

STANDARD
AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality
Western Region
750 Front Street NE, Suite120
Salem, Oregon 97301-1039
(503) 378-8240

This permit is being issued in accordance with the provisions of ORS 468A.040 and based on the land use compatibility findings included in the permit record.

ISSUED TO:

Evanite Fiber Corporation
P.O. Box E
Corvallis, OR 97339-0598

INFORMATION RELIED UPON:

Application No.: 22580
Date Received: 03/20/08

PLANT SITE LOCATION:

Plant 1: 1551 SE Crystal Lake Drive
Plant 2: 1120 SE Crystal Lake Drive
Corvallis, OR 97333

LAND USE COMPATIBILITY FINDING:

Approving Authority: City of Corvallis
Approval Date: Plant 1: 03/08/88 &
Amended 05/08/96
Plant 2: 01/03/96 &
Amended 05/08/96

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Claudia Davis for

Cheryll Hutchens-Woods, Western Region Air Quality Manager

JUL 17 2008

Dated

Source(s) Permitted to Discharge Air Contaminants (OAR 340-216-0020):

Table 1 Code	Source Description	SIC
Part B, 33	Glass Manufacturing [Also Glass Fiber Manufacturing and Glass Fiber Products Manufacturing]	3296

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BOOK 113-1011

1.0 GENERAL EMISSION STANDARDS AND LIMITS

- 1.1. Visible Emissions** Emissions from any air contaminant source must not equal or exceed 20% opacity for a period aggregating more than 3 minutes in any one hour.
- 1.2. Particulate Matter Emissions** The permittee must comply with the following particulate matter emission limits, as applicable:
- a. Particulate matter emissions from any burning equipment must not exceed 0.1 grains per standard cubic foot, corrected to 12% CO₂ or 50% excess air.
 - b. Particulate matter emissions from any air contaminant source other than fuel burning equipment and fugitive emission sources must not exceed 0.1 grains per standard cubic foot.
- 1.3. Fugitive Emissions** The permittee must take reasonable precautions to prevent fugitive dust emissions by:
- a. Treating vehicular traffic areas of the plant site under the control of the permittee.
 - b. Operating all air contaminant-generating processes so that fugitive type dust associated with the operation will be adequately controlled at all times.
 - c. Storing collected materials from air pollution control equipment in a covered container or other method equally effective in preventing the material from becoming airborne during storage and transfer.
 - d. Maintaining screening of not greater than ¼ mesh (16 openings per square inch) on all building ventilation openings (except doorways) which can exhaust fugitive emissions or maintain the building under negative pressure such that all fugitive emissions are prevented from leaving the building.
- 1.4. Particulate Matter Fallout** The permittee must not cause or permit the emission of any particulate matter larger than 250 microns in size at sufficient duration or quantity, as to create an observable deposition upon the real property of another person. The Department will verify that the deposition exists and will notify the permittee that the deposition must be controlled.

- 1.5. Nuisance and Odors** The permittee must not cause or allow air contaminants from any source to cause a nuisance. Nuisance conditions will be verified by Department personnel.

2.0 OPERATION AND MAINTENANCE REQUIREMENTS

- 2.1. Scrubber Pressure Drop and Liquid Flow Rate Monitoring** The permittee must operate and maintain, in accordance with the manufacture's written instructions, devices which continuously (a minimum of one reading every 15-minute clock period) measure the pressure drop and liquid flow rate values for each wet scrubber pollution control system.
- a. The pressure monitors must be accurate to within ± 250 pascal (\pm one inch water gauge) over the full operating range.
 - b. The liquid flow rate monitors must be accurate to within $\pm 5\%$ over the full operating range.
- 2.2. Parameter Value Deviation** An alarm must be initiated if a pressure drop or liquid flow rate value occurs which is outside the normal range established for the given scrubber system and the permittee must take corrective action to return the control system to highest and best operation.

3.0 PLANT SITE EMISSION LIMITS

- 3.1. Plant Site Emission Limits (PSEL)** Plant site emissions must not exceed the following:

Pollutant	Limit (tons/year)	Unassigned Emissions (tons/year)
PM	72	4
PM ₁₀	50	4
SO ₂	39	0
NO _x	98	0
CO	99	0
VOC	39	0
Fluorides	2	0

- 3.2. Annual Period** The annual plant site emissions limits apply to any 12-consecutive calendar month period.

4.0 COMPLIANCE DEMONSTRATION

- 4.1. Testing Requirements** Not later than 180 days after initial startup of any new or expanded fiber forming and/or fiber product production line, the permittee must conduct particulate matter emissions testing using DEQ Modified (heated line) Method 8 or other methods as approved in the pretest plan to demonstrate compliance with the emission limit of Condition 1.2.b.
- a. The following parameters must be monitored and recorded during the source test:
 - i. visible emissions as measured by EPA Method 9 for a period of at least six minutes during or within 30 minutes before or after each test run;
 - ii. process operating parameters;
 - iii. pollution control device operating parameters.
 - b. All tests must be conducted in accordance with the Department's Source Sampling Manual and the approved pretest plan. The pretest plan must be submitted at least 15 days in advance and approved by the Regional Source Test Coordinator. Test data and results must be submitted for review to the Regional Source Test Coordinator within 60 days unless otherwise approved in the pretest plan.
 - c. Only regular operating staff may adjust the combustion system or production processes and emission control parameters during the source test and within two hours prior to the source test. Any operating adjustments made during the source test, which are a result of consultation with source testing personnel, equipment vendors or consultants, may render the source test invalid.
- 4.2. PSEL Compliance Monitoring** a. Compliance with the PSEL is determined for each 12-consecutive calendar month period based on the following calculation for each pollutant:

$$E = \Sigma(EF \times P)/2000 \text{ lbs}$$

where,

$$\begin{aligned} E &= \text{pollutant emissions (ton/yr);} \\ EF &= \text{pollutant emission factor (see Condition 11.0);} \\ P &= \text{process production (see Condition 12.0)} \end{aligned}$$

- b. The determination of the actual emissions for each 12-month period and comparison to the PSEL must be performed by the last day of the following month for each 12-month period.

- 4.3. Emission Factors** The permittee must use the default emission factors provided in Condition 11.0 for calculating pollutant emissions, unless alternative emission factors are approved by the Department. The permittee may request or the Department may require using alternative emission factors provided they are based on actual test data or other documentation (e.g., AP-42 compilation of emission factors) that has been reviewed and approved by the Department.

5.0 SPECIAL CONDITIONS

- 5.1. Complaints**
- a. Air quality related complaints will be investigated by a plant representative as soon as is practicable, but in no case longer than 24 hours after receipt of the complaint. A plant representative will provide a response to the complainant within 72 hours.
- b. The permittee will submit to the Department (Salem Office) written notification of any air quality related complaint within 15 days of the complaint. The notification will include a description of the complaint including date and time received, investigation findings and actions taken, date and time complainant was responded to, and any other information deemed relevant by the permittee.

6.0 RECORDKEEPING REQUIREMENTS

- 6.1. Operation and Maintenance** The permittee must maintain the following records related to the operation and maintenance of the plant and associated air contaminant control devices:
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- a. Records of the scrubber pressure drop and liquid flow rate values for each calendar day for each scrubber control system using a computer generated graphical and/or listing type format.
- b. Records of scrubber pressure drop and liquid flow rate parameter deviations and corrective actions taken.
- c. Records of the following production data must be maintained on a 12-month rolling basis:
 - i. Total annual quantities of glass produced (tons/year).
 - ii. Total annual quantities of glass pulled to fiber (i.e., excludes glass patties) by process category (tons/year).
 - iii. Total annual quantities of fiber products produced by Line 6 (tons/year).
 - iv. Total annual quantities of resin binder used by Line 6 (tons/year).
 - v. Total annual quantities of natural gas used (million cubic feet/year).
 - vi. Total annual quantities of raw materials processed (tons/year).
- d. The actual emissions determined for each 12-month period and comparison to the PSEL.

6.2. Excess Emissions

The permittee must maintain records of excess emissions as defined in OAR 340-214-0300 through 340-214-0340 (recorded on occurrence). Typically, excess emissions are caused by process upsets, startups, shutdowns, or scheduled maintenance. In many cases, excess emissions are evident when visible emissions are greater than 20% opacity for 3 minutes or more in any 60-minute period. If there is an ongoing excess emission caused by an upset or breakdown, the permittee must cease operation of the equipment or facility no later than 48 hours after the beginning of the excess emissions, unless continued operation is approved by the Department in accordance with OAR 340-214-0330(4).

6.3. Complaint Log The permittee must maintain a log of all written complaints and complaints received via telephone that specifically refer to air pollution concerns associated to the permitted facility. The log must include a record of the permittee's actions to investigate the validity of each complaint and a record of actions taken for complaint resolution.

6.4. Retention of Records Unless otherwise specified, all records must be maintained on site for a period of two (2) years and made available to the Department upon request.

7.0 REPORTING REQUIREMENTS

7.1. Excess Emissions The permittee must notify the Department of excess emissions events if the excess emission is of a nature that could endanger public health.

- a. Such notice must be provided as soon as possible, but never more than one hour after becoming aware of the problem. Notice must be made to the regional office identified in Condition 8.4 by e-mail, telephone, facsimile, or in person.
- b. If the excess emissions occur during non-business hours, the permittee must notify the Department by calling the Oregon Emergency Response System (OERS). The current number is 1-800-452-0311.
- c. The permittee must also submit follow-up reports when required by the Department.

7.2. Annual Report For each year this permit is in effect, the permittee must submit to the Department by **March 15** two (2) copies of the following information for the previous calendar year:

- a. Production parameter amounts for the prior calendar year as listed in Condition 12.0.
- b. A summary of annual pollutant emissions determined each month in accordance with Condition 4.2.
- c. An Excess Emissions Summary that lists date, time, and device for each excess emissions event that occurred during the prior calendar year.
- d. A summary of complaints relating to air quality received by permittee during the year.

- e. List permanent changes made in plant process, production levels, and pollution control equipment which affected air contaminant emissions.
- f. List major maintenance performed on pollution control equipment.

7.3. Initial Startup Notice

The permittee must notify the Department in writing of the date a new production line is started up. The notification must be submitted no later than 30 days after startup.

7.4. Notice of Change of Ownership or Company Name

The permittee must notify the Department in writing using a Departmental "Permit Application Form" within 60 days after the following:

- a. Legal change of the name of the company as registered with the Corporations Division of the State of Oregon; or
- b. Sale or exchange of the activity or facility.

7.5. Construction or Modification Notices

The permittee must notify the Department in writing using a Departmental "Notice of Construction Form," or "Permit Application Form," and obtain approval in accordance with OAR 340-210-0205 through 340-210-0250 before:

- a. Constructing, installing, or establishing a new stationary source that will cause an increase in any regulated pollutant emissions;
- b. Making any physical change or change in operation of an existing stationary source that will cause an increase, on an hourly basis at full production, in any regulated pollutant emissions; or
- c. Constructing or modifying any air pollution control equipment.

7.6. Where to Send Reports and Notices

The reports, with the permit number prominently displayed, must be sent to the Permit Coordinator for the region where the source is located as identified in Condition 8.3.

8.0 ADMINISTRATIVE REQUIREMENTS

8.1. Permit Renewal Application The completed application package for renewal of this permit is due on March 1, 2013. Two (2) copies of the application must be submitted to the DEQ Permit Coordinator listed in Condition 8.3.

8.2. Permit Modifications Application for a modification of this permit must be submitted not less than **60** days prior to the source modification. A special activity fee must be submitted with an application for the permit modification. The fees and two (2) copies of the application must be submitted to the Business Office of the Department.

8.3. Permit Coordinator Addresses All reports, notices, and applications should be directed to the Western Region Air Quality Permit Coordinator as follows:
Department of Environmental Quality
Air Quality Division
750 Front Street NE, Suite 120
Salem, OR 97301-1039
Telephone: (503) 378-5305

8.4. Department Contacts Information about air quality permits and the Department's regulations may be obtained from the DEQ web page at <http://www.oregon.gov/DEQ/>. All inquiries about this permit should be directed to the Salem regional office as follows:

Department of Environmental Quality
Salem Office – AQ Division
750 Front Street NE, Suite 120
Salem, OR 97301-1039
Telephone: (503) 378-8240

9.0 FEES

9.1. Annual Compliance Fee The Annual Fee specified in OAR 340-216-0020, Table 2, Part 2 for a Standard ACDP is due on **December 1** of each year this permit is in effect. An invoice indicating the amount, as determined by Department regulations, will be mailed prior to the above date. **Late fees in accordance with Part 4 of the table will be assessed as appropriate.**

- 9.2. Change of Ownership or Company Name Fee** The non-technical permit modification fee specified in OAR 340-216-0020, Table 2, Part 3(a) is due with an application for changing the ownership or the name of the company.
- 9.3. Special Activity Fees** The special activity fees specified in OAR 340-216-0020, Table 2, Part 3 (b through i) are due with an application to modify the permit.
- 9.4. Where to Submit Fees** Fees must be submitted to:
Department of Environmental Quality
Business Office
811 SW Sixth Avenue
Portland, Oregon 97204-1390

10.0 GENERAL CONDITIONS AND DISCLAIMERS

- 10.1. Permitted Activities** This permit allows the permittee to discharge air contaminants from processes and activities related to the air contaminant source(s) listed on the first page of this permit until this permit expires, is modified, or is revoked.
- 10.2. Other Regulations** In addition to the specific requirements listed in this permit, the permittee must comply with all other legal requirements enforceable by the Department.
- 10.3. Conflicting Conditions** In any instance in which there is an apparent conflict relative to conditions in this permit, the most stringent conditions apply.
- 10.4. Masking of Emissions** The permittee must not cause or permit the installation of any device or use any means designed to mask the emissions of an air contaminant that causes or is likely to cause detriment to health, safety, or welfare of any person or otherwise violate any other regulation or requirement.
- 10.5. Department Access** The permittee must allow the Department's representatives access to the plant site and pertinent records at all reasonable times for the purposes of performing inspections, surveys, collecting samples, obtaining data, reviewing and copying air contaminant emissions discharge records and conducting all necessary functions related to this permit in accordance with ORS 468-095.

- 10.6. Permit Availability** The permittee must have a copy of the permit available at the facility at all times.
- 10.7. Open Burning** The permittee may not conduct any open burning except as allowed by OAR 340 Division 264.
- 10.8. Asbestos** The permittee must comply with the asbestos abatement requirements in OAR 340, Division 248 for all activities involving asbestos-containing materials, including, but not limit to, demolition, renovation, repair, construction, and maintenance.
- 10.9. Property Rights** The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.
- 10.10. Permit Expiration**
- a. A source may not be operated after the expiration date of the permit, unless any of the following occur prior to the expiration date of the permit:
 - i. a timely and complete application for renewal or for an Oregon Title V Operating Permit has been submitted, or
 - ii. another type of permit (ACDP or Oregon Title V Operating Permit) has been issued authorizing operation of the source.
 - b. For a source operating under an ACDP or Oregon Title V Operating Permit, a requirement established in an earlier ACDP remains in effect notwithstanding expiration of the ACDP, unless the provision expires by its terms or unless the provision is modified or terminated according to the procedures used to establish the requirement initially.
- 10.11. Permit Termination, Revocation, or Modification** The Department may modify or revoke this permit pursuant to OAR 340-216-0082 and 340-216-0084.

11.0 EMISSION FACTORS

Emissions device or activity	Pollutant	Emission Factor (EF)	EF units	EF Reference
Raw material unloading & conveying controlled by baghouses	PM/PM ₁₀	0.03	pound/ton raw material	AP-42, table 11.13 with 99% control efficiency
Raw material storage controlled by baghouses and vented inside building	PM/PM ₁₀	0.001	pound/ton raw material	AP-42, table 11.13 with 99% control efficiency and 50% reduction for venting inside building
Raw material weighing & mixing controlled by baghouses	PM/PM ₁₀	0.006	pound/ton raw material	AP-42, table 11.13 with 99% control efficiency
Raw material batch mix storage controlled by baghouses	PM/PM ₁₀	0.002	pound/ton raw material	AP-42, table 11.13 with 99% control efficiency
Glass melting and conditioning	PM	0.064	pound/ton glass	Source tests
	PM ₁₀	0.044	pound/ton glass	11/95 source test
	Fluorides	0.018	pound/ton glass	Source tests
Rotary coarse glass fiber production	PM	1.194	pound/ton rotary coarse fiber	Source tests
	PM ₁₀	0.836	pound/ton rotary coarse fiber	11/95 source test
	Fluorides	0.018	pound/ton rotary coarse fiber	Source tests
Rotary fine glass fiber production	PM	8.282	pound/ton rotary fine fiber	Source tests

Emissions device or activity	Pollutant	Emission Factor (EF)	EF units	EF Reference
	PM ₁₀	5.798	pound/ton rotary fine fiber	11/95 source test
	Fluorides	0.302	pound/ton rotary fine fiber	Source tests
Flameblown glass fiber production	PM	12.164	pound/ton flameblown fiber	Source tests
	PM ₁₀	8.514	pound/ton flameblown fiber	11/95 source test
	Fluorides	0.358	pound/ton flameblown fiber	Source tests
Natural Gas combusted	SO ₂	1.7	pound/MMcf	DEQ
	NO _x	100	pound/MMcf	DEQ
	CO	84	pound/MMcf	DEQ
	VOC	5.5	pound/MMcf	DEQ
Resin used in glass fiber product mfg.	VOC	0.017	pound/pound resin	Evanite

12.0 PROCESS/PRODUCTION RECORDS

Emissions device or activity	Process or production parameter	Frequency
Raw material processing	Raw material processed (tons)	monthly, annually
Glass Furnaces #1 & #2	Glass produced (tons)	monthly, annually
Rotary coarse fiber production	Rotary coarse fiber produced (tons)	monthly, annually
Rotary fine fiber production	Rotary fine fiber produced (tons)	monthly, annually
Flameblown fiber production	Flameblown fiber produced (tons)	monthly, annually

Emissions device or activity	Process or production parameter	Frequency
Natural gas used	Natural gas burned (MMcf)	monthly, annually
Glass fiber product manufacturing	Resin used (tons)	monthly, annually

13.0 ABBREVIATIONS, ACRONYMS, AND DEFINITIONS

ACDP	Air Contaminant Discharge Permit	NSR	New Source Review
ASTM	American Society for Testing and Materials	O ₂	oxygen
AQMA	Air Quality Maintenance Area	OAR	Oregon Administrative Rules
calendar year	The 12-month period beginning January 1 st and ending December 31 st	ORS	Oregon Revised Statutes
CFR	Code of Federal Regulations	O&M	operation and maintenance
CO	carbon monoxide	Pb	lead
DEQ	Oregon Department of Environmental Quality	PCD	pollution control device
dscf	dry standard cubic foot	PM	particulate matter
EPA	US Environmental Protection Agency	PM ₁₀	particulate matter less than 10 microns in size
FCAA	Federal Clean Air Act	ppm	part per million
gal	gallon(s)	PSD	Prevention of Significant Deterioration
gr/dscf	grains per dry standard cubic foot	PSEL	Plant Site Emission Limit
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040	PTE	Potential to Emit
I&M	inspection and maintenance	RACT	Reasonably Available Control Technology
lb	pound(s)	scf	standard cubic foot
MMBtu	million British thermal units	SER	Significant Emission Rate
MMcf	million cubic feet	SIC	Standard Industrial Code
NA	not applicable	SIP	State Implementation Plan
NESHAP	National Emissions Standards for Hazardous Air Pollutants	SO ₂	sulfur dioxide
NO _x	nitrogen oxides	Special Control Area	as defined in OAR 340-204-0070
NSPS	New Source Performance Standard	VE	visible emissions
		VOC	volatile organic compound
		year	A period consisting of any 12-consecutive calendar months