible Costs		Eligible Costs
DIRECT COSTS				
Fixed Asset Listing	**$4,024,968**		**0**	**$4,024,968**
CIP Invoices				
FAB Process Acid/Solvent Exhaust Duct		46,500		
FAB Process Acid Air Data Logging Equipment		287,689		
	$619,006		**$334,189**	**$284,817**
Meissner &Wurst (M&W) Invoice #28				
FAB Process Solvent/VOC Ductwork		2,476,682		
FAB Process Scrubbed Exhaust Ductwork		3,699,489		
	$10,308,839		**$6,176,161**	**$4,132,678**
M&W Change Orders				
COR 67, Revision to exhaust risers & laterals		3,608,346		
COR 555, Additional offsets and revisions to exhaust risers		67,548		
COR 127, Relocate acid exhaust duct from tower fan bay #12		21,882		
COR 134, Modify acid exhaust duct in CUB		122,166		
COR 520, Condensate drain to acid exhaust at scrubber		9,580		
COR 521, Provide acid exhaust condensate drain		20,419		
COR 667, Acid Exhaust modifications in tunnels		47,204		
	$4,324,997		**$3,897,145**	**$427,852**
Post EQC Meeting Information Submittal				
Line 1: Level One Acid Ductwork Hookups		1,340,000		
Line 2: Exhaust Pumps Difference		1,319,436		
Line 5: 15% of installation cost		(495,774)		
Line 6: 5% of installation cost		165,258		
			$ 2,328,929	
DIRECT COSTS SUBTOTAL	**$ 21,289,246**		**$ 12,736,415**	**$ 8,870,315**
ALLOCATED COSTS				
Fixed Asset Listing - Land	$68,801		$60,564	$8,237
M&W Invoice #28 – Building & Structural	$1,926,025		$423,961	$1,502,064
M&W Change Orders – Emergency Diesel Generator	$26,265		$0	$26,265
M&W Electrical (1920 KVA)	$646,013		$0	$646,013
ALLOCATED COSTS SUBTOTAL	**$ 2,667,104**		**$ 484,525**	**$ 2,182,579**
TOTAL	**$ 24,,273,834**		**$ 13,220,940**	**$11,052,894**

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 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.

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

Compliance

The facility is in compliance with Department rules and statutes, LRAPA and with EQC orders.
Synthetic Minor Air Contaminant Discharge Permit (LRAPA) # 203531, issued 5/24/96

Reviewers: Gordon Chun, P.E., SJO Consulting Engineers,Inc.
Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Waldemar Seton, Principal, SJO Consulting Engineers, Inc.

Maggie Vandehey, DEQ

Hyundai Pollution Control
Air Application #~~7075~~ 5075 WOJ
Post-EQC Mfg Information Submittal

Principle Purpose - Pollution Control

1 Level One Acid Ductwork Hookups	$ 1,340,000.00	per Southland Letter	
2 Exhaust Pumps Difference	$ 1,319,436.00	per Southland Est. Difference x # of Pumps	643
3 Level One Acid Ductwork Laterals	$ 243,237.78	per Hyundai Engineer	
4 One to Five Acid Duct Header	$ 320,000.00	Per Scott Mechanical Co.	
	$ 3,222,673.78		
5 Less Previous Installation (15%)	$ (495,774.00)	per Air Application Exhibit D, Page 4	
6 Plus Installation (5%)	$ 165,258.00	per Scott Sexton, Harder Inc.	
	$ (330,516.00)		
7 Total Allocation to Pollution Control	$ 2,892,157.78		

Notes

1 Lines 1 & 2 were part of the Tool Hook-up Contract Costs that totalled $112,139,306. These costs were not previously submitted. We erroneously assumed this contract was entirely for production tool hook-up.
2 Line 2 is the difference between placement of exhaust pumps on level 2 vs. level one. These pumps are required for production tool operation and therefore not included in the submitted costs. However, absent the Pollution Control requirement they could be on level 2. The difference is the labor, materials, and additional floor penetration to reach level 1.
3 Line 3 - Absent the Pollution Control Requirement, Acid Ductwork is not required on Level 1. This is the estimated cost for labor and materials associated with the Acid Ductwork laterals on Level 1.
4 Line 4 is large Duct Header that splits the Acid Exhaust Duct form one line to four. Clearly not required if exhausting to the Air. This cost was previously included in the submitted Acid Duct costs.
5 Line 5 is the deduction of the previously estimated installation costs associated with the Point of Use Scrubbers on level 1.
6 Line 6 - Per the Southland letter and verbal estimates from Scott Sexton of Harder Inc. we have estimated the installation costs of these devices much more accurately. According to Mr. Sexton all scrubbers require about $500 to uncrate, place and anchor to meet siesmic requirements. Furthermore, depending on whether they are wet, dry or burn scrubbers they require $1,200 to $1,500 for hook-up of hydrogen gas or water. Electrical hook-up would be additional. We have estimated 5% of the device cost. Average device cost is approximately $35,000.
7 We are of the opinion that these are conservative estimates. We have not estimated the costs associated with 5 stacks, 5 exhaust fans, acid scrubbers connecting ductwork, etc. due to the time constraints.

PLEASE INCLUDE IN ORIGINAL APPLICATION.

THANKS

W. O Jol.

Tax Credit Review Report

EQC 12/30/1998

Director's Recommendation: **APPROVE**

Applicant **Hyundai Semiconductor America, Inc.**
Application No. **5077**
Facility Cost **$5,381,770**
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

The applicant is a C corporation operating a semiconductor manufacturing facility taking tax relief under taxpayer identification number 77-0408168. The applicant is the owner of the facility. The applicant's address is:

Hyundai Semiconductor America, Inc.
1830 Willow Creek Circle
Eugene, Oregon 97402

Facility Identification

The certificate will identify the facility as:

A Hydrofluoric Acid (HF) Batch Neutralization System and an Acid Waste Neutralization (AWN) System

The facility is located at:

1830 Willow Creek Circle
Eugene, OR 97402

Technical Information

The facility consists of two pretreatment waste water treatment systems:

Hydrofluoric Acid (HF) Batch Neutralization System
The WTS Batch Master (BM-6000) provides batch treatment of hydrofluoric acid and metal bearing waste waters by pH adjustment and fluoride precipitation, followed by precipitate flocculation and clarification. System components include:

1. **HF Flow Equalization Tank**
   The HF wastewater flows from the fabrication plant to this 11,000 gallon tank which is required to smooth out fluctuations in the fluoride concentration prior to treatment. The HF wastewater is then pumped into the BM reactor.

2. **WTS Batch Master (BM-6000)**
   A 6,000 gallon stirred reactor is utilized for pH adjustment of the influent using NaOH and for precipitation of fluoride using calcium chloride, which forms a calcium fluoride precipitate. An ionic polymer is added to the vessel to coagulate the precipitate, which promotes rapid settling. The contents of the batch reactor are transferred to the Sludge Aging Tank using dual air operated diaphragm pumps.

3. **Sludge Aging Tank**
   The sludge dewatering system is designed to allow the calcium fluoride slurry to settle. The settling/aging process allows the slurry to further thicken to 2-4% solids prior to processing by the filter press cycle. Clear supernatant is pumped to the Acid Waste Neutralization System. After the filter press cycle, the CaF2 cake is placed into a dumpster and subsequently hauled from the facility by a waste contractor. The water pressed from the filter is drained into the Acid Waste Neutralization System or returned to the Batch Master tank.

Acid Waste Neutralization (AWN) System
The AWN is a multiple stage pH neutralization system utilizing three stirred tank reactors. The reactors are connected in series, and sodium hydroxide or sulfuric acid is added to neutralize acidic or alkaline wastewater. Influent sources are:

1) DI Regen Tank
2) The treated waste from the HF acid treatment system
3) Process effluent from the fabrication plant.

System components include:

1. **Three Stirred Tank Reactors**
   The first tank receives the waste flows and the automatic controls add neutralizing chemicals. The waste then overflows into the second and third tanks and the neutralization proceeds in stages to reach a neutral pH suitable for discharge. Each tank holds about 17,000 gallons providing a minimum of 10 minutes retention time.
2. **DI Regen Tank**
   This tank provides 50,000 gallons of surge capacity to prevent these very intermittent flows from disrupting the neutralization process.
3. **Capacity Holding Discharge Tank**
   The 32,000 tank acts as a collection point for the AWN flow plus other wastes not requiring neutralization prior to discharge to the City sewer system.
4. **U.S. Filter/WTS log-linear pH control**
   This functions to automatically add the neutralizing chemicals.

Effluent from the Capacity Holding Discharge Tank is pumped to the sanitary sewer by three of four centrifugal pumps.

Eligibility

ORS 468.155 (1)(a) The **principal purpose** of the **new equipment** is to prevent or control a substantial quantity of water pollution.
Required by Wastewater Discharge Permit H-300E, issued 6/18/97, by Public Works, Wastewater Division, City of Eugene.

ORS 468.155 The disposal or elimination of or redesign to eliminate industrial waste and the

(1)(b)(A) use of treatment works for industrial waste as defined in ORS 468B.005
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	**09/08/1998**
Application Substantially Complete	**11/03/1998**
Construction Started	**12/22/1995**
Construction Completed	**03/16/1998**
Facility Placed into Operation	**03/16/1998**

Facility Cost

Claimed Facility Cost	**$ 11,731,174**
Ineligible Costs (see table below)	**($ 6,349,404)**
Eligible Facility Cost	**$ 5,381,770**

The costs for the installation of the two systems exceeds $500,000; therefore Maggie Vandehey performed an accounting review on behalf of the Department. **Pricewaterhouse Coopers, LLP.** provided the accounting review on behalf of the applicant. Invoices and cost summaries substantiated the cost of the facility.

The claimed direct costs included itemized expenses from Meissner & Wurst, the general contractor, that are not eligible because: 1) they do not prevent, control, or reduce pollution; or 2) the primary and most important purpose was not pollution control but to create an internal environment that is safe and conducive to film substrate manufacturing. The allocated costs for this claimed facility were calculated as a percentage of all pollution control equipment claimed under applications numbered 5075, 5076 and 5077.

	Claimed	Ineligible Costs		Eligible Costs
DIRECT COSTS				
Invoices	**$100,316**			**$100,316**
Meissner &Wurst (M&W) Invoice #28	**$5,937,762**		**$3,481,762**	**$2,456,000**
FAB Process Piping Routing to CUB		661,540		
FAB Process Solvent Mixing		744,584		
FAB Process HF and H_2SO4 Piping		1,477,980		
FAB Process Waste Drains		597,658		
M&W Change Orders	**$3,767,378**		**$2,714,661**	**1,052,717**
COR 516, Pipe Racks		13,478		
COR 260, FAB Safety – Double Containment Piping		85,188		
COR 504, FAB Safety – Double Containment Piping		10,508		
COR 19, FAB Waste Piping Design Changes		2,208,064		
COR 48, FAB Safety – Double Containment Piping		397,423		
DIRECT COSTS SUBTOTAL	**$ 9,805,456**		**$ 6,196,423**	**$ 3,609,033**
ALLOCATED COSTS				
Fixed Asset Listing – Land	$34,995		$29,385	$5,610
M&W Invoice #28 – Building & Structural	$1,642,428			$1,642,428
M&W Change Orders – Emergency Diesel Generator	$9,035		$6,300	$,2,735
M&W Electrical (200 KVA)	$239,260		$117,296	$121,964
ALLOCATED COSTS SUBTOTAL	**$ 1,925,718**		**$ 152,981**	**$ 1,772,737**
TOTAL	**$ 11,731,174**		**$ 6,349,404**	**$ 5,381,770**

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 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.

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

Compliance

The applicant states the facility is in compliance with Department rules and statutes and with EQC orders. The following DEQ permits have been issued to the facility:
Wastewater Discharge Permit H-300E, issued 6/18/97

Reviewers: Lois L. Payne, P.E., SJO Consulting Engineers, Inc.
Waldemar Seton, Principal, SJO Consulting Engineers, Inc.
Maggie Vandehey, DEQ
Elliot Zais, DEQ

Hyundai Pollution Control
Water Application #5077
Post-EQC Mtg Information Submittal

Principle Purpose - Pollution Control

1	Acid Waste Drains and Piping	1,477,880.00	Per Original Application
2	Mixed Solvents Waste Recovery System	744,584.00	Per Original Application
3	Double Containment, Acid Waste Piping	493,119.00	Per Original Application
4	Waste Piping Design Changes	728,661.00	1/3rd Original Application Amount
		3,444,344.00	

Notes

1 Acids, absent the Pollution Control requirement, could be disposed through the Process Waste Drain System that was erroneously included in the original application (Ineligible Cost $597,658 + $661,540= $1,259,198). This system covers the entire process floor (Level 2) area. See Drawing MWP8-06B.
2 This item, originally titled Mixed Solvents and changed during DEQ review to "FAB Process Solvent Mixing", is the Mixed Solvent Waste Recovery System. Although not separately described, drawings for this system were included in the original submittal. A description is provided. It is shown in Drawings MWP2-07, MWP2-10, MWP8-09A and MWP8-09B.
3 If Acids were mixed with Process Waste, concentrations would be so diminished that double containment piping would not be required.
4 Upon further review of COR 19, it was discovered that this change order request resulted from changes to tool design layouts and conflicts between drain and exhaust lines. Absent the Pollution Control requirement these conflicts would have much cheaper to work out. This is purely an estimate.
5 We are of the opinion that these are conservative estimates. Costs associated with the IPA1 and IPA2 waste solvent system were not included in the Original application, nor have they been included in this revision. The invoiced costs associated with this system total $1,477,444. Together these two systems cover about 70% of the production floor and would be capable of taking care of all solvent wastes. See Drawing Numbers MWP8-09C.2, MWP8-09C.3

PLEASE INCLUDE AS ORIGINAL APPLICATION

THANKS

WOJ

Tax Credit Review Report

EQC 12/30/98

Director's Recommendation: **APPROVE**

Applicant **Portland General Electric Company**
Application No. **5086**
Facility Cost **$22,878**
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

The applicant is a **C corporation** operating a distribution substation in the power business taking tax relief under taxpayer identification number 93-0256820. The applicant is the **owner** of the facility. The applicant's address is:

Portland General Electric Company
121 SW Salmon Street
Portland OR 97204

Facility Identification

The certificate will identify the facility as:

An Oil Spill Containment System

The facility is located at:

Kelly Point Substation
8201 N. Marine Drive
Portland, OR

Technical Information

The facility consists of a lined containment system that drains to a vault and surrounds the transformer pad. The site is graded such that all rainfall or spilled oil in the containment area is directed through the drainage system. The system allows passage of water and stops the flow of oil.

The substation has oil filled electrical equipment with approximately 3,800 gallons of transformer oil. With this system installed, any spilled oil or contaminated materials can be contained until crews are dispatched to clean up the oil. Without the containment facility, if a spill occurred, the oil would have gone into the ground or in flood conditions, to the Columbia Slough and into the Willamette River.

Eligibility

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

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

Timeliness of Application

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

Application Received	**9/28/98**
Application Substantially Complete	**12/9/98**
Construction Started	**4/20/96**
Construction Completed	**9/30/96**
Facility Placed into Operation	**9/30/96**

Facility Cost

Claimed Facility Cost	**$ 22,878**
Salvage Value	$ - 0
Government Grants	$ - 0
Other Tax Credits	$ - 0
Insignificant Contribution (ORS 468.155(2)(d))	$ - 0
Ineligible Costs	$ - 0
Eligible Facility Cost	**$ 22,878**

Copies of invoices were provided which substantiated the cost of the facility. A certified public accountant's statement was not provided on behalf of Portland General Electric Company.

Facility Cost Allocable to Pollution Control

According to ORS.190 (3), the facility cost does not exceed $50,000, therefore 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 this facility is used for pollution control and therefore, the percentage allocable to pollution control is 100%.

Compliance

The applicant states the facility is in compliance with Department rules and statutes and that there are no DEQ permits issued to the facility.

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

Tax Credit Review Report

EQC 12/30/1998

Director's Recommendation: **APPROVE**

Applicant	**Vernon & Galen Kropf**
Application No.	**5128**
Facility Cost	**$ 149,573**
Percentage Allocable	**55%**
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

The applicant is a partnership operating as a grass seed farm that is taking tax relief under taxpayer identification number 542-02-9022. The applicant is the owner of the facility. The applicant's address is:

Vernon and Galen Kropf
32191 Cartney Dr
Harrisburg, OR 97446

Facility Identification

The certificate will identify the facility as:

John Deere 9200 Tractor 260hp Shulte 5026 Rotary Cutter

The facility is located at:
32191 Cartney Drive
Harrisburg, OR 97446

Technical Information

The applicant claims that prior to using alternatives to thermal sanitation they open field burned as many acres as the smoke management program and weather permitted.
Applicants have 933 acres under perennial grass seed and 550 acres under annual grass-seed cultivation. They have reduced the number of acres open field burned by 665 acres and with the use of the John Deere 9200 Tractor and Shulte 5026 Rotary Cutter will continue the reduction trend.

Eligibility

ORS 468.155 (1)(a)	The **principal purpose** of this land and building 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	**12/04/1998**
Application Substantially Complete	**12/04/1998**
Construction Started	**02/09/1998**
Construction Completed	**02/09/1998**
Facility Placed into Operation	**02/09/1998**

Facility Cost

Claimed Facility Cost	**$149,573**
Eligible Facility Cost	**$149,573**

The facility cost was greater than $50,000 but less than $500,000. Therefore, Grove, Mueller, Hall & Swank, P.C. 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. The percentage of the facility cost allocable to pollution control is **55%**.

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 applicant claims a negative average annual cash flow.
ORS 468.190(1)(c) Alternative Methods	No alternative investigated.
ORS 468.190(1)(d) Savings or Increase in Costs	There was an increase in annual costs of $5,200. This was considered in the return on investment calculation.
ORS 468.190(1)(e) Other Relevant Factors	The established average annual operating hours for tractors is set at 450 hours. The total alternative to field burning annual operating hours (224) divided by the average annual operating hours (450) gives 48% allocable to pollution control. Tractor @48% = $61,715 Rotary Cutter @100% = $21,000 Total cost allocable $82,715 82,715/149,573 = 55%

The actual cost of the equipment properly allocable to pollution control as determined by using these factors is 55%

Compliance and Other Tax Credits

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

Reviewers: James Britton
Department of Agriculture

Tax Credit Review Report

EQC 12/11/1998

Director's Recommendation: **APPROVE**

Applicant	**Ernest Glaser Farms**
Application No.	**5130**
Facility Cost	**$171,314**
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

The applicant is a partnership operating as a grass seed farm that is taking tax relief under taxpayer identification number 93-0487925. The applicant is the owner of the facility. The applicant's address is:

Ernest and Brian Glaser
29245 Seven Mile Lane
Shedd, OR 97377

Facility Identification

The certificate will identify the facility as:

200 acres of tiling

The facility is located at:

29245 Seven Mile Lane
Shedd, OR 97377

Technical Information

The applicant has 1,820 perennial and 380 annual grass seed acres under cultivation. The applicant states that all of this acreage was open field burned prior to investigating and implementing alternative methods to thermal sanitization. The alternative methods include baling the bulk straw off the perennial fields, flail chopping the bulk straw on annual fields and the remaining residue on perennial fields, plowing the flailed straw under on annual fields and vacuuming the flailed straw off perennial fields. A deleterious effect of these alternatives is an increase in the weed population. The best farming practice recommended for weed control to avoid increasing chemical application is crop rotation. Drainage tile enhances crop rotation because tiling extends the season so land can be prepared earlier for crops other than grass. The tiling drains the land making it available for oat and wheat production and standard row crop plantings.

The Division of State Lands has determined this 200 acres to be prior converted wetlands and not subject to the Food Security Act unless the area reverts to wetlands as a result of abandonment.

Eligibility

ORS 468.155 (1)(a) The **principal purpose** of this land and building 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	**12/09/1998**
Application Substantially Complete	**12/09/1998**
Construction Started	**07/01/1998**
Construction Completed	**08/01/1998**
Facility Placed into Operation	**08/01/1998**

Facility Cost

Claimed Facility Cost	**$171,314**
Eligible Facility Cost	**$171,314**

The facility cost was greater than $50,000 but less than $500,000. Therefore, Robert L. Armstrong, P.C. 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. 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. Straw protected from inclement weather is a 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.
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: James Britton