State of Oregon
Department of
Environmental
Quality

STANDARD
AIR CONTAMINANT DISCHARGE PERMIT

Department of Environmental Quality
Eastern Region
475 NE Bellevue Dr., Suite 110
Bend, OR 97701
541-388-6146

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:

Coyote Island Terminal, LLC
170 South Main Street, Suite 700
Salt Lake City, UT 84101

PLANT SITE LOCATION:

Coyote Island Terminal
72000 Dewey West Ln.
Morrow Pacific Bulk Terminal
Boardman, OR 97818

INFORMATION RELIED UPON:

Application No.: 26945
Date Received: 07/27/2012

LAND USE COMPATIBILITY FINDING:

Approving Authority: Morrow County
Approval Date: 07/24/2012

ISSUED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY

Mark W. Bailey, Eastern Region Air Quality Manager

FEB 11 2014
Dated

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

Source Description	Activity Type	SIC	NAICS	DEQ Table 1 Permit Category Code(s)
Coal shipping terminal	Primary	4491	488320	Part B, 85

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1.0 PERMITTED ACTIVITIES

1.1. Purpose

This permit authorizes construction and operation of a coal bulk transfer facility at the Port of Morrow in Boardman, Oregon. The facility will include the following emission sources and activities:

a. An electric powered positioning system for maneuvering railcars through the Railcar Unloading Building;

b. An enclosed Railcar Unloading Building with dust fogger system and two wet scrubbers with exhaust vents;

c. Enclosed conveyors with dust fogger systems;

d. Up to three coal storage buildings, each with five wet scrubbers with exhaust vents; and

e. A retractable telescoping loading chute equipped with a resitain valve and flexible boot for loading coal into barges.

1.2. Conditions of Approval

The construction of the project must be in strict conformance with approved plans and specifications. No major changes or deviations may be made without prior written approval of DEQ.

a. With the exception of the railcars entering the facility and barge loading operations, the handling and storage of coal must be conducted within enclosures at all times.

b. Granting approval does not relieve the owner of the obligation to obtain required local, state, federal and other permits and to comply with the appropriate statutes, administrative rules, standards and, if applicable, to demonstrate compliance.

2.0 GENERAL EMISSION STANDARDS AND LIMITS

2.1. 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.

2.2. Particulate Matter Emissions

Particulate matter emissions from any air contaminant source other than fugitive emission sources must not exceed 0.1 grains per standard cubic foot.

2.3. 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, building enclosure, or other method equally effective in preventing the material from becoming airborne during storage and transfer.
d. With the exception of the railcars entering the facility and the barge loading operations, the handling and storage of coal must be conducted within enclosures at all times.
e. In the event of a spill or upset where fugitive particulate matter has accumulated, the permittee must immediately clean up the area and prevent the material from becoming airborne.

2.4. 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. DEQ will verify that the deposition exists and will notify the permittee that the deposition must be controlled.

2.5. 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 DEQ personnel.

3.0 WORK PRACTICES

3.1. Best Management Practices Plan The permittee must prepare and implement a site-specific best management practices plan to minimize fugitive dust and visible emissions. The plan must be submitted to the Department prior to the facility receiving coal. The plan is to be submitted in a loose leaf binder. The Department will review for completeness within 30 days of receipt. A current copy of the plan must be maintained at the facility and made available to operation and maintenance personnel. The plan shall identify reasonable measures to prevent particulate matter from becoming airborne. Such reasonable measures must include, but are not limited to the following:

a. Monitoring and compliance with Condition 2.3 of this permit;
b. Management and operation procedures for the electric powered positioning system used for maneuvering railcars through the Railcar Unloading Building;

c. Routine inspections and cleaning of the Railcar Unloading Building and train tracks to prevent the migration of coal material offsite;
d. Control measures to ensure the railcar unloading building is operated in a manner that minimizes wind movement at the rotary dump mechanism;
e. Management and operation procedures for ensuring that all access doors and openings to the storage buildings are closed during active coal handling and emissions originating within a storage building exit through a wet scrubber system that is operated in accordance with manufacturer's design parameters or site-specific operating parameters;
f. Management and operation procedures to ensure the dust suppression fogger stations are effective in controlling particulate emissions within the enclosed conveyor system and at each conveyor to conveyor transfer drop point;
g. Management and operation procedures for ensuring that each conveyor to conveyor drop point is operated and maintained within a fully enclosed structure;
h. Management and operation procedures of the retractable telescoping loading chute that ensures effective control of particulate emissions when loading a barge;
i. Management and operation procedures for a resitain valve assembly installed at the base of the retractable telescoping loading chute prior to the skirt. The resitain valve may be in the opened position only when coal is being actively loaded into a below deck cargo hold or for maintenance and repair. The resitain valve must be actuated into a closed position when loading is complete and prior to raising the telescoping loading chute above the barge deck.
j. Routine inspections and periodic sweeping or cleaning of paved roads and other areas as necessary to prevent migration of coal materials offsite; and
k. Annual review and update of the best management practices plan. All updates and modifications must be retained on site and submitted to DEQ upon request.

4.0 PLANT SITE EMISSION LIMITS

4.1. Plant Site Emission Limits (PSEL)

Plant site emissions must not exceed the following:

Pollutant	Limit	Units
PM	24	tons per year
PM_{10}	14	tons per year
$PM_{2.5}$	9	tons per year

4.2. Annual Period

The annual plant site emission limits apply to each 12-consecutive calendar month period.

5.0 COMPLIANCE DEMONSTRATION

5.1. Testing Requirements

By no later than 30 days after startup (i.e., first shipment of coal received at the facility), the permittee must demonstrate that the facility is capable of operating at its maximum operating capacity in compliance with Conditions 2.1 and 2.3 by conducting a source test as follows:

a. For each of the following emissions sources, visible emissions must be measured three times in accordance with **Modified EPA Method 9** for a minimum period of 30 minutes each time:
   i. The Railcar Unloading Building and Wet Scrubber Systems (15 minutes per scrubber, if both scrubbers are operating);
   ii. The railcar entry and exit areas of the Railcar Unloading Building;
   iii. Each Coal Storage Building being utilized and the associated Wet Scrubber Systems (6 minutes per scrubber if all scrubbers are operating or an equal amount of time per scrubber for the scrubbers that are operating); and
   iv. The Telescoping Loading Chute to the Barge Hull (one test run must include observation of the loading chute being retracted to either load another barge or secure the chute in the holding position after loading the barges).

b. For each of the following emission sources, visible emissions must be measured three times in accordance with **EPA Method 22** for a minimum period of six minutes:
   i. Each Conveyor to Conveyor Drop Point enclosure; and
   ii. Each storage building access point (e.g., doorways).

c. All testing must be performed only when coal is being handled within the emissions source. (Note, it may be necessary to schedule the testing on multiple days to ensure that all emission sources are tested when loading directly to the barges or to a storage building and when future storage buildings are put in service). The following parameters must be monitored and recorded at each location at the time of the source test:
   i. Tons per hour of coal being transferred, as measured at either the railcar unloading building or barge loading area;
   ii. Wet Scrubber system flow rates and pressure readings; and
   iii. The conveyance path the coal is being transferred to when the source test is performed (e.g., to or from storage building or directly to the barge loading area).

d. All tests must be conducted in accordance with DEQ'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 30 days unless otherwise approved in the pretest plan.

e. Only regular operating staff may adjust the 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.

f. As used in this permit, **"Modified EPA Method 9"** is the same as EPA Method 9, except the data is not reduced to 6-minute averages. Instead, each observation represents 15 seconds for the purpose of determining the amount of aggregate time in a 60-minute period that the visible emissions are equal to or greater than the opacity limit. If any one reading during the observation periods specified

for each emissions source is greater than the opacity standard, the observer must perform a full 60-minute test on that emission source. The observation period can be less than 60 minutes if the observer documents a violation of the standard before the 60-minute observation period is completed.

5.2. Visible Emissions Monitoring Requirements

The permittee must monitor the operation and maintenance of the plant and associated air contaminant control devices as follows:

a. At least once a week during daylight hours and during active operations at each of three separate locations within the plant, the permittee must visually survey the plant for any sources of visible emissions, except for the telescoping loading chute, for a minimum period of 30 minutes. The person conducting the survey does not have to be EPA Method 9 certified. However, the individual should be familiar with the procedures of EPA Method 9, including using the proper location to observe visible emissions. For each survey, the permittee must:

   i. Document the date, time and location of the visible emissions survey; and
   ii. Document the source(s) of visible emissions and the duration of visible emissions, if present.
   iii. If visible emissions are observed for more than 30 seconds during an observation period, immediately take corrective action to minimize the fugitive emissions, document the corrective action taken, and conduct a follow-up survey of the visible emissions source within 30 minutes after taking corrective action.
   iv. If, after taking corrective action, visible emissions are observed for more than 30 seconds during an observation period, continue taking corrective action and conducting surveys until visible emissions are observed for 30 seconds or less during an observation period.
   v. If required to continue taking corrective action and conducting visible emissions surveys after 24 hours from the first observation, the permittee must notify DEQ and conduct a modified EPA Method 9 test on the source(s) of visible emissions as soon as possible, but by no later than 48 hours after the first observation of visible emissions that lasted more than 30 seconds.

b. At least once a week during daylight hours when loading coal into a barge, the permittee must visually survey the Telescoping Loading Chute for visible emissions for a minimum period of 30 minutes three times during a day. At least one of the observation periods must be conducted when the loading chute is retracted to either load another barge or secure the chute in the holding position after completing the loading operations. For each survey, the permittee must:
   i. Document the date, time and location of the visible emissions survey; and
   ii. Document the duration of visible emissions, if present.
   iii. If visible emissions are observed for more than 30 seconds during an observation period, immediately take corrective action to minimize the fugitive emissions, document the corrective action taken, and conduct a follow-up survey within 30 minutes after taking corrective action.
   iv. If, after taking corrective action, visible emissions are observed for more than 30 seconds during an observation period, continue taking corrective action and conducting surveys until visible emissions are observed for 30 seconds or less during an observation period.
   v. If required to continue taking corrective action and conducting visible emissions surveys after 24 hours from the first observation, the permittee must notify DEQ and conduct a modified EPA Method 9 test as soon as possible, but by no later than 48 hours after the first observation of visible emissions that lasted more than 30 seconds.

5.3. Wet Scrubber Monitoring At least once a day, the permittee must observe and record wet scrubber system flow rates and pressure readings during active operations.

5.4. Equipment Inspections At least once a month, the permittee must visually inspect the conveyor system and Telescoping Loading Chute for damage and excessive wear and make repairs, as necessary.

5.5. PSEL Compliance Monitoring 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,

E = pollutant emissions (ton/yr);
EF = pollutant emission factor (see Condition 12.0);
P = process records (see Condition 13.0)

5.6. Emission Factors The permittee must use the default emission factors provided in Condition 12.0 for calculating pollutant emissions, unless alternative emission factors are approved by DEQ. The permittee may request or DEQ 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 DEQ.

6.0 SPECIAL CONDITIONS

6.1. Special Conditions Permittee must comply with the following:

a. Permittee must notify DEQ in writing when the facility has started operations. The notification must be provided not more than seven (7) days after the facility starts operating.
b. Permittee must notify DEQ in writing prior to starting construction of the second and third coal storage buildings;
c. The permittee must only unload, transfer, or store sub-bituminous coal;
d. The facility must only accept and transfer coal that has had a topping agent applied to all railcars prior to shipping;
e. Windblown erosion from railcars on site is to be minimized by only accepting railcars that have been loaded using loading profiles that are designed to minimize emissions during transit.
f. The permittee must use an electric powered positioning system when maneuvering railcars through the Railcar Unloading Building.
g. The permittee must provide the Regional Office of DEQ with written notification within five days of all nuisance complaints received by the permittee during the operation of the facility. Documentation must include date of contact, time of observed nuisance conditions, description of nuisance condition, location of receptor, and status of plant operation during the observed period.
h. If the preventive measures specified in Conditions d and e above do not prevent fugitive emissions from being

emitted from the railcars, the permittee must prepare and submit to DEQ a plan for controlling fugitive emissions from the railcars when requested by DEQ. The plan may include, but is not limited to installing a system for applying topping agent to the railcars as they enter the facility or covering each railcar until the railcar enters the Railcar Unloading Building. DEQ will use visible emissions monitoring data and information from complainants to determine whether the plan must be submitted to DEQ. Once approved by DEQ, the plan must be implemented as expeditiously as possible in accordance with a schedule approved by DEQ.

7.0 RECORDKEEPING REQUIREMENTS

7.1. 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. Inspection dates, findings and identification of the person performing the inspection shall be maintained in a log:

a. Coal shipment records, including the date and time that each train arrives at the site, the amount of coal delivered per train, and documentation of the loading profiles, as well as the topping agents applied during loading;
b. Daily observation and recording of the Railcar Unloading Building wet scrubber system flow rates and pressure readings during active operations;
c. Daily observations and recordings of each Coal Storage Building wet scrubber system flow rates and pressure readings during active operations;
d. Weekly visual emissions observations and corrective action, if necessary;
e. Monthly visual inspections for damage and excessive wear of the conveyance system;
f. Monthly visual inspections of the Telescoping Loading Chute, including the resitain valve assembly and attached boot for damage and excessive wear.

7.2. 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. For this source, excess emissions are evident when visible emissions are equal to or 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 DEQ in accordance with OAR 340-214-0330(4).

7.3. 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 with 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.

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

8.0 REPORTING REQUIREMENTS

8.1. Excess Emissions The permittee must immediately notify DEQ of excess emissions events. Excess emission events are visible emissions equal to or greater than 20% opacity for more than an aggregate of 3 minutes in any 60 minute period.

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 9.4 by email, telephone, facsimile or in person.

b. If the excess emissions occur during non-business hours and are of a nature that could endanger public health, the permittee must notify DEQ 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 DEQ.

8.2. Annual Report

For each year this permit is in effect, the permittee must submit to DEQ by **February 15** two (2) copies of the following information for the previous calendar year:

a. Operating parameters:
   i. Tons of coal received; and
   ii. Tons of coal shipped.
b. An annual certificate that states:
   i. A topping agent has been applied to all railcars as required by loading procedures in Condition 6.1.d;
   ii. The identification of all topping agent(s) that have been used during the reporting year; and
   iii. All railcars have been loaded to approved heights and profile as required in Condition 6.1.e.
c. A summary of rolling 12-month total pollutant emissions determined each month in accordance with Condition 5.5.
d. Records of all planned and unplanned excess emissions events.
e. Summary of complaints relating to air quality received by permittee during the year.
f. List permanent changes made in plant process and pollution control equipment which affected air contaminant emissions.
g. List major maintenance performed on pollution control equipment.

8.3. Initial Startup Notice

See Condition 6.1.a

8.4. Notice of Change of Ownership or Company Name

The permittee must notify DEQ in writing using a Departmental "Transfer 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.

8.5. Construction or Modification Notices

The permittee must notify DEQ in writing using a Departmental "Notice of Intent to Construct" form, or other permit application forms, 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.

8.6. 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 9.3.

9.0 ADMINISTRATIVE REQUIREMENTS

9.1. Permit Renewal Application The completed application package for renewal of this permit is due on **December 1, 2018**. Two (2) copies of the application must be submitted to the DEQ Permit Coordinator listed in Condition 9.3

9.2. 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 DEQ Business Office.

9.3. Permit Coordinator's Address All reports, notices and applications should be directed to the Permit Coordinator for the area where the source is located. The Permit Coordinator's address is as follows:

Department of Environmental Quality
Eastern Region – Bend Office
475 NE Bellevue Drive, Suite 110
Bend, OR 97701-7415
Telephone: 541-633-2021

9.4. Department Contacts Information about air quality permits and DEQ's regulations may be obtained online at www.oregon.gov/DEQ/. All inquiries about this permit should be directed to the following regional office:

Department of Environmental Quality
Eastern Region - Pendleton Office
800 SE Emigrant Avenue, Suite 330
Pendleton, OR 97801-2597
Telephone: 541-276-4063

10.0 FEES

10.1. 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 DEQ regulations will be mailed prior to the above date. **Late fees in accordance with Part 4 of the table will be assessed as appropriate.**

10.2. 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.

10.3. 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.

10.4. Where to Submit Fees

Fees must be submitted to:

Department of Environmental Quality
Business Office
811 SW Sixth Avenue
Portland, OR 97204-1390

11.0 GENERAL CONDITIONS AND DISCLAIMERS

11.1. 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.

11.2. Other Regulations

In addition to the specific requirements listed in this permit, the permittee must comply with all other legal requirements enforceable by DEQ.

11.3. Conflicting Conditions

In any instance in which there is an apparent conflict relative to conditions in this permit, the most stringent conditions apply.

11.4. 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.

11.5. Department Access

The permittee must allow DEQ'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.

11.6. Permit Availability The permittee must have a copy of the permit available at the facility at all times.

11.7. Open Burning The permittee may not conduct any open burning except as allowed by OAR 340 Division 264.

11.8. 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 limited to, demolition, renovation, repair, construction and maintenance.

11.9. 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.

11.10. 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.

11.11. Permit Termination, Revocation or Modification DEQ may modify or revoke this permit pursuant to OAR 340-216-0082 and 340-216-0084.

12.0 EMISSION FACTORS

Emissions Activity	Pollutant	Emission Factors[(1)] (lbs/ton)
Combined emission factors for coal transferred from railcars through Storage Building #3 and into a barge cargo hold.	PM	3.74E-04
	PM_{10}	1.83E-04
	$PM_{2.5}$	2.79E-05

(1) These emission factors are aggregate emission factors for all activities at the facility using the conservative assumption that all coal is loaded into the barges after being temporarily stored in the third storage building, which will result in the most transfer points throughout the facility. The aggregate emission factors are the sum of the emission factors calculated for each activity using equations from EPA's Compilation of Emission Factors (AP-42) and applying the applicable capture and control efficiencies for each activity. The equation in Section 13.2.4.3 was used to calculate the emissions from material transfer points and the equation in Section 13.2.5.5 was used to calculate wind erosion emissions from the loaded railcars while on site.

13.0 PROCESS RECORDS

Emissions Activity	Process Parameter	Frequency
Coal received at the transfer facility	Tons	Daily and Monthly
Tons of coal shipped from the transfer facility		

14.0 ABBREVIATIONS, ACRONYMS AND DEFINITIONS

ACDP	Air Contaminant Discharge Permit
ASTM	American Society for Testing and Materials
AQMA	Air Quality Maintenance Area
calendar year	The 12-month period beginning January 1st and ending December 31st
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO_2e	Carbon Dioxide Equivalent
DEQ	Oregon Department of Environmental Quality
dscf	dry standard cubic foot
EPA	US Environmental Protection Agency
FCAA	Federal Clean Air Act
Gal	Gallon(s)
GHG	Greenhouse Gas
gr/dscf	grains per dry standard cubic foot
HAP	Hazardous Air Pollutant as defined by OAR 340-244-0040
I&M	Inspection and Maintenance
lb	Pound(s)
MMBtu	Million British thermal units
NA	Not Applicable
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO_X	Nitrogen Oxides
NSPS	New Source Performance Standard
NSR	New Source Review
O_2	Oxygen
OAR	Oregon Administrative Rules
ORS	Oregon Revised Statutes
O&M	Operation and Maintenance
Pb	Lead
PCD	Pollution Control Device
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10 microns in size
$PM_{2.5}$	Particulate Matter less than 2.5 microns in size
ppm	part per million
PSD	Prevention of Significant Deterioration
PSEL	Plant Site Emission Limit
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
scf	standard cubic foot
SER	Significant Emission Rate
SIC	Standard Industrial Code
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
Special Control Area	as defined in OAR 340-204-0070
VE	Visible Emissions
VOC	Volatile Organic Compound
year	A period consisting of any 12-consecutive calendar months

State of Oregon
Department of
Environmental
Quality

STANDARD AIR CONTAMINANT DISCHARGE PERMIT REVIEW REPORT

Department of Environmental Quality
Eastern Region

Source Information:

SIC	4491
NAICS	488320

Source Categories (Table 1 Part, Code)	Part B, 85
Public Notice Category	III

Compliance and Emissions Monitoring Requirements:

FCE	No
Compliance Schedule	No
Unassigned Emissions	No
Emission Credits	No
Special Conditions	Yes

Source test [date(s)]	30 days after startup
COMS	No
CEMS	No
PEMS	No
Ambient Monitoring	No

Reporting Requirements:

Annual Report (due date)	2/15
Quarterly Report (due dates)	No

Monthly Report (due dates)	No
Excess Emissions Report	15 days

Air Programs

Synthetic Minor (SM)	No
SM -80	No
NSPS (list subparts)	No
NESHAP (list subparts)	No
Part 68 Risk Management	No
CFC	No

NSR	No
PSD	No
RACT	No
TACT	No
Other (specify)	No

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PERMITTING

PERMITTEE IDENTIFICATION

1. Ambre Energy has submitted an application for a Standard Air Contaminant Discharge Permit (ACDP) for approval to construct and operate an enclosed coal bulk transfer facility to be located at 72000 Dewey West Lane at the Port of Morrow in Boardman, Oregon. The facility is registered with the state of Oregon Corporations Division as Coyote Island Terminal.

PERMITTING ACTION

2. The proposed Air Contaminant Discharge Permit (ACDP) is a new permit that regulates air emissions from a new coal transfer facility. The proposed ACDP does not circumvent applicable permitting requirements, certifications or obligations established by other federal, state or local regulating authorities.

OTHER PERMITS

3. Other permits to be issued by the DEQ for this source include: a Water Pollution Control Facilities (WPCF) Permit and a general 1200-C National Pollutant Discharge Elimination System (NPDES) storm water permit for construction activities.

ATTAINMENT STATUS

4. This source is located in an area that is in attainment for all pollutants. This source is not located within 10 kilometers (6.2 miles) of a Class I air quality protection area.

SOURCE DESCRIPTION

OVERVIEW

5. The applicant proposes to operate a coal transfer station where up to 8,800,000 tons per year of sub-bituminous coal would arrive by railcar and be transferred to barges on the Columbia River. The coal transfer station facility proposes to operate three shifts, 8-hours per day, and employ up to 28 full time positions annually. Upon arrival the coal is to be unloaded from railcars and conveyed through fully enclosed spaces to either enclosed cargo holds on a barge or temporarily stored in a storage building at the facility. The components of the facility to be regulated by the proposed permit consist of an indoor rotary railcar unloading station, an enclosed transfer conveyor system with completely enclosed conveyor to conveyor drop points, three coal storage buildings, and barge loading equipment. The coal transfer terminal will operate with all power and water provided by the Port of Morrow. No electrical generation or emergency generator units are proposed to be installed and operated at the terminal.

6. Ancillary facilities that are not part of the actual coal transfer operations include a small Operations Building located southwest of the storage buildings. It will house a shift office, control room, maintenance office, change/shower rooms, restrooms, lunch room, warehouse, and shop/tool storage space. There will also be an administration building located on site. It will house the administration staff and will have a small conference room/visitors center.

7. The facility is to be designed with an electric powered positioning system for maneuvering railcars through the railcar unloading building. The railcars will enter an unloading building which will be enclosed, except for entrance and exit doorways for the railcars. The entrance and exit of the unloading building are only marginally larger than the railcars to limit influence by ambient winds. Below ground hoppers will receive the coal as it is unloaded via a rotary dump mechanism. The unloading building will have an advanced dust extractor/scrubber system and a water fogging system located under the railcars. The dust extractor/scrubber system will be operated with two sizeable blowers. These systems are designed to contain dust within the building and prevent dust from settling on the railcars during unloading. The dust extraction/scrubber system will draw air from the railcar unloading building which in turn will draw air inward through the entrance and exit of the unloading building, creating a net flow of air towards the underside of the railcar and through the wet scrubbers. In the event that there is a small amount of counter air flow during unloading, the water spray fogging system under the railcar is designed to entrain the dust particles so that they can more readily be collected with the extraction/scrubber system. A closed loop wash water system will be used after each train to clean-up the railcar unloading station.

8. After unloading from the railcars to the underground hoppers, the coal will be transferred via fully enclosed conveyors either directly to barges on the Columbia River (via the bypass to the Loadout Conveyor) or to one of three planned storage buildings. The conveyor belt system is designed to operate at capacity of 850 feet per minute, transferring up to 3,000 tons of coal per hour. The coal storage buildings are to be identical. The path that leads to Coal Storage Building #1 and to a barge from the railcar unloading station involves the fewest number of conveyor to conveyor drop points at six (6). The path that leads to the Coal Storage Building #2 and to a barge involves the average number of conveyor to conveyor drop points at seven (7). The path that leads to the Coal Storage Building #3 and to a barge involves the most number of conveyor to conveyor drop points at eight (8). An average of seven (7) fully enclosed conveyor to conveyor drop points will be used throughout the year when transferring coal through the three storage buildings and to a barge. There will be multiple wash down and dust suppression fogger stations throughout the conveyor belt system. The wash down stations are designed to periodically rinse down areas where coal dust may accumulate as a housekeeping measure and to prevent coal dust from becoming re-suspended in the transfer terminal system. The dust suppression foggers are designed to control particulate matter emissions by operating along designated sections of the enclosed conveyor system and at each conveyor transfer drop point.

9. Initially one coal storage building is to be constructed with two future coal storage buildings to be constructed at a later date. Each of the coal storage buildings will have a design storage capacity of 100,000 tons of coal. Each coal storage building will utilize five (5) wet scrubbers for a combined total of fifteen (15) wet scrubbers. Three of the five wet scrubbers in a coal storage building located nearest to where the coal is being loaded or unloaded are to be operated to control dust and particulate emissions at all times. The wet scrubber systems are designed to achieve complete capture of the particulate emissions generated within the coal storage buildings. The wash down and wet scrubber water used in the system will be collected and conveyed in a closed loop system for treatment and re-use. The solids collected in the treatment system are to be returned to the coal stream and the treated water is to be re-circulated back to scrubbers and wash down systems.

10. All access points to all conveyor systems and each storage building are to remain secured and closed during operations. When transferring coal to storage, the coal will be diverted through the Tripper Conveyor line to a storage building. There will be three (3) man doors on the Tripper Conveyor line at the building ridge. There will be one (1) door at both end walls and one (1) exiting out the side of the roof through a dog-house as an emergency exit. Each storage building will have six (6) man doors at grade level. There will be two (2) on each end and one (1) on each side of a storage building. All man doors will be of steel construction and some may be constructed with ½ clear-light reinforced glass inserts. All doors will be equipped with self-closers. There will be four (4) roll up doors with two (2) on each end of a storage building. The roll up doors will have the approximate dimension of 16-ft x 16-ft. Each roll up door will be powered and will be interlocked through the control system to assure they are shut during coal placement in the building or when drawing coal out of the building. Doors will only be opened during maintenance work and this will only be performed when the building is not in operation. These doors will be metal slat roll up doors with weather stripping to ensure a good seal.

11. At the barge loading station the facility proposes to operate a retractable telescoping loading chute that will be used to off load coal into below deck cargo holds. The telescoping chute is designed with internal collapsible cascading cones that will minimize the drop velocity of the material, greatly reducing the potential for creating suspended dust. The outer wall of the telescoping chute provides a barrier that contains the formation of any fugitive dust within the chute. The outer wall of the telescoping chute will be attached to a flexible boot that maintains contact with the pile of loaded coal within the barge by the incorporation of sensors. As a result, any dust generated inside the load-out chute has nowhere to go. It settles and becomes re-entrained with the material passing through the internal cones. In addition, a resitain valve assembly will be installed at the base of the retractable telescoping loading chute prior to the skirt. The resitain valve is a trap door closure that will be open when coal is actively being loaded into a below deck cargo hold in a barge and closed at all other times.

12. Four (4) enclosed empty barges in tow will arrive at the dock loading area with all hatches closed. The barges will be positioned next to the dock and two (2) barges end to end will be attached to the barge positioning system and released from the tow for loading. As this

transition is taking place the barge hatches on these two barges will be opened. When the first barge is loaded and while loading the second barge, the first barge hatches will be closed. When the second barge is loaded the tugboat will position the remaining two barges at the upstream dock and they are attached to the positioning system. As this occurs the second barge's hatches will be closed and the third and fourth barge hatches will be opened. As the third and fourth barges are being loaded the tugboat would tie onto the first two (2) loaded barges and will position them next to the third and fourth barges to complete the tow. Upon loading the third and fourth barges, hatches will be closed. At this time all four (4) barges are full and fully enclosed.

PROCESS AND CONTROL DEVICES

13. The moisture content of sub-bituminous coal is typically in the range of 20% to 30%, which is higher than other types of coals, such as bituminous coal or anthracite. Sub-bituminous coal is therefore generally less dusty when handled. In addition, the dust suppression foggers located in the Railcar Unloading Building and Conveyor System will add moisture to the coal. The moisture in the coal will help to prevent fugitive emissions from occurring. Other emissions controls at the facility will include the following:

    a. The rotary railcar unloading dust extractor equipment system includes two (2) Engart Type 46 (200 hp, 460 volt) Dust Extractor Units or equivalent. Pre-filters are connected to individual ductwork manifolds with collection hoods located along the length of each side of the railcar. Each Engart unit is designed to pull exhaust ventilation and dust extraction independently from each side of the railcar.
    b. Wash down stations are included along conveyor systems for periodic housekeeping measures. The dust suppression foggers are to be located at every conveyor to conveyor drop point and along each conveyor system. All conveyor drop points and conveyor lines are fully enclosed systems.
    c. Each storage building will be equipped with five (5) wet scrubber systems. Each system will include an Engart Type 33H (75 hp, 460 volt) Dust Extractor Unit or equivalent. Pre-filters are connected to individual ductwork manifolds with collection hoods located along the length of each side of storage building.
    d. The retractable telescoping loading chute is designed to control potential particulate dust emissions by utilizing sensors that allow a one (1) meter long shroud attached to the tip of the loading chute to maintain contact with the surface of the coal pile in the barge hull while loading. The shrouded tip is designed to cover and contain particulate dust generated during loading. The internal cascading drop mechanism within the retractable telescoping loading chute is designed to minimize the drop velocity of the coal to further reduce particulate dust formation at the shrouded tip. In addition to the shrouded tip, a resitain valve assembly will be used to contain any residual coal within the chute between loading barges and when docked. The resitain valve will be remotely activated to close before the shrouded tip rises above a barge hatch and does not re-open until the shrouded tip is lowered below the next barge hatch.

14. The unit descriptions, activities and pollution control devices at the facility include the following:

Unit Description	Device Description	Pollution Control Devices	
		Description	**PCD ID**
Railcar Unloading Building	Rotary Railcar Drop into Underground Hopper in the Railcar Unloading Building	(2) Engart/Type 46 Wet Scrubbers	WS-R01 & WS-R02
		(2) Dust Fogger Systems	Enclosed Drop
First Unloading Conveyor	Enclosed Drop from Railcar Unloading Building to First Unloading Conveyor	Dust Fogger System	Enclosed Drop
Second Unloading Conveyor	Enclosed Drop from First Unloading Conveyor to Second Unloading Conveyor	Dust Fogger System	Enclosed Drop
Transfer Conveyor	Enclosed Drop from Second Unloading Conveyor Diverter to Transfer Conveyor for Coal Storage Buildings #2 and #3	Dust Fogger System	Enclosed Drop
Loadout Conveyor Drop	Enclosed Drop from Second Unloading Conveyor Diverter to Barge Loadout Conveyor, bypassing storage	Dust Fogger System	Enclosed Drop
Tripper Conveyor	Enclosed Drop from Second Unloading Conveyor Diverter to Tripper Conveyor for Coal Storage Building #1	Dust Fogger System	Enclosed Drop
Three Coal Storage Buildings with Reclaim Conveyors	Tripper Conveyor Drops to Storage Building Piles	Engart/Type 33 Wet Scrubbers	WS-01 thru WS-15 (5 per building)
	Storage Building Pile Extraction Drops to the Reclaim Conveyor		
Loadout Conveyor	Enclosed Drop from Reclaim Conveyors to the Loadout Conveyor	Dust Fogger System	Enclosed Drop
Transfer Conveyor	Enclosed Drop from Loadout Conveyor to Transfer Conveyor	Dust Fogger System	Enclosed Drop
Barge Loading Conveyor	Enclosed Drop from Transfer Conveyor to the Barge Loading Conveyor	Dust Fogger System	Enclosed Drop
Barge Loading	Barge Loading Conveyor Drop through the Retractable Telescoping Chute into a Barge Cargo Hold	Internal Cascading Cone Drops, Resitain Valve, and Shrouded Tip	TLC-01

EMISSIONS

15. The pollutant emitted from the proposed facility is particulate matter ($PM/PM_{10}/PM_{2.5}$). The potential particulate matter emissions from the facility were calculated based on AP-42 Section 13.2.4.3 (11/2006), Page 13.2.4-3, for batch/continuous drop operations. The calculated potential particulate matter emissions for $PM/PM_{10}/PM_{2.5}$ are provided in the Emissions Detail Sheets at the end of this report. The following is the equation provided in AP-42, Section 13.2.4.3. The calculations are based on the particulate matter size, physical conditions of the coal at the facility, along with the capture and control efficiencies of the enclosures and control devices used to minimize emissions:

AP-42 Equation with Control & Capture Efficiencies:			
Emission Factors (lbs/ton) for $PM/PM_{10}/PM_{2.5}$	=	Particle size multiplier [K]x0.0032*(wind speed [U]/5)$^{1.3}$ /(moisture content [M]/2)$^{1.4}$	
Where:			
PM particle size multiplier (k)	=	0.74	Aerodynamic Particle Size Multiplier [AP-42
PM_{10} particle size multiplier (k)	=	0.35	Section 13.2.4.3 Predictive Emission Factor
$PM_{2.5}$ particle size multiplier (k)	=	0.053	Calculations]
	=	2 mph	Estimated air movement within full enclosures (conveyor drop points and storage buildings).
	=	4 mph	Estimated air movement within railcar unloading building (partial enclosure)
Wind Speed [U]	=	25.3 mph	Estimated air movement for open railcars and Fully Loaded railcars & telescoping chute based on 24-hr highest annual 24-hr average wind speed at the Port of Morrow: (ref: PGE Coyote Springs 1995 Wind Speed Collection Data)
Moisture Content [M]	=	20%	Low end of moisture content for the sub-bituminous coal
	=	5%	Estimated moisture content of coal at the surface of the loaded railcars that enter the facility.
Loaded railcars entering the facility. The control efficiency is based on the first 1/4 foot of uncovered coal in a fully loaded railcar being exposed to wind erosion. Coal below the 1/4 foot depth is not subject to wind erosion because it is completely enclosed by the sides and bottom of the railcar:			
Fully Loaded Railcar Control Efficiencies:	=	97.6%	Engineering Estimate for worst case
Conveyor process control efficiencies are estimated based on fully enclosed conveyors and the utilization of fogging systems:			
Enclosed Conveyor Control Efficiencies:	=	95%	Engineering Estimate for worst case
Telescoping Retractable Loading Chute control efficiency is estimated based on internal cascading cone drop design and shrouded tip:			
Loading Chute Control Efficiency	=	80%	Engineering Estimate for worst case

The Capture and Control Efficiencies of each wet scrubber used in the Railcar Unloading Building and in each Storage Building are as follows:			
Unloading Building Capture Efficiency	=	90%	Estimated capture efficiency of the dust extractor system
Storage Building Capture Efficiency	=	100%	Storage Buildings must vent through scrubber system
PM Scrubber Control Efficiency	=	99.7%	Control efficiencies provided by wet scrubber manufacturer/vendor
PM_{10} Scrubber Control Efficiency	=	98.4%	
$PM_{2.5}$ Scrubber Control Efficiency	=	94.99%	

16. The unloading, conveying, storage, and loading activities will generate particulate matter emissions to some extent because the coal is disturbed during these activities. Other potential sources of emissions are the loaded uncovered railcars located at the site prior to unloading. The application did not include an estimate of the emissions from these railcars. DEQ assumes that the emissions from the railcars will most likely be negligible because the coal will not be disturbed and the coal will be loaded into the railcars before arriving at the site using techniques that will minimize emissions during transit (e.g., loading profiles and topping agents). Three separate topping agents have been proposed. Each topping agent manufacturer specifications claims to control at least 85 percent of coal dust erosion compared to coal cars without topping agents. In addition, any fine material at the surface of the railcar will most likely be emitted (e.g., eroded by wind) before the railcars arrive at the site. However, as a conservative estimate, DEQ calculated potential emissions assuming that there will be some wind erosion from the surface area of the coal in each railcar. For these calculations, DEQ used the highest 24-hour average wind speed for the Boardman area at 25.3 mph. The potential particulate matter emissions from the facility were calculated based on AP-42 Section 13.2.5.2 (11/2006), Page 13.2.5-13, wind erosion from flat area covered with coal dust. The emission calculations and detail sheets are provided at the end of this review report. The variables used in the equations are provided in the following table:

AP-42 Section 13.2.5.5 Equations for wind erosion from flat area covered with coal dust:				
(EQ 2) Emission Factor	(E)	=	$(k)\sum P_i$	
(EQ 3) Erosion Potential Function	(P)	=	$58(u^*-u_t^*)^2 + 25(u^*-u_t^*)$	
(EQ 4.) Equivalent Friction velocity	(u^*)	=	(0.053) x (u^+_{10m})	
		=	0.54 m/s	Fine coal dust on concrete pad conservative est.
Control Efficiency (Manufacturer Spec.)		=	85%	
Where:				
PM particle size multiplier (k)		=	1.0	
PM_{10} particle size multiplier (k)		=	0.5	
$PM_{2.5}$ particle size multiplier (k)		=	0.075	
Wind Speeds	(u^+_{10m})	=	25.3 mph	Estimated air movement for open fully loaded uncovered railcars based on 24-hr highest annual 24-hr average wind speed at the Port of Morrow. *(ref: PGE Coyote Springs 1995 Wind Speed Collection Data)*

17. Proposed PSEL information:

Pollutant	Baseline Emission Rate (tons/yr)	Netting Basis		Plant Site Emission Limits (PSEL)		
		Previous (tons/yr)	Proposed (tons/yr)	Previous PSEL (tons/yr)	Proposed PSEL (tons/yr)	PSEL Increase (tons/yr)
PM	0	0	0	0	24	24
PM_{10}	0	0	0	0	14	14
$PM_{2.5}$	0	0	0	0	9	9

a. The baseline emission rate and the netting basis are zero because this facility was constructed after the baseline period of 1977-1978 for all pollutants. In addition, the source is not subject to New Source Review (NSR).
b. The proposed PSEL for particulate matter pollutants are equal to the Generic PSEL in accordance with OAR 340-222-0040(1).
c. Generic PSELs are not established for SO_2, NO_x, CO, VOC, and greenhouse gases (GHG) because the source would generate less than the deminimis level for each of these criteria pollutants. (Note: Emissions from mobile source engines - locomotives and tug boats - are not regulated by this permit.)
d. A PSEL was not established for GHG emissions because the source does not have the potential to generate 2,500 metric tons, or more, of carbon dioxide equivalent of greenhouse gases per year. (See also Section 31 of this review report.)
e. The PSEL is a federally enforceable limit on the potential to emit.

SIGNIFICANT EMISSION RATE ANALYSIS

18. The proposed PSELs are greater than the netting basis for all pollutants as shown below:

Pollutant	Significant Emission Rate (tons/yr)	Generic PSEL (tons/yr)	Increase Due to Proposed Activities (tons/yr)
PM	25	24	1.6
PM_{10}	15	14	<1
$PM_{2.5}$	10	9	<1

19. Since the PSELs are less than the significant emission rate, an air quality impact analysis is not required in accordance with OAR 340-222-0041.

REGULATORY REQUIREMENTS

20. The proposed facility is required to obtain an Air Contaminant Discharge permit in accordance with Oregon Administrative Rule (OAR) 340-216-0020 (Table 1, Part B, Category 85).

21. The proposed facility is subject to the following emission limits and standards:

    a. OAR 340-208-0110: 20% opacity (visible emissions) limits
    b. OAR 340-208-0210: minimize fugitive emissions to the extent practicable
    c. OAR 340-208-0300: prohibits nuisances
    d. OAR 340-208-0400: prohibits masking emissions
    e. OAR 340-208-0450: prohibits particulate matter fallout; and
    f. OAR 340, Division 222: Plant Site Emission Limits

22. In addition to the emissions limits and standards identified above, the facility is also subject to the rules for highest and best practicable treatment and control in OAR 340-226-0100 through 340-226-0140.

    a. Based on the design of the facility, particulate matter and visible emissions, which is an indicator of particulate matter emissions, should be minimal.
    b. Therefore, the permit includes requirements for conducting routine visible emission surveys and requiring the permittee to take corrective action when visible emissions are observed.
    c. In addition, the permit requires the permittee to develop and implement a best work practices plan to ensure that the activities, process equipment, and emissions control equipment are operated and maintained in a manner that will minimize emissions to the extent practicable (see further discussion below). The initial plan must be submitted to DEQ 30 days prior to receiving coal. DEQ will review the plan for completeness. The plan must be reviewed and updated by the permittee on an annual basis.

23. The rules for the review and approval of new federal major sources (OAR 340, Division 224) that include requirements for the best available control technology (BACT) and ambient air quality impact analysis do not apply to this facility because it is not a federal major source of pollutant emissions. A federal major source for this type of activity is one that has the potential to emit 250 tons or more of any criteria pollutant. Secondary emissions, which include emissions from the tug boats and locomotives, are not included in the calculations for determining whether a source is a major source in accordance with OAR 340-224-0100 and the definition of "secondary emissions" in OAR 340-200-0020.

24. There are no federal standards (New Source Performance Standards – 40 CFR Part 60 or National Emission Standards for Hazardous Air Pollutants – 40 CFR Part 63) that apply to this facility.

25. The mobile sources used to transport coal to and from the facility (e.g., locomotives and tug boats) are not regulated under DEQ's stationary source air permitting program. Other state and federal standards (engine emission standards) may apply to the mobile sources, depending on the model year and regulation.

SPECIAL CONDITIONS

26. The permittee must notify DEQ in writing of the date the new facility is started up as soon as practicable, but not more than seven (7) days after the facility starts operating.

27. The permittee must develop, install, and maintain best management practices to minimize fugitive and visible dust emissions. Design measures shall include enclosed material handling processes with enclosed storage and air pollution equipment. The following best management practices are proposed at the coal transfer terminal:

    a. The permittee may only receive coal that has been prepared for shipping using techniques that will minimize fugitive emissions from the railcars. These techniques include loading profiles that minimize emissions while in transit, as well as the application of topping agents that form a surface crust. These loading procedures should prevent fugitive emissions from occurring while the loaded railcars are on site before they enter the unloading building since the coal will not be disturbed before it is unloaded. However, if that is not the case and fugitive emissions do occur, the permit includes a requirement for the permittee to submit a plan for controlling the fugitive emissions. Once approved by DEQ, the plan must be implemented by the permittee. Additional measures for controlling fugitive emissions may include installing a system for applying a topping agent to the coal in the railcars as they arrive at the site or covering the railcars while on site before they are unloaded.
    b. Two wet scrubbers will be used in the rotary railcar unloading building. The building will be constructed and operated in a manner that minimizes wind movement at the rotary dump mechanism.
    c. Each storage building will be equipped with five (5) wet scrubbers. All emissions originating within a storage building must exit though a properly functioning wet scrubber system.
    d. All conveyor to conveyor drop points are to occur and be maintained within a fully enclosed structure.
    e. There will be wash down for housekeeping and dust suppression fogger stations used to control particulate emissions along sections of the enclosed conveyor system and located at all conveyor to conveyor transfer drop points.
    f. Permittee must manage all access points to storage buildings and conveyor system to ensure fugitive emissions are minimized at all times.
    g. The barges are to be loaded with a retractable telescoping loading chute with internal collapsible cascading cones, an attached flexible boot that maintains contact with the pile of the coal in the barge, and a resitain valve that will remain closed when not loading coal into the barges.

28. The permittee must provide the Regional office of DEQ with written notification within five days of all nuisance complaints received by the permittee during the operation of the facility. Documentation must include date of contact, time of observed nuisance conditions, description of nuisance condition, location of receptor, and status of plant operation during the observed period.

COMPLIANCE

29. The permittee is required to conduct an initial performance test for demonstrating compliance with the visible emissions standards. The testing must be performed in accordance with EPA's reference test Method 9 modified to determine compliance with DEQ's emission standard, which is based on a 3 minute aggregate in any 60 minute period instead of a 6-minute average. Each emission source at the facility will be tested.

30. For ongoing compliance assurance:

    a. The permit includes requirements for conducting weekly visible emission surveys. If any visible emissions are observed for more than 30 seconds from the emission sources, the permittee is required to take corrective action immediately.
    b. The permit requires the permittee conduct periodic inspections of the process equipment and make repairs, as necessary.
    c. The permit requires the permittee to monitor emission control parameters to ensure that the control equipment remains effective for controlling emissions from the unloading and storage buildings.

31. In addition, the facility will be inspected by DEQ personnel at least twice within the first year of operation to ensure compliance with the permit conditions.

TITLE V MAJOR SOURCE APPLICABILITY

CRITERIA POLLUTANTS

32. A major source is a facility that has the potential to emit 100 tons/yr or more of any criteria pollutant. For greenhouse gases, the source must also have the potential to emit 100,000 tons/year or more of CO_2e to be a major source. This facility is not a major source of criteria pollutant emissions.

    The permitted activities are not combustion sources so carbon dioxide and nitrous oxide greenhouse gases will not be emitted from the facility. There is some potential for methane emissions which is contained in coal when it is mined. However, DEQ has determined that the methane emissions will be well below the GHG deminimis level of 2,500 metric tons per

year. This determination is based on studies that have determined the rate at which the methane desorbs from the coal, a conservative estimate of the amount of time it takes for the coal to arrive at the facility from the mine, and the amount of time that the coal will be at the facility.

HAZARDOUS AIR POLLUTANTS

33. A major source is a facility that has the potential to emit 10 tons/yr or more of any single Hazardous Air Pollutant (HAP) or 25 tons/yr or more of combined HAPs. This source is not a major source of hazardous air pollutants. The HAP emissions detail for the proposed Coyote Island Terminal is provided at the end of this report. A complete list of regulated HAPs is provided on the USEPA website at http://www.epa.gov/ttnatw01/187polls.html.

INFORMATION MEETINGS

34. DEQ held three information meetings in December 2012 prior to preparing the draft permit. The meetings were held in Boardman, Clatskanie, and Portland. At each meeting, there was a question and answer period followed by a comment period. DEQ also received numerous written comments before, during, and after the public meetings. The meetings were not formal hearings, so DEQ has not prepared a formal response to the comments. However, DEQ has reviewed the comments and taken them into consideration while preparing the draft permit. Provided below is a summary of the comments received and general responses to those comments:

a. Meeting participation: At each meeting, DEQ asked those attending the meeting to sign an attendance sheet and provide their e-mail address if they wanted electronic notices of permit actions regarding the proposed facility. Personal observations and newspaper reports suggest that many more people attended the meetings than signed in on the attendance sheet. However, according to the attendance sheets, the following number of people attended each meeting:

Boardman meeting (12/4/12):	147 people signed in on the attendance sheet
Clatskanie meeting (12/5/12):	132 people signed in on the attendance sheet
Portland meeting (12/6/12):	587 people signed in on the attendance sheet

b. Written comments: In addition to those that attended the meetings and provided comments at the meetings (not all commented, but many did), DEQ received 5,379 written comments via e-mail and mail. Most of the people that commented submitted form letters in opposition to the proposed facility. There were 10 comments received that specifically addressed the permit application.

35. Most of the comments addressed three areas of general concern: 1) Global impacts related to the combustion of coal, such as greenhouse gas emissions and climate change, regional haze, mercury emissions, and other hazardous air pollutant emissions; 2) transportation

issues, such as increased train traffic, locomotive and tugboat emissions, noise, spills, and fugitive dust while the coal is in transit; and 3) economic benefits associated with the project, such as jobs for Oregonians and revenue for local communities. DEQ acknowledges that these are significant concerns, but are not within DEQ's authority to address in an air contaminant discharge permit action. To the extent possible, given DEQ's limited resources and authority, DEQ has prepared question and answer (Q&A) documents that provide general responses to these concerns. The Q&A documents are available at the following website: http://oregon.gov/DEQ/Pages/CoalExport.aspx.

36. Comments specific to the permit application: DEQ received a few comments specifically related to the permit application, which were considered while drafting the permit. The comments and DEQ's general responses are as follows:

a. **Comment:** Emissions were underestimated using incorrect assumptions for wind speeds, coal moisture content, and control efficiencies for enclosures and add-on control equipment.

Response: *DEQ has carefully reviewed the information provided in the permit application, as well as the comments, and developed emission estimates based on recognized procedures for estimating emissions from material handling operations. The basis for the estimates is provided in this review report and the attached emissions detail sheets. DEQ does not agree that average wind speeds in the Boardman area should be used in the calculations for emissions from activities that occur within enclosures that are protected from the wind. However, there are a few activities that do not have full enclosures. For these activities, DEQ did use average maximum wind speeds for calculating the emissions.*

b. **Comment:** Secondary emissions from locomotive and tug boat engines were not included in the stationary source's emission inventory.

Response: *DEQ does not agree that emissions from tugboat and train engines that bring material to and from the source should be included in the emission inventory for the source. These emissions are considered "secondary emissions", as defined in OAR 340-200- 0020 and are not included in the determination of whether a source is a major source in accordance with OAR 340-224-0100.*

c. **Comment:** The results of an air dispersion modeling exercise showed violations of the National Ambient Air Quality Standards.

Response: *DEQ's regulations do not require air dispersion modeling for sources that are not major sources. This source is not considered a major source. If modeling were required, DEQ has requirements for developing a modeling protocol to ensure that the modeling is performed in accordance with EPA models and guidelines, including identifying the emission points to be modeled, the emissions from the emissions points, the appropriate models, receptor grids, and*

meteorological data to be used in the models. The modeling does not address mobile source emissions.

d. **Comment:** Fugitive emissions will not be adequately controlled.

Response: *DEQ has reviewed the proposed design of the facility and obtained additional clarifying information from the applicant. Based on this information, DEQ has determined that the emissions will be effectively controlled, as indicated by the emissions estimates provided in this review report. To ensure adequate control, DEQ has included requirements for a Best Management Practices Plan, initial compliance testing, and routine visible emissions monitoring. Based on the design of the facility, visible emissions from the activities should not occur, but if there are visible emissions, the emissions should not last long. Therefore, DEQ has structured the monitoring such that if visible emissions are observed for more than 30 seconds, corrective action must be taken by the operators to minimize the emissions. In addition, the permittee must notify DEQ of complaints and DEQ will conduct at least two inspections of the facility in the first year of operation.*

PUBLIC NOTICE

37. Pursuant to OAR 340-216-0066(4)(a)(A), issuance of Standard Air Contaminant Discharge Permits requires public notice in accordance with OAR 340-209-0030(3)(c), which requires DEQ to provide notice of the proposed permit action and a minimum of 35 days for interested persons to submit written comments. In addition, two hearings have been scheduled to allow interested persons to submit oral or written comments. The date, time and location of the public hearings is provided below. DEQ will provide a minimum of 30 days notice for the hearing. **The public notice was issued on May 31, 2013 and originally expired on July 12, 2013. On July 1, 2013 DEQ extended the comment period to August 12, 2013.** Hearing details did not change.

Public hearings were held on July 9, 2013 and DEQ received numerous comments. DEQ's response to the comments begins on page 21 of this Review Report.

EMISSIONS DETAIL SHEETS

Proposed $PM/PM_{10}/PM_{2.5}$ Emission Calculations:

Loaded Uncovered Railcars: $PM/PM_{10}/PM_{2.5}$					
EU ID	**Operating Parameters (tons/yr)**	**Emission Factors (lbs/ton)**		**Reference**	**Emissions (tons/yr)**
Uncovered railcars fully loaded	8,800,000	PM	2.00E-04	AP 42 - Section 13.2.5.5 with Topping Agent Control	8.8E-01
		PM_{10}	1.00E-04		4.4E-01
		$PM_{2.5}$	1.50E-05		6.6E-02

For these emission factor calculations, DEQ used the highest 24-hour average wind speed for the Boardman area at 25.3 mph based on 24-hr highest annual 24-hr average wind speed at the Port of Morrow. The emission factors were conservatively developed assuming there would be a constant wind speed of 25.3 mph at the transfer facility throughout the entire year. *(ref: PGE Coyote Springs 1995 Wind Speed Collection Data)*.

Railcar Unloading Building Wet Scrubbers/Fogging System: $PM/PM_{10}/PM_{2.5}$					
EU ID	**Operating Parameters (tons/yr)**	**Emission Factors (lbs/ton)**		**Reference**	**Emissions (tons/yr)**
WS-R01 WS-R02	8,800,000	PM	7.24E-06	AP 42 Section 13.2.4.3 and wet scrubber vendor	3.2E-02
		PM_{10}	3.82E-06		1.7E-02
		$PM_{2.5}$	7.33E-07		3.2E-03

Coal Storage Building Wet Scrubbers: $PM/PM_{10}/PM_{2.5}$					
EU ID	**Operating Parameters (tons/yr)**	**Emission Factors (lbs/ton)**		**Reference**	**Emissions (tons/yr)**
Drop to Storage Pile					
WS-01 thru WS-15	8,800,000	PM	8.59E-08	AP 42 Section 13.2.4.3 and wet scrubber vendor	3.8E-04
		PM_{10}	2.17E-07		9.5E-04
		$PM_{2.5}$	1.03E-07		4.5E-04
Storage Pile Drop to Reclaim Conveyor					
WS-01 thru WS-15	8,800,000	PM	8.59E-08	AP 42 Section 13.2.4.3 and wet scrubber vendor	3.8E-04
		PM_{10}	2.17E-07		9.5E-04
		$PM_{2.5}$	1.03E-07		4.5E-04

Enclosed Conveyor to Conveyor Drop Points: $PM/PM_{10}/PM_{2.5}$							
	Emission Factor (lbs/ton)				Emissions (tons/yr)		
Emission Point ID	PM	PM_{10}	$PM_{2.5}$	Reference	PM	PM_{10}	$PM_{2.5}$
Railcar Unloading Building to First Unloading Conveyor (BC-0.5)	1.43E-06	6.77E-07	1.03E-07	AP 42 - Section 13.2.4.3 with enclosure control efficiencies	6.30E-03	2.98E-03	4.51E-04
First Unloading Conveyor to Second Unloading Conveyor (BC-01)	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04
Second Unloading Conveyor diverter gate drop to Loadout Conveyor to bypass storage.	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04
Second Unloading Conveyor diverter gate drop to Tripper Conveyor (BC-02)	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04
Second Unloading Conveyor diverter gate drop to Storage Transfer Conveyor (BC-04)	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04
Storage Transfer Conveyor diverter gate drop to the Tripper Conveyor (BC-05)	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04
Storage Transfer Conveyor) diverter gate drop to Transfer Conveyor (BC-07)	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04
Transfer Conveyor drop to the Tripper Conveyor (BC-08)	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04
Storage Reclaim Conveyor drop to the Loadout Conveyor (BC-10)	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04
Loadout Conveyor drop to the Transfer Conveyor (BC-11)	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04
Transfer Conveyor drop to the Barge Loading Conveyor (BC-12)	1.43E-06	6.77E-07	1.03E-07		6.30E-03	2.98E-03	4.51E-04

Telescope Loading Chute: $PM/PM_{10}/PM_{2.5}$					
EU ID	**Operating Parameters (tons/yr)**	**Emission Factors (lbs/ton)**		**Reference**	**Emissions (tons/yr)**
TLC-01	8,800,000	PM	1.55E-04	AP 42 Section 13.2.4.3 and enclosure control efficiencies	6.83E-01
		PM_{10}	7.34E-05		3.23E-01
		$PM_{2.5}$	1.11E-05		4.89E-02

Total Emissions: $PM/PM_{10}/PM_{2.5}$			
	Emissions (tons/yr)		
Emission Point ID	**PM**	**PM_{10}**	**$PM_{2.5}$**
Uncovered railcars fully loaded	0.88	0.44	0.07
Railcar Unloading Building Rotary Dump	3.19E-02	1.68E-02	3.23E-03
Railcar Unloading Building to First Unloading Conveyor (BC-0.5)	6.30E-03	2.98E-03	4.51E-04
First Unloading Conveyor to Second Unloading Conveyor (BC-1)	6.30E-03	2.98E-03	4.51E-04
Second Unloading Conveyor to Storage Transfer Conveyor (BC-04	6.30E-03	2.98E-03	4.51E-04
Storage Transfer Conveyor to Transfer Conveyor (BC-07)	6.30E-03	2.98E-03	4.51E-04
Transfer Conveyor to Tripper Conveyor for Storage (BC-08)	6.30E-03	2.98E-03	4.51E-04
Tripper Conveyor drop to Storage Pile in Storage Building #3	3.78E-04	9.54E-04	4.52E-04
Storage Pile drop to Storage Reclaim Conveyor (BC-09)	3.78E-04	9.54E-04	4.52E-04
Reclaim Conveyor to the Loadout Conveyor (BC-10)	6.30E-03	2.98E-03	4.51E-04
Loadout Conveyor to Transfer Conveyor (BC-11)	6.30E-03	2.98E-03	4.51E-04
Transfer Conveyor to Barge Loading Conveyor (BC-12)	6.30E-03	2.98E-03	4.51E-04
Barge Loading Conveyor through the Telescope Loading Chute to a Barge Hull	6.83E-01	3.23E-01	4.89E-02
Total Particulate Emissions (tons/yr):	**1.65**	**0.81**	**0.12**
Total Particulate Emissions (pounds/yr):	**3295**	**1612**	**246**

The maximum potential emissions were calculated assuming that all 8.8 million tons/year of the coal are conveyed through the maximum number of possible drop points to and from the furthest Storage Building #3. The emission factors incorporate capture and control efficiencies of enclosures and air pollution equipment where applicable. Emission factors are established by reference from the USEPA Technology Transfer Network Clearinghouse for Inventories & Emissions Factors, AP 42 website: (http://www.epa.gov/ttn/chief/ap42/).

Emission Factors Based on Coal Transfer Activity

Coal Transfer Locations [(1)]	Pollutant	Emission Factor (lbs/ton)
Tons of Uncovered Coal Received by Railcar	PM	2.00E-04
	PM_{10}	1.00E-04
	$PM_{2.5}$	1.50E-05
Tons of Coal Transferred From The Railcar Unloading Building Into Coal Storage Building #1	PM	1.16E-05
	PM_{10}	6.07E-06
	$PM_{2.5}$	1.14E-06
Tons of Coal Transferred From The Railcar Unloading Building Into Coal Storage Building #2	PM	1.31E-05
	PM_{10}	6.74E-06
	$PM_{2.5}$	1.25E-06
Tons of Coal Transferred From The Railcar Unloading Building Into Coal Storage Building #3	PM	1.45E-05
	PM_{10}	7.42E-06
	$PM_{2.5}$	1.35E-06
Tons of Coal Transferred From a Coal Storage Building to a Barge	PM	1.60E-04
	PM_{10}	7.56E-05
	$PM_{2.5}$	1.15E-05
Tons of Coal Transferred From The Railcar Unloading Building Directly to a Barge, Bypassing Storage	PM	1.70E-04
	PM_{10}	8.06E-05
	$PM_{2.5}$	1.24E-05

(1) Emission Factors were developed from AP-42 Section 13.2.5.5 for the loaded uncovered railcars and AP-42 Section 13.2.4.3 Predictive Emission Factor for drop points along with control and capture efficiencies.

The emission factors provided in the table above are based on coal arriving at the Coyote Island Terminal having to be transferred to one of the three coal storage buildings, transferred from a coal storage building to a barge, or transferred from the railcar unloading building directly to a barge. The emission factors for each drop and transfer point between these specified locations have been aggregated. Recordkeeping of the tons of coal transferred between these locations may be used to calculate actual particulate matter emissions. The facility will have the ability to measure the weight of coal (in tons) upon arriving at the transfer facility. There will be no weights available between or after the storage buildings. To conservatively estimate emissions the permittee must assume all coal received at the transfer facility will take the longest route prior to being loaded into a barge. Therefore, emission will be calculated assuming that all coal is transferred through storage building #3 prior to being loaded in a barge. The table below provides emission factors to determine the monthly and annual emission:

Aggregate Emission Factors based on the entire Coal Transfer Facility:

Combined Coal Transfer Emission Factors	Pollutant	Emission Factor (lbs/ton)
Emission Factors for coal received by railcar, transferred through Storage Building #3, and transferred into a barge cargo hold	PM	3.74E-04
	PM_{10}	1.83E-04
	$PM_{2.5}$	2.79E-05

Emission factors were developed from AP-42 Emission Factors Section 13.2.5.5 for the loaded uncovered railcars entering the transfer facility and AP-42 Section 13.2.4.3, Predictive Emission Factors was used to calculate emissions for all drop points within the transfer facility. The AP-42 emission factors are adjusted to incorporate established control and capture efficiencies of the controls and pollution control devices such as topping agents, wet scrubbers, and the dust suppression fogger stations.

Hazardous Air Pollutants:

Hazardous Air Pollutants Calculations		
Hazardous Air Pollutant	**Fraction of PM 1/**	**Potential to Emit (tons/year)**
Antimony	4.90E-07	6.81E-08
Arsenic	2.60E-06	3.61E-07
Beryllium	5.40E-07	7.51E-08
Cadmium	2.10E-07	2.92E-08
Chromium	6.10E-06	8.48E-07
Cobalt	1.90E-06	2.64E-07
Lead	3.00E-06	4.17E-07
Manganese	2.60E-05	3.61E-06
Mercury	1.30E-07	1.81E-08
Nickel	4.60E-06	6.39E-07
Selenium	1.10E-06	1.53E-07
Uranium	1.30E-06	1.81E-07
Total Annual HAP Emissions (tons/yr):		**6.67E-06**
Total Annual HAP Emissions (pounds/yr):		**0.01334**

1. Stricker, G.D., and Ellis, M.S., "Coal Quality and Geochemistry, Powder River Basin, Wyoming and Montana" in U.S. Geological Survey Professional Paper 1625-A, Chapter PQ, 1999, Table PQ-1. (http://pubs.usgs.gov/pp/p1625a/Chapters/PQ.pdf)

RESPONSE TO COMMENTS

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RESPONSE TO PUBLIC COMMENTS

State of Oregon Department of Environmental Quality

TABLE OF CONTENTS:

I. SUMMARY

The Oregon Department of Environmental Quality released three draft permits simultaneously for public notice and comment. These permits included conditions for protecting air and water during construction and operation of a proposed coal transfer facility in Boardman, Oregon. These permits included: an Air Contaminant Discharge Permit (ACDP); an industrial Water Pollution Control Facility permit (WPCF); and a Construction Stormwater permit. These permits must be issued or assigned prior to construction of the facility.

The draft permits for the proposed Coyote Island Terminal facility in Boardman, Oregon were made available for public comment on May 31, 2013. Public hearings were held in Portland and Hermiston on July 9, 2013. The comment period was extended to August 12, 2013. DEQ received 16,515 comments on the draft permits.

- 13,321 of the comments were form letters opposed to issuing the permits.
- 2,771 of the comments were form letters in favor of issuing the permits.
- 336 people provided comments at the public hearings, some of whom also provided written comments (205 opposed and 129 in favor of issuing the permits)
- 87 people provide written comments (57 opposed and 30 in favor of issuing the permits)

Most of the comments, including the form letters, addressed three areas of general concern: 1) Global impacts related to the combustion of coal, such as greenhouse gas emissions and climate change, regional haze, mercury emissions, and other hazardous air pollutant emissions; 2) transportation issues, such as increased train traffic, locomotive and tugboat emissions, noise, spills, and fugitive dust while the coal is in transit; and 3) economic benefits associated with the project, such as jobs for Oregonians and revenue for local communities. DEQ acknowledges that these are significant concerns, but are not within DEQ's authority to address in the air and water quality permit action. To the extent possible, given DEQ's limited resources and authority, DEQ has prepared question and answer (Q&A) documents that provide general responses to these concerns. The Q&A documents along with other documents related to these permit actions are available at the following website: http://www.oregon.gov/DEQ/Pages/CoalExport.aspx

There were comments requesting that DEQ insist on state certification of the project under Section 401 of the federal Clean Water Act. A water quality certification is not a requirement for issuance of air or water quality permits for this project and has not been considered in their development. Separately, DEQ has determined that some in-water work associated with this project is likely to create water quality impacts that require implementation of best management practices to protect water quality. DEQ has requested that the U.S. Army Corps of Engineers require a Section 401 water quality certification prior to issuing a Section 10 permit for this project.

A few of the comments were related to the public hearing process. One person did not agree with the process because it prevented people from witnessing other people when they provided their comments. A couple of people thought the format was good because they could schedule the time to provide comments, which was more convenient for them. One person was concerned that DEQ lost some of the oral comment due to a problem with a recorder. DEQ contacted each person that testified and asked them to resubmit their comments by phone. The transcribed phone messages are included in the permit record.

Provided below are DEQ's responses to the specific comments for each permit. The persons or organizations that provided comments are listed in bold followed by a summary of their comments with DEQ's response provided in italics immediately following each comment.

II. WATER QUALITY WPCF PERMIT COMMENTS

Coyote Island Terminal, LLC (CIT)

1. Calibration of flow meters should be every five years instead of annually.

DEQ typically requires verification of flow meter calibration at least annually. However, if constituents in CIT's wastewater affect the calibration based on annual verification, more frequent verification may be necessary. DEQ will address that need when it arises. For now, DEQ believes that verification of flow meter calibration should remain annually.

2. Weekly logging of parameters is most sensible based on anticipated operations.

DEQ typically requires daily flows. At any time the equipment is not operating, the monitoring report can reflect that status.

3. Filter press monitoring should be per event.

DEQ supports CIT's suggestion that monitoring of the filter press should be per event. The permit will be revised to reflect that removal of a filter cake will be required to be recorded as an event.

4. DEQ should require logging filter press runs.

This comment requests clarification of what "recording of the filter press event" means. You are requesting that you log if the filter press is running. The actual wording in the permit requires the permittee to record the "Removal of filter cake from filter press." This requires the permittee record when a filter cake is removed from the press.

Confederated Tribes of the Umatilla Indian Reservation

1. The CTUIR believes the state and federal agencies with permitting authority over the proposed CIT should be analyzing the impacts of the project in a more coordinated manner.
2. The CTUIR believes that the project should not be able to move forward without a DEQ-issued Clean Water Act Section 401 Water Quality Certification from the State of Oregon for the Coyote Island Terminal.
3. Oregon must take a cumulative look at the impacts of this project rather than examining the footprint of only one element of the project in isolation.

DEQ will respond at a later date regarding the need for a 401 Certification. See also the response to comments for the Air Contaminant Discharge Permit.

Confederated Tribes and Bands of the Yakama Nation

Additionally, from our own observations, coal trains in the Columbia Gorge that use these suppression methods alone are currently releasing coal dust along and into the Columbia River, in direct violation of the Clean Water Act. To ensure that our natural and cultural resources are protected, Yakama Nation again requests that DEQ requires all coal to be 100% contained upon entering the proposed Port of Morrow facility. If DEQ has the authority to set requirements for railcars entering the site, DEQ then has the authority and responsibility to require that the mitigation measures are fully protective, not only 80% effective. Further, Yakama Nation requests that the DEQ requires Ambre Energy to apply for a Clean Water Act Section 401 Water Quality Certification from the State of Oregon for the Coyote Island Terminal.

DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow. See also the response to comments for the Air Contaminant Discharge Permit.

Dr. Theodora Tsongas

1. The permit needs to specifically address monitoring and treatment of topping agents and toxic substances in wastewater from this facility. Recycling of wastewater and solids must be addressed in the permit specifically.

The permit is written based on the permittee's application asserting that the wastewater and solids will be recycled and maintained within a closed loop system. CIT will have to obtain a waste characterization and approval prior to any wastewater or waste solids disposal outside the closed loop system. Schedule A, Condition 5, requires that disposal outside of the closed loop cannot occur without DEQ approval. This condition was clarified to include submittal of waste characterization as follows:

> *"All activities pertaining to the management and disposal of the authorized wastes shall be conducted in accordance with the DEQ-approved Engineering Report/Facility Plan, and any amendments approved in writing by DEQ. A waste characterization must be submitted as part of any requests to dispose of wastewater or solids outside the closed loop system."*

2. Will the wash water remove the topping agent from the surface of the coal in the rail cars? How will this wash water be treated? Will the topping agent be reapplied before the coal is loaded into the barges? If it is reapplied, who will be doing this and how will it be done?

The WPCF permit application materials indicate that all wash water is to be contained in the closed loop system. CIT will have to obtain a waste characterization and approval prior to any disposal outside the closed loop system. Language will be added in Schedule A to clarify this. Residual effects of topping agents applied prior to loading would be found when a wastewater characterization is performed.

3. Regarding the coal washing system, will the coal be wet when it is transferred to the barges (possibly increasing its weight and changing the stability of the cargo in the barges)? If it will not be wet, how will it be dried before transferring it to the barges?

The WPCF permit does not specify the moisture content of the coal during transfer to the barges. The moisture content of the coal on the barge as well as barge stability issues are beyond the scope of this permit.

4. Schedule B.1.a. The flow meter calibration should be performed more frequently than once per year. Calibration should be conducted at least monthly for the first year and every six months thereafter. For recommendations on calibration of flow meters, see website specified in comment.

DEQ typically requires verification of flow meter calibration at least annually. However, if constituents in CIT's wastewater affect the calibration based on annual verification, more frequent verification may be necessary. DEQ

will address that need when it arises. For now, DEQ believes that verification of flow meter calibration should remain annually.

5. Schedule D. Special Conditions. 2. This section is poorly written and confusing. Wastewater can be used inside and outside of the coal transfer structures. The permit must state specifically when and where wastewater can be used, if at all.

DEQ concurs and the condition was rewritten as follows:

> *"The wastewater from the clarifier must be internally recycled back into the system for dust extraction, misting, washdown, and deluge. Fogger systems are to use fresh water."*

6. Schedule D. Special Conditions. 7. Add "and to include a public review process."

The condition states that "The Department may reopen the permit, if necessary, to include new or revised discharge limitations, monitoring or reporting requirements, compliance conditions and schedules, and special conditions." Public notice and public participation requirements for permitting actions are contained in Oregon Administrative Rules (OAR). In accordance with OAR 340-045-0027, public notice and opportunity for public participation are not required for permit actions with low environmental and public health significance. On the other hand, permit actions with potentially high environmental and public health significance do require public notice and opportunity for public participation. DEQ will evaluate any modification in light of the QAR requirements. The reopener condition is standard to WPCF permits.

7. Schedule F comments regarding A.5, C.1, D.

Schedule F is not subject to editing, therefore the items in this section will not be revised. These conditions are standard to WPCF permits and include language regarding operation and maintenance of facilities, monitoring and record keeping, and reporting requirements.

8. Schedule F comments regarding C.4 – Records must be kept on site for 10 years.

DEQ intends to treat this facility similar to others. The permit requires the records to be kept for three years. DEQ knows of no extenuating circumstance that would necessitate a longer retention period.

9. The permit needs to address monitoring and treatment of topping agents and toxic substances in wastewater from this facility. Recycling of wastewater and solids must be addressed in permit specifically.

The permit is written based on the permittee's application asserting that the wastewater and solids will be recycled and maintained within a closed loop system. CIT will have to obtain a waste characterization and approval prior to any wastewater or waste solids disposal outside the closed loop system. Schedule A, Condition 5, requires that disposal outside of the closed loop cannot occur without DEQ approval. This condition was clarified to include submittal of waste characterization as follows:

> *"All activities pertaining to the management and disposal of the authorized wastes shall be conducted in accordance with the Department-approved Engineering Report/Facility Plan, and any amendments approved in writing by the Department. A waste characterization must be submitted as part of any requests to dispose of wastewater or solids outside the closed loop system."*

The document includes comments not related to the WPCF permit. These comments, such as for fire response, safety, etc., should be addressed to the appropriate responsible party.

Dr. Andy Harris

1. What is DEQ doing to assure that the proposed coal terminal will not contaminate Boardman's municipal drinking water?

Boardman obtains its municipal drinking water from groundwater wells adjacent to the Columbia River. CIT's WPCF permit application materials indicate that all wastewater will be contained within a closed loop system. Therefore, the proposed permit does not permit discharge or disposal from the system. Accordingly, CIT will have to submit a waste characterization and obtain DEQ approval prior disposal. This will be clarified in Schedule A.

2. Shouldn't we be concerned about contamination from construction of the dock, which will stir up toxic sediments?

Water quality impacts from in-water work during dock construction is beyond the scope of DEQ's WPCF permit authority. DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow.

3. Has DEQ tested for PCBs, pesticides and radioactive isotopes in the riverbed?

Evaluation of constituents in the riverbed is not part of the WPCF permitting process, thus was not investigated. Entities that do not discharge to surface water apply for WPCF permits. Please see our website for possible riverbed sample results in our databases, specifically for cleanup projects.

4. What will be the impact on drinking water from diesel pollution from the barges?

Diesel pollution from barges is prohibited by Oregon Revised Statute (ORS) 468B.025. Evaluation of impacts to drinking water systems by river traffic is outside the scope of the proposed WPCF permit.

5. Wouldn't it be prudent to study the health impact of toxic coal dust spilled into the water during the loading of barges?

Discharge of coal dust to the river is prohibited by Oregon Revised Statute (ORS) 468B.025 and it is not permitted by the proposed WPCF permit.

6. Is there an alternative drinking water supply should this source be contaminated?

The WPCF permit is a non-discharging permit, therefore, surface water and groundwater are not allowed to be impacted by the facility's wastewater system. Investigation of alternative drinking water supplies is not part of the WPCF permitting process.

Tom Ehrlichman Salish Community Strategies

1. Your air quality and water quality permits fail to regulate air and water quality pollutants from fugitive coal dust emissions during ship loading.

The WPCF permit is a non-discharging permit; however, DEQ agrees that it would be clearer if there was a condition in the permit that specifically prohibited discharge of coal and coal dust to the river during barge loading. Therefore, the following condition will be added to the permit.

> *"Discharge of coal and coal dust to the Columbia River from the CIT coal transfer facilities at Port of Morrow is prohibited."*

2. DEQ is approving an unauthorized "take" of endangered species if it issues air quality, water quality and stormwater permits.

The WPCF permit prohibits discharge to waters of the state, including discharge of coal and coal dust.

Alexandra Amonette

1. The proposed terminal poses risk to the groundwater and soil. The WPCF permit makes no mention of effluent treatment due to wet scrubber and fire suppression waste water.

The facility's wastewater system recycles wastewater in a closed loop. No discharge is allowed, therefore, groundwater and soil will not be impacted. Within the system, wastewater collects in sumps and is transferred to a central washdown collection sump. From there, it is pumped through a flocculator to help settle the coal particles, and then it is sent to a clarifier. Clarified wastewater will flow to a process water tank and recycle back through the system to the scrubbers and washdown systems. Also, this system will be designed to accommodate a deluge event resulting from activation of the fire suppression system.

2. The proposal states that each storage building is to have five (5) wet scrubbers. Wet scrubbers corrode, and if there were a fire, there is no mention of fire suppression. Based on using the latest mercury speciation methods to sample several full-scale scrubbers, it's been shown that wet scrubbers effectively capture almost all of the soluble oxidized mercury but capture little if any of the elemental mercury. If wet scrubbers are to be considered an effective control method, the mercury must be in oxidized form before it reaches the scrubber. The mercury the coal is present as a sulfide, not oxidized. Therefore, the wet scrubbers will be ineffective.

The wastewater system provides water to the fire suppression system. However, the adequacy of the fire suppression system is beyond the scope of this wastewater permit. Moreover, the effectiveness of the wet scrubbers is outside the scope of this wastewater permit, as well.

3. Does DEQ know if coal pollution will dirty the local drinking water source in Boardman? Is DEQ planning to regulate coal pollution from trains? What if coal chunks are falling out of trains and into the Columbia River or local creeks and wetland en route from Wyoming and Montana? The McNary National Wildlife Refuge, the Irrigon Fish Hatchery and numerous others wetlands, sloughs, and natural areas are located within 10 miles of the proposed facility. Again millions of dollars of taxpayer's money has been expended on restoring salmon. Why permit a facility whose very activities will endanger salmon and steelhead?

Boardman obtains its municipal drinking water from groundwater wells adjacent to the Columbia River. CIT's WPCF permit application materials indicate that all wastewater will be contained within a closed loop system. Therefore, the proposed permit does not permit discharge or disposal from the system. Accordingly, CIT will have to submit a waste characterization and obtain DEQ approval prior disposal. This will be clarified in Schedule A. The WPCF permit does not regulate rail cars during transport; it covers only the wastewater system at the proposed coal transfer facilities. Discharge of coal dust to the river is prohibited by Oregon Revised Statute (ORS) 468B.025 and it is not permitted by the proposed WPCF permit.

4. DEQ could and should require a Clean Water Act section 401 certification to evaluate the water quality impacts of the entire coal project – from mining to shipping to burning to aerial deposition – examine the impacts of coal dust, barges, a new dock, and ships on salmon, river life, surrounding riparian and uplands. OR DEQ should determine if Ambre's entire project complies with Oregon's Water quality standards. For air, OR DEQ should wait for full federal analysis and evaluate the air impacts from the Port Westward end of the project before making its final determination for the proposed Port Morrow Ambre facility.

DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow. Air quality impacts are beyond the scope of the proposed wastewater permit.

5. To summarize this comment, Ambre has violated the Clean Water Act at the Decker Mine in Montana. The company is causing material damage to the hydrologic balance, and is in violation of environmental laws. I

strongly urge OR DEQ to contact the Western Environmental Law Center, Montana Environmental Information Center, and the Sierra Club and find out about Ambre and other coal mining companies operating in Montana and Wyoming and how they are destroying the environment there.

The proposed wastewater permit is based on the proposed activity at the Boardman site and Oregon environmental laws.

6. The remaining comments concern fire, combustion, barge accidents, impacts to local and global agricultural and industry.

The WPCF permit regulates the wastewater system, which does not discharge to surface or groundwater.

Many other comments were included regarding coal transportation, burning of coal, mining, climate change, etc. These are not addressed as they do not pertain to the WPCF permitting process as outlined in Oregon Administrative Rules.

Hellene Chapman

The commenter requests a 401 certification and to evaluate the impacts of the coal on the river.

DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow. Also, the facility is prohibited from discharging to surface water, therefore evaluation of a surface water discharge is not required.

Susan Applegate

The commenter requests a 401 certification and to evaluate the impacts of the coal on the river.

DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow. Also, the facility is not allowed to discharge to surface water or groundwater, therefore, an evaluation of the impact to waters of the state is not required.

Claudia Keith

1. Coal is toxic and DEQ should stop toxic pollution. (DEQ shouldn't allow dust from trains/terminals to pollute river and lungs)

Discharge of coal dust to the river is prohibited by Oregon Revised Statute (ORS) 468B.025 and it is not permitted by the proposed WPCF permit. Airborne coal dust is regulated under the Air Quality permit.

2. It is foolish for DEQ to only look at one small part of the coal export project – the coal storage site at the Port of Morrow. (more questions/comments that DEQ should consider: uncovered coal trains spilling coal dust into river, new coal dock would harm salmon, impact of increased barging on river, air/water impacts of other coal terminals where coal is transferred from barge to ship, this terminal is proposed in a salmon nursery 219 miles downstream from Port of Morrow at Port Westward, impacts of new coal barges on scenic area and coal ships on estuary)

DEQ does not permit the discharge of coal or coal dust to the river. It is prohibited by Oregon Revised Statute (ORS) 468B.025 and it is not permitted by the proposed WPCF permit.

3. Instead of putting on blinders and ignoring the full impacts, DEQ should require a Clean Water Act 401 certification to consider all of the impacts of Ambre's coal – from the trains to the ships. (more

questions/comments that DEQ should consider: DEQ can require a 401 cert. for entire project from train to ship, under Section 401, DEQ can evaluate entire project's complying with water quality standards, notify Ambre that 401 is necessary for dock at Port of Morrow, DEQ gives Ambre free pass by waiving 401 cert., DEQ doesn't want to know full impacts, DEQ waiving 401 cert. that would protect river from coal.)

DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow.

4. Without 401 certification, there are large gaps in government review. (more questions/comments that DEQ should consider: Who will check if coal barges will harm the river – Army Corps will not review and responding to spills is not enough, who will evaluate the impact of ships and barges in the salmon nursery at Port Westward)

DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow.

5. Oregon should not piecemeal coal permits. (more questions/comments that DEQ should consider: The Oregon Department of State Lands made the prudent decision to require the full analysis of impacts before issuing any permits. Why is DEQ plowing ahead? The State should act in a coordinated manner.)

When DEQ receives an application for a wastewater permit, we must evaluate the discharge against environmental rules and issue a permit if certain criteria are met. Each agency processes their respective applications according to their regulations.

Jessica Yarnall Loarie, Sierra Club

1. DEQ should require a 401 water quality certification

DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow.

2. DEQ should deny the Water Pollution Control Facilities Permit and Construction Stormwater Permit

DEQ permits wastewater facilities within the context of the rules and statutes that apply to DEQ and to the proposed facilities. If Ambre meets all of the legal requirements, DEQ will issue the WPCF and construction storm water permits.

Regna Merritt, Oregon Physicians for Social Responsibility

1. A health impact assessment

A health impact assessment is beyond the scope of the proposed wastewater permit.

2. An analysis by the DEQ Drinking Water Program of potential threats associated with this facility and this project to the drinking water source, including water quality and water quantity, for residents and businesses of the City of Boardman.

Boardman obtains its municipal drinking water from groundwater wells adjacent to the Columbia River. CIT's WPCF permit application materials indicate that all wastewater will be contained within a closed loop system. Therefore, the proposed permit does not permit discharge or disposal from the system. Accordingly, CIT will have to submit a waste characterization and obtain DEQ approval prior disposal. This will be clarified in Schedule A.

3. 401 certification; a site-specific environmental impact statement; a regional environmental impact statement

DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow.

Lauren Goldberg, Columbia Riverkeeper

1. 401 certification request

DEQ has requested that the U.S. Army Corps of Engineers require a Section 401water quality certification for the proposed project. The scope of the certification decision is limited to the construction and operation activities associated with the proposed terminal at the Port of Morrow.

2. The application materials submitted by Ambre are incomplete, because it has failed to document how and when it would drain the closed loop system and how that wastewater would be managed.

Ambre Energy has been advised that the completely closed loop system will be permitted as such – no discharge of any kind will be allowed outside of the closed loop system. The engineering plans for the system will be reviewed prior to installation, and part of the review will be to ensure that this condition is met. Engineering plans are not required at time of application, but these discussions have occurred.

3. Constituents in coal and associated wastewater are a threat to human health and the environment.

The facility is not allowed to discharge to surface water or groundwater.

4. The permit should require Ambre to monitor the total flow and volume of water drained from the process wastewater system.

The facility is not allowed to discharge to surface water or groundwater. Therefore, a discharge monitoring requirement is inconsistent with the express prohibition in the permit.

5. The permit should require Ambre to monitor the total mass of coal dust collected at the clarifier.

Regarding coal dust in the wastewater, the clarifier underflow, consisting of thickened slurry, will be pumped to a clarifier and plate and frame filter press where excess water will be separated and coal particles will be placed back onto the conveyor as product. The permit requires monitoring of the number of filter cakes removed from the filter press. Volumes/weights can be calculated from the results, but won't be required to be performed for monitoring purposes.

6. The permit should require Ambre to characterize and monitor the wastewater filter cakes.

The solids from the filter press will be pressed into a cake that is dewatered. The cake will be deposited on the load-out conveyor for export as part of the product stream. This WPCF permit will regulate the wastewater created at the facility, not the exported product. In the case of a spill at the site, the discharge will be considered a violation of the permit. Proper spill response actions will be expected.

7. The language of Schedule A.2 should be changed.

This condition reads as follows: "There will be no discharge allowed from the closed loop system other than to be used as recycled water within the enclosed system to be re-collected into the wastewater system." It specifically

requires the wastewater to be maintained within the closed loop wastewater system, not allowing it to be held otherwise in holding tanks, tanker trucks, or some other manner of holding tank. Therefore, this condition will remain.

8. Schedule B.1 should be amended to require more frequent equipment calibration.

DEQ typically requires verification of flow meter calibration at least annually. However, if constituents in CIT's wastewater affect the calibration based on annual verification, more frequent verification may be necessary. DEQ will address that need when it arises. For now, DEQ believes that verification of flow meter calibration should remain annually.

9. DEQ should clarify the requirement of Schedule D.2.

DEQ concurs and the condition was rewritten as follows:

> *"The wastewater from the clarifier must be internally recycled back into the system for dust extraction, misting, washdown, and deluge. Fogger systems are to use fresh water."*

10. DEQ should clarify that it will comply with the requirements of OAR 340-045-0055 if it reopens the permit.

The condition states that "The Department may reopen the permit, if necessary, to include new or revised discharge limitations, monitoring or reporting requirements, compliance conditions and schedules, and special conditions." Public notice and public participation requirements for permitting actions are contained in Oregon Administrative Rules (OAR). In accordance with OAR 340-045-0027, public notice and opportunity for public participation are not required for permit actions with low environmental and public health significance. On the other hand, permit actions with potentially high environmental and public health significance do require public notice and opportunity for public participation. DEQ will evaluate any modification in light of the QAR requirements. The reopener condition is standard to WPCF permits.

11. DEQ should commit to processing any transfer of the permit as a Category III action.

Permitting actions will be processed according to the rules outlined in OAR 340-045, which may or may not require a Category III action.

12. Ambre must allow inspection at all times.

This comment refers to Schedule F, Section C, Condition 1. Schedule F is not subject to editing, therefore the items in this section will not be revised. These conditions are standard to WPCF permits and include language regarding operation and maintenance of facilities, monitoring and record keeping, and reporting requirements.

13. Ambre should be required to retain records for ten years at the site.

This comment refers to Schedule F, Section C, Condition 4.

> *"The permittee must retain records of all monitoring and maintenance information, including all calibrations, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. The Department may extend this period at any time."*

DEQ knows of no extenuating circumstance that would necessitate a longer retention period.

14. The permit should require immediate reporting of noncompliance that endangers health or the environment.

Schedule F, Section D, Condition 4 meets this request. The condition is as follows:

"The permittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally (by telephone) within 24 hours from the time the permittee becomes aware of the circumstances, unless a shorter time is specified in the permit. During normal business hours, the Department's Regional office must be called. Outside of normal business hours, the Department must be contacted at 1-800-452-0311 (Oregon Emergency Response System)."

III. WATER QUALITY STORM WATER PERMIT COMMENTS

Columbia Riverkeeper

1. To the extent that Ambre revises its draft ESCP, we request that DEQ re-notice and re-open the public comment to provide the public an opportunity to comment on a complete ESCP for the Morrow Pacific Project.

DEQ is not obligated under Rule to re-post or re-notice revised Plan. DEQ appreciates comments that may have identified the need for added information to the ESCP. OAR 340-011-0330 gives any concerned party the right to review records at any time. Also, all revised permits and ESCP will be posted to the Coal Export Project page on the DEQ website.

2. The ESCP fails to address whether stormwater will discharge to the shallow underlying aquifer. Has Ambre provided DEQ with any analysis of whether stormwater will discharge to groundwater?

The permit is a National Pollutant Discharge Elimination System general permit for construction activities that may discharge to surface waters or conveyance systems leading to surface waters of the state. The permit ensures proper handling of pollutants and allows for infiltration of potentially turbid stormwater. DEQ does not anticipate groundwater contamination from construction discharge.

Stormwater Discharge General Permit	Comment	DEQ Response
Schedule A.7.a.i.	The company's Erosion and Sediment Control Plan (ESCP) "assume[s] 'dry weather' construction. Under Schedule A.7.a.i., Ambre's ESCP must describe Wet Weather BMPs. See Schedule A.7.a.i. ("Avoid or minimize excavation and bare ground activities during wet weather."). As noted above, Ambre's ESCP addresses exclusively dry weather conditions. Based on Ambre's proposed construction timeframe, however, the ESCP must include wet weather BMPs.	*The ESCP has been revised and no longer states "These erosion and sediment control plans assume 'dry weather' construction." The ESCP as designed meets the conditions of the permit and specific language under Schedule A.7.a.i.*
Schedule A.12.b.iv.2.	Overall, the ESCP fails to meet the minimum requirements of DEQ's 1200-C Permit. For example, the 1200-C Permit requires a "Narrative Site Description," which includes a "[p]roposed timetable indicating when each erosion and sediment control BMP is to be installed and the duration that it is to remain in place." 1200-C Permit at Schedule A.12.b.iv.2. The ESCP lacks this fundamental element	*The Plan includes an implementation schedule for BMP installation. This table is not complete as the timeline for construction is unknown. The Plan states "Detailed BMP implementation schedule will be provided prior to beginning of construction."*

Stormwater Discharge General Permit	Comment	DEQ Response
	of the ESCP.	
Schedule A.12.b.v.3.	Specifically, the ESCP fails to identify: "Areas used for the storage of soils and wastes[,]" required under Schedule A.12.b.v.3.g.	*A note has been added to Figure 5 of the Plan showing soil stockpile area, storage area and concrete equipment washout.*
Schedule A.12.b.v.	Specifically, the ESCP fails to identify: "Drainage patterns before and after finish grading," required under Schedule A.12.b.v.	*Figure 4, the existing site plan, and Figure 5, the proposed site plan, includes slope arrows, depressions and topographic contour lines showing drainage patterns pre and post construction.*
Schedule A.12.b.v.3.j.	Specifically, the ESCP fails to identify: "Temporary and permanent stormwater conveyance systems," required under Schedule A.12.b.v.3.j.	*Figure 5, the proposed site plan, includes bioswales. These retention areas will collect stormwater from roof drains on building 1. There will be a piped system to convey roof water to bioswales for retention and infiltration. During construction, runoff will be confined to site and accumulate in the existing depression or percolate into the ground.*
A.12.b.v.3.g.	Specifically, the ESCP fails to identify: "All erosion or sediment control measures or structures," required under Schedule A.12.b.v.3.g.	*The revised ESCP addressed the comments received during the extended public notice and meets the conditions of the permit.*

Alexandra Amonette

Stormwater Discharge General Permit	Comment	DEQ Response
Schedule A.12.v.2.	The drawings in the permit and map are not up-to-date. They do not show all of the roads and existing buildings located near the proposed facility. How are other industries in the vicinity supposed to know about the proposed construction site if the roads are not clearly identified? Have these companies even been notified about the Ambre proposed facility?	*The permit requires the site map to show sufficient roads and features for DEQ or Agent to locate and access the site. Figure 3 of the facility's ESCP clearly meets this condition for DEQ to locate the proposed development.* *The Morrow County Planning Director has approved the land use outright under Section 3.073 port industrial ordinance. DEQ held three public information meetings, although we did not directly notify any surrounding companies.*
Schedule A.12.b.iv.2.	Overall, the ESCP fails to meet the minimum requirements of DEQ's 1200-C Permit. For example, the 1200-C Permit requires a "Narrative Site Description," which includes a "[p]roposed timetable indicating when each erosion and sediment control BMP is to be installed and the duration that it is to remain in place." 1200-C	*The Plan includes an implementation schedule for BMP installation. This table is not complete as the timeline for construction is unknown. The Plan states: "Detailed BMP implementation schedule will be provided prior to beginning of construction."*

Stormwater Discharge General Permit	Comment	DEQ Response
	Permit at Schedule A.12.b.iv.2. The ESCP lacks this fundamental element of the ESCP.	
Schedule A.7.b.ii.	Based on recent experience with seeing topsoil excavated and dirt being shoveled at a huge construction site in Umatilla, I can attest to the fact that windblown dust from construction activities occurs even if a person is on the waterer truck and wetting the dirt frequently. The wind in this part of the world blows dust and dries out wetted soil very quickly (in the time of a half hour lunch break, for example). Since this site is so close to the river, there is a danger that dust will get into the water, cover plants, shallow water macroinvertebrates and get into the water column and mother macroinvertebrates through siltation. It can also blow a cross roads, pose a traffic hazard, cover vegetation, harm nesting birds, and affect other facilities located nearby.	*DEQ agrees that soils are prone to wind erosion at the proposed industrial port. Next to all disturbed areas adjacent to the river the ESCP requires installation of a sand fence and a silt fence. The permit conditions require the permittee to prevent sediments on public roads and use water or soil-binding agents or other dust control technique as need to avoid wind-blown soil. The Plan on Figure 5 includes the statement: "Lewis and Clark Drive and Dewey West Lane shall be cleared of significant windblown soils at the end of each workday."*

Dr. Theodora Tsongas

The ground water and drinking water aquifer for the City of Boardman is fed by the Columbia River. The Columbia River is also stated in the permit to be the "receiving water body" for any construction site runoff. This is unacceptable as any release can be a threat to the local limited and very fragile drinking water supply. Allowing percolation of site runoff into the ground is unacceptable for the same reason.

DEQ does not anticipate groundwater or drinking water contamination from construction runoff. The site must control solid waste and any hazardous materials through applicable Best Management Practices. These include: written spill prevention and response procedures, employee training on spill prevention and proper disposal procedures, spill kits in all vehicles, regular maintenance schedule for vehicles and machinery, material delivery and storage controls, signage and covered storage areas for waste supplies.

IV. AIR CONTAMINANT DISCHARGE PERMIT COMMENTS

Earthrise

1. The permit must be denied because the proposed facility will cause violations of the NO_x and $PM_{2.5}$ National Ambient Air Quality Standards (NAAQS).

DEQ disagrees that the facility addressed by the draft permit will cause a violation of any NAAQS. The permit review report includes an estimate of the projected emissions from the facility. The emission estimates for course and fine particulate matter are less than 1 ton per year. The facility for which a permit has been requested does not include activities that will emit other pollutants for which a NAAQS has been established. Based on the fine and course particulate matter emission estimates, air dispersion modeling is not required and it is not reasonable to assume that emissions less than 1 ton per year would cause a violation of the NAAQS. The emissions are primarily "fugitive" emissions generated by meteorological conditions that are the opposite of conditions that occur during poor air quality events (i.e., high winds versus stagnant air conditions).

2. DEQ cannot issue the ACDP because the facility is a federal major source that requires a permit.

DEQ disagrees that the facility being permitted is a federal major source. Given the location of the proposed facility and the type of source, there would have to be potential emissions of 250 tons per year of at least one regulated pollutant for the source to be considered a federal major source (see definition of "federal major source" in OAR 340-200-0020). The permit review report includes an estimate of the projected emissions from the facility. The emission estimates for course and fine particulate matter are less than 1 ton per year. The facility does not include activities that will emit other regulated pollutants.
The commenter argues that particulate matter emissions have been underestimated because incorrect wind data and assumptions were used in the calculations. DEQ disagrees. The basis for the emission estimates are provided in the review report. DEQ used meteorological data from 1995 because it is the best available data for the site. The data was collected using DEQ approved monitoring procedures for permitting the PGE Coyote Springs plant which is very close to the proposed facility. Other data sets were considered, but were collected from sites farther from the the proposed site and may not have been collected in accordance with DEQ procedures.
DEQ used the average 24-hour maximum wind speed to calculate the annual emissions because the coal at the site will be subject to the average and not the maximum wind speed during the course of a year. Not all of the 8.8 million tons of coal will be on site during maximum wind conditions. Wind can generate fugitive emissions when it comes in contact with the coal. Sometimes the winds will be high and sometimes there will be no wind at all. The amount of coal exposed to the wind at any given time depends on the activity. Most of the activities are not affected by wind because they occur inside enclosures. The barge loading operation and open railcars are only partially enclosed. For these emission sources, DEQ used the 24-hour maximum wind speed has a conservative approach to estimating the emissions. When considering the total amount of coal handled throughout the year, it is conservative to use the average of the maximum 24-hour wind speeds to estimate the emissions.

For the unloaded railcars, DEQ calculated the emissions based on one wind erosion event per railcar using the average of the 24-hour maximum wind speeds. In addition, the emission factor is only applied to the surface layer of the coal in the coal cars that will be exposed to the wind. Although the loading profiles and topping agents applied when the coal is loaded into the railcars will minimize emissions at the site, it is possible that some loose/fine coal will accumulate at the surface due to the eddy effects of the wind passing over the railcars (i.e., the transit is equivalent to one wind disturbance). While in transit, the winds are essentially in one direction. When the railcars are on site, winds from other directions will blow across the surface of the railcars potentially picking up material built up in transit. DEQ acknowledges that this is a conservatively high estimate, but at the same time, contends that it is not reasonable to conclude that there will be zero emissions from the railcars while on site.

The commenter argues that engine emissions from the tugboats and locomotives used to transport coal to and from the facility should be included in the source's potential emissions for purposes of determining whether it is a federal major source. As stated in the review report, the engine emissions are secondary emissions that do not count

towards the federal major source determination. The definitions of a "federal major source" and "secondary emissions" are contained in OAR 340-200-0020.
Since the source is not a federal major source, the prevention of significant deterioration (PSD) requirements contained in OAR 340-224-0070 do not apply to this permitting action. The requirement for establishing Plant Site Emission Limits (PSELs) for minor sources in OAR 340, division 222 apply to this source.

3. The permit does not include all necessary conditions and must be revised to be practically enforceable. The permit should include monitoring and recordingkeeping requirements as prescribed in the Oregon Title V Operating Permit program.

DEQ does not agree that the monitoring requirements of the nationally developed Title V permitting program for major sources should be applied to the state's ACDP program for minor sources. The general comments regarding terms and phrases used in the permit have been considered and some revisions have been made to the permit to strengthen the enforceability of the permit. Provided below are responses to the comments for specific conditions in the permit:

Draft ACDP Condition #	Comment	DEQ Response
3.1.a	The ACDP says that the permittee must monitor the fugitive emission conditions outlined in section 2.3. The ACDP fails to specify information necessary to carry out this monitoring. The ACDP does not indicate when, what or how monitoring should occur. The ACDP must include these monitoring requirements so that it can be practically enforceable.	*Condition 5.1 requires an initial performance test. Condition 5.2 requires periodic monitoring. Condition 3.1.a requires the permittee to develop additional monitoring for the activities identified in condition 2.3 as part of the work practices plan.*
5.2.b	The ACDP requires that at least one of the three required observation periods be done while the chute is retracted, but does not require one of the tests to be completed while the chute is down. It is important to ensure that there are no excess emissions occurring when the chute is up and down. For this reason, the ACDP should require at least one test when the chute is retracted and one test when the chute is down.	*The testing must be performed while coal is being loaded into the barge. In order to load coal into the barge, the chute must be in the lowered position. DEQ is requiring that one of the observations be made when the chute is retracted to ensure that there is not any residual coal being emitted during the movement of the chute.*
5.3	The ACDP requires daily observations and recordings of the scrubber system flow rates and pressure readings during active operations. However, the ACDP does not state limits for the flow rates and pressure. Simply observing and recording what the rates are will not ensure that the system is operating within the permitted parameters.	*Condition 3.1.f requires the permittee to establish management and operating procedures for ensuring that all emissions originating within a storage building exit though a properly functioning wet scrubber system. In response to this comment DEQ has revised condition 3.1.e to add minimum scrubber parameters that must be addressed in the Best Management Practices Plan.*
5.2	Condition 5.2 fails to specify what test must be used to monitor visible emissions. The EPA requires a permit to specify what type of test should be used for monitoring. Though section 5.2(a) hints that the appropriate test may be EPA Method 9, the ACDP must clearly state whether this test or some other test is required. However, Method 9 would not be effective.	*A test method is not specified for the surveys required by this monitoring condition because the observer is not required to quantify the visible emissions nor document the duration of the visible emissions. The condition requires corrective action if there are any visible emissions observed for more than 30 seconds during the observation period. The condition*

Draft ACDP Condition #	Comment	DEQ Response
	To begin with Method 9 does not work at night. Thus, approximately half the time, the source will be unmonitored. But worse, Method 9 does not work with it is raining or snowing. Thus, monitoring using Method 9 would result in very little monitoring and thus lack a practical enforceability.	*does require the observer to have a basic understanding of how visible emissions should be observed as provided in EPA Method 9. This is monitoring that must be conducted during "active operations". DEQ has added a provision that the surveys must be conducted during daylight hours.* *DEQ acknowledges that visible emissions monitoring will not be conducted during the night time hours, but the conditions that cause fugitive emissions (i.e., high winds) generally occur during the daytime so monitoring at night is not as important as monitoring during the daylight hours.*
5.1.c	Section 5.1(c) requires that all tests in the section must be performed when coal is being handled within the emissions source. The ACDP fails to specify how coal must be handled during a test. The permittee could thus choose to do its tests only during the lightest days of the week, which would lead to inaccurate information. The ACDP should include a requirement that tests conducted during times of operation with maximum capacity. Similarly, section 5.2(b) requires that test be done while coal is being loaded into a barge without specifying how much coal should be loaded for a test. The ACDP should specify that these tests should be conducted during times of operation with maximum capacity.	*DEQ does not believe it is necessary to specify an operating rate for when monitoring should be conducted. Movement of coal at any rate can generate emissions, but it is most likely that the rate of coal movement will not vary significantly. It is essentially an on or off operation. However, DEQ's Source Sampling Manual requires that tests be performed while the source is operating at normal production rates. (DEQ 1992 Source Sampling Manual section 2.2.c)*
General monitoring comments	A practically enforceable permit must include a requirement that a source be constructed to accommodate the required monitoring. The ACDP does not include such a requirement for any of its monitoring requirements. The ACDP should include this requirement.	*DEQ does not agree that the permit should include special conditions for accommodating the monitoring required by the permit. Visible emissions can be observed from just about any location provided the observer has the sun at their back and can see the emissions activity. In addition, monitoring wet scrubber parameters can be done remotely using electronic equipment.*
	The ACDP fails to include any requirement for regulatory personnel to witness monitoring. DEQ claims its personnel will witness monitoring. The ACDP must include requirements for regulatory personnel to witness monitoring.	*Condition 5.1 requires notification of the initial compliance test. DEQ will observe the test if personnel are available. DEQ tries to observe as many compliance source test as possible, but due to limited resources, it is not possible to observe all tests. As stated in the review report DEQ has committed to inspecting this facility at least twice in the first year of operation. During the inspection, DEQ will review the monitoring data and procedures and witness monitoring if performed during the inspection.*

Draft ACDP Condition #	Comment	DEQ Response
General recordkeeping comment	A critical aspect of a practically enforceable permit is that the requirement may be verified. Proper recordkeeping in accordance with ACDP conditions allows DEQ and the public to verify that monitoring requirements and emission limitations are being complied with. The ACDP fails to require any recordkeeping for 5.1(b). The ACDP should require recordkeeping of the monitoring in 5.1(b) so that these requirements can be verified and therefore practically enforceable.	*Condition 5.1.d requires the permittee to submit a test report to DEQ for the testing required by conditions 5.1.a and 5.1.b. Once the report is received by DEQ, it is a document that is available to the public. Depending on the size of report, DEQ can make the report available electronically, or anyone can visit the DEQ office to review the report and obtain a copy. Anyone that would like to obtain a copy of the report must submit a records request to DEQ.*
2.3(b)	Section 2.3(b) requires fugitive dust be "adequately" controlled at all times, but fails to define adequate. "Adequateness" is completely subjective and therefore it cannot be practically enforced. The ACDP must define what adequate means in the context of controlling fugitive dust emissions.	*Condition 5.2 is the monitoring for condition 2.3.b. As such, "adequate" is either "no visible emissions" or visible emissions that have been corrected right away. Ongoing visible emissions are not "adequate", which is why condition 5.2.a.vi and 5.2.b.vi require the permittee to notify DEQ of visible emissions that continue for more than 24 hours.*
3.1(c) and (j)	In section 3.1(c) and (j), the ACDP requires "routine" inspections but fails to define routine. Routine could mean every day or every month, or something in between. Without definition, the permittee cannot know how frequent their inspections must be, and the inspections – performed at some unknown interval – may not prevent the migration of coal materials offsite. The ACDP must define the frequency of "routine".	*The permittee is required to submit the Best Management Practices Plan before beginning operations. The permittee must identify how often they will do the inspections based on their knowledge of the process and design. Once the facility begins operating, the periodic monitoring required by condition 5.2 will be used to determine whether the inspection frequency is sufficient. Condition 3.1.k requires an annual review and update of the best management practices plan. DEQ will review the plan with the permittee during inspections.*
6.1(h)	In section 6.1(h), the ACDP requires the permittee to submit a plan as "expeditiously as possible" if certain preventative measures do not prevent fugitive emissions. This phrase is too vague to be practically enforceable. If the permittee determines that the soonest the plan can be submitted is six months from the finding of a problem because the facility fails to employ sufficient or qualified workers, the only way DEQ could enforce this requirement is through costly litigation over what as "expeditiously as possible" means. The ACDP must give the permittee a clear deadline for the submission of the plan.	*DEQ agrees, but it is not possible to determine a "clear deadline" for implementing the plan because it will depend on the plan. DEQ has added a provision for implementing the plan "in accordance with a schedule approved by DEQ".*
8.1(b)	Section 8.1(b), requires the permittee to notify DEQ during non-business hours if excess emissions are of "a nature that could endanger public health." The permittee cannot be expected to define what could endanger the public health. If the permittee wrongly	*This provision is taken directly from DEQ's excess emissions rules - OAR 340-214-0330(1)(b).*

Draft ACDP Condition #	Comment	DEQ Response
	determines that an emission does not endanger the public health, the public health will be endangered until DEQ business hours resume. For this reason, the ACDP must clearly define when excess emissions would be of a nature that could endanger public health so that the permittee is clearly aware of when it must report excess emissions.	

4. Ambre must not construct the Port Westward portion of the project without an ACDP.

DEQ acknowledges this comment, but it does not relate to the draft permit for the Coyote Island Terminal.

Columbia Riverkeeper

These comments relate to the water quality permits. Please refer to Section II of this document.

Sierra Club

1. The permit should be denied because the facility will cause violations of the $PM_{2.5}$ and NO_2 ambient air quality standards.

See response to similar comment provided by Earthrise.

2. The proposed facility is a "major source".

See response to similar comment provided by Earthrise.

3. The permit lacks minimum enforceability requirements.

See response to similar comment provided by Earthrise.

4. The Port Westward facility must not be constructed without an ACDP.

See response to similar comment provided by Earthrise.

Oregon Physicians for Social Responsibility (OPSR) and Theodora Tsongas, PhD, MS

1. Position paper on coal export facilities.

DEQ acknowledges the position of OPSR.

2. DEQ should require a Health Impact Assessment.

This is not a requirement of the ACDP program for minor sources.

3. DEQ should require an Environmental Impact Statement.

This is not a requirement of the ACDP program for minor sources.

4. OPSR incorporated by reference the comments submitted by OPSR on December 20, 2012, Columbia Riverkeeper on August 9, 2013, Sierra Club on August 12, 2013, and Earthrise on August 12, 2013.

See response to those comments.

5. The emission factor calculations based on average constant wind speed are inadequate.

See response to similar comments provided by Earthrise.

6. The wind speed collection data is nearly 20 years old.

See response to similar comment by Earthrise.

7. Comments on specific permit conditions:

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2.3.a	Revise condition to read as follows: Treat <u>all areas</u> of plant site….	*This condition is included to specifically address dust that may be generated from vehicles traveling on paved and unpaved roads.*
2.3.e	Add: "….and report spill or upset to DEQ immediately. The permittee should also immediately notify the Oregon Health Authority, the City of Boardman, and residents of the area.	*This condition addresses spills that occur on site. The permit requires the permittee to clean up the spills immediately to prevent the material from migrating offsite. Spills are not necessarily excess emissions. If they become excess emissions, then condition 8.1 requires the permittee to notify DEQ within 1 hour. There is no regulatory requirement for the permittee or DEQ to notify the public of an excess emission unless the excess emission is of a nature that could endanger public health (see condition 8.1.b).*
2.4	Particulate matter fallout: This section is inadequately worded to provide for control or prevention of contamination. The permit appears to use only visible emissions to monitor for particulate matter that is not visible. This section is completely inadequate to prevent exposure to $PM_{2.5}$ and to prevent adverse health impacts.	*This requirement is based on OAR 340-208-0450. Large particles are not generally a health concern, but they could cause a nuisance. The limits for total particulate matter, including fine particulate matter, are provided in condition 2.1 and 2.2 (20% opacity and 0.1 gr/dscf). The monitoring for these conditions are conditions 5.1 and 5.2, as wells as condition 3.1, 5.3, 5.4, and 6.1. Visible emissions are a good indicator of fine PM emissions because smaller particles tend to cause more opacity: Particles with diameters approximately equal to the wavelength of visible light (0.4 to 0.7 µm) have the greatest scattering effect and cause the highest opacity. [EPA Visible Emission Field Manual – EPA 340/1-92-004, December 1993]*
3.1.e	Line 4: Correct typographical error – "though" should be "through"	*DEQ agrees.*
3.1.j	Preventing migration of coal materials offsite should not be limited to "in or near the Columbia River, and onto public road system". Migration of coal and coal dust anywhere	*DEQ agrees.*

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	offsite should be prevented.	
4.2	DEQ should determine what the annual period is, rather than letting the permittee determine the 12-month period.	*Compliance with the PSEL must be demonstrated for each 12-consecutive month period. The word "any" has been changed to "each".*
5.2.a and b	The person conducting the survey should be EPA Method 9 certified if EPA Method 9 is to be used.	*The corrective action criteria is "any" visible emissions. The observer is not required to quantify the visible emissions. It is not necessary for a person to be be certified to observe visible emissions.*
5.5	How is the 12-consecutive calendar month period defined? Rolling or otherwise? This should be made explicit in the test of the permit.	*See response to comment for condition 4.2.*
5.6	Emission factors: Does the DEQ approval procedure(s) include public notification and comment? It should specifically require these procedures.	*No, but the permit must be renewed every 5 years. When the permit is renewed, any factors that were approved in accordance with condition 5.6 would be included in the permit renewal and the pubic would have the opportunity to comment on the changes to the permit.*
6.0	Special conditions: If the permit and DEQ can require topping agent on coal cars, why can't the permit and agency require that rail cars be covered?	*At this time, DEQ does not know if the loading procedures will be sufficient to control fugitive emissions when the railcars are on site. The permittee has stated that the loading procedures and topping agents will be sufficient. DEQ requires monitoring. There may not be an issue, so DEQ is not requiring additional measures up front. If there is an issue, then additional measures for preventing fugitive emissions will be required.*
6.1.a	The date for the facility to notify DEQ of the date the facility starts operating should be changed to "no less than 7 days before it starts operating".	*This is a standard requirement for new sources. DEQ sees no reason to change the requirement for this particular facility. DEQ requires notification after beginning operations rather than in advance of beginning operations because schedules can change. If the notification occurs after startup, it is certain that the facility has begun operations.*
6.1.d	The ingredients of the required topping agent must be made known to the public and DEQ, for any topping agent that is applied.	*DEQ does not believe it is necessary to require public disclosure of each material used on or off of the site. There are other agencies and programs that regulate material usage and documentation (e.g., OSHA). If the information were necessary for calculating emissions, the permittee would be required maintain records of the material data sheets, but that is not the case for this facility. The amount of topping agent applied to the coal is a very small percentage of the total coal handled and the potential emissions from the*

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		facility.
6.1.e	Change to: "…using loading profiles that are designed and demonstrated to prevent emissions during transit."	*DEQ has no control over the development of the loading procedures. However, DEQ is aware that these procedures are available and implemented. DEQ is requiring the permittee to only handle coal that has been loaded following the procedures.*
6.1	If DEQ can require special conditions for the coal cars, DEQ must also require special conditions for the diesel locomotives moving those cars, including but not limited to requiring them to use only clean diesel fuel.	*When the loaded railcars are on-site, they are considered storage piles. DEQ regulates material storage piles at stationary sources. Locomotives bring the railcars to the site, but once on site, the railcars are moved through the unloading building with an electric powered positioning system. DEQ does not regulate mobile locomotive/engine sources under the ACDP program.*
7.2	Excess emissions: Ongoing excess emissions should require permittee to cease operations immediately. (Reference 3.a in Water Pollution Control Facilities permit.)	*The permit condition includes reference to the regulatory authority that is the basis of the condition. Requiring the source to cease operations immediately would conflict with the rule.*
7.4	Retention of Records: Records shall be maintained on site for a period of 10 years not 2 years.	*There is no regulatory authority for requiring a source to maintain records for 10 years. The 2 year record retention requirement is consistent with other ACDPs issued by DEQ. There is no basis for treating this facility differently than other facilities.*
8.1	Recordkeeping must include excess emissions inside and outside of the facility.	*The permittee has no control over what happens outside of the facility.*
8.2.b	Annual certificate must include all ingredients of all topping agents used.	*DEQ does not agree. Topping agents are applied offsite. If the topping agents are applied on site, DEQ will require the permittee to maintain records of the material data sheets associated with the topping agents. Considering the amount of coal handled and the estimated coal emissions, the amount of topping agent emitted from the facility will be negligible if it could even be detected..*
8.2.b.iii	No railcars shall be loaded to exceed approved heights & weights.	*The permit requires the permittee certify that the railcars have been loaded to the proper heights and profiles to minimize emissions while the railcars are on site. The weight should not be a factor for whether fugitive dust will be generated on site.*
8.2.e	Summary of complaints should include those applying to conditions inside and outside the terminal.	*The permit condition does not put restrictions on what conditions the complaints apply to other than being related to air quality.*
8.4	Permittee must notify DEQ in writing using Department "Transfer Application" form at least 60 days prior to legal change of name or sale or exchange of activity.	*DEQ disagrees. Transfers of ownership can be complicated legal actions that are not fully realized until completed. DEQ requires the notification after the transfer is completed to avoid having to change the permit more than*

Draft ACDP Condition #	Comment	DEQ Response
		once.
8.5	The permit must explicitly specify the timeframe for filing the "Notice of Intent to Construct" and for obtaining DEQ approval for same.	*The Notice of Construction rules (OAR 340-210-0205 through 340-210-0280) specify the types of changes and procedures for approval. In all cases, the change must be approved prior to beginning construction. For minor changes (type 1 and 2 changes), the rules allow for default approvals, but the NC must be submitted prior to the default periods.*
11.5	Department access: Permittee MUST allow DEQ's representatives access at all times. (Definition of the word "reasonable" is subjective and ambiguous.) Furthermore, the number of times the facility will be inspected by DEQ personnel should be at least six (6) times within the first year and twice per year thereafter, to ensure compliance with permit conditions. The permit should state that these inspections will be unannounced, to prevent the company from preparing for them by 'cleaning up' or changing the process before an inspection.	*This is a general condition included in all ACDPs issued by DEQ. There is no basis for revising it for this particular source. DEQ typically inspects sources operating under a Standard ACDP at least once every five years, but there is no specific requirement for the frequency of inspections. Due to the interest in this facility, DEQ has committed to two inspections in the first year of operation. DEQ may or may not announce when the inspections will be conducted. It will be important to conduct the inspection when coal is being handled at the facility.*

8. The following additional concerns should be addressed in the permit:
   - Noncompliance and notification procedures in the air quality permit should be at least as protective as those described in Section 3 of the draft Water Pollution Control Facilities Permit.

   DEQ acknowledges that each program has slightly different requirements based on the regulations.

   - No public notification of violations is included in the air permit.

   DEQ issues news releases when enforcement actions are completed.

   - What contingency plans are in effect for power outages?

   The applicant has stated that necessary emergency services and equipment will be provided from off-site sources.

   - What kinds of fire suppression systems are included in the facility design?

   The applicant has stated that necessary emergency services and equipment will be provided from off-site sources.

   - Has this company prepared and submitted an emergency plan in the event of a fire, earthquake, wind storm, flooding, or other emergency?

   Emergency plans are not a requirement of the permitting program. If excess emissions occur as a result of an emergency DEQ would evaluate the appropriate enforcement action, if any, under the excess emission rules in OAR 340-214-0300 through 340-214-0360.

- What kinds of process safety management analyses have been done to prevent hazardous exposure to employees?

Worker safety is regulated by other agencies and programs.

- What kinds of contingency plans have been made for increases or decreases in the amount of coal being transferred at this facility that may affect the entire transportation line?

The permit does not limit the amount of coal that can be processed. The permit is written for a facility that is designed to handle 8.8 million tons of coal per year. If the permittee can accommodate more coal within the design of the facility, they may do so as long as the emissions do not exceed the limits in the permit. If the permittee needs to add additional equipment, such as conveyors, storage buildings, unloading facilities, etc., the permittee would have to submit a notice of intent to construct for approval by DEQ before the adding or modifying equipment.

- Be explicit regarding the potential impacts of this permit on environmental justice communities and/or sovereign nations.

The emissions from this facility are below the levels that would require an air quality impact analysis. DEQ is not responsible for approving where facilities are located. With respect to the ACDP program, DEQ is responsible for ensuring that facilities will comply with all state and federal air quality regulations.

- We have further concerns that DEQ may not have access to the taped comments of those testifying in Conference Room C125 at the Convention Center during the August public hearings. How does DEQ intend to rectify or mitigate that loss of a substantive component of public comment?

DEQ notified the people that attended the hearings where the tapes were lost and asked them to re-submit their comments by phone. The phone calls were recorded and entered into the record.

The Morrow Pacific Project

1. DEQ should allow CIT to develop a Best Management Practices Plan to minimize fugitive emissions. Some of the requirements for a Best Management Project Plan are overly restrictive.
   - The permittee will have no control over train operations beyond the unloading positioning system.

DEQ agrees and has removed reference to train operations.

- It is excessive to restrict the operation of the Resitain valve and require it to remain shut except when coal is actively loaded. The valve may need to be opened for a number of reasons, including routine maintenance.

DEQ agrees and has added an exception for maintenance and repair.

2. Secondary emissions should not be included for determining whether the source is a "federal major source" for purposes of the PSD program.

DEQ agrees.

3. Air dispersion modeling is not required because the potential emissions from the facility are well below the significant emission rates.

DEQ agrees.

4. The monitoring requirements provided in the draft permit are not consistent with the requirements included in permits for other fugitive emission sources (e..g., rock crushers, seed cleaners, grain elevators, etc.).

DEQ has structured the monitoring requirement around the unique design of the facility.

5. The frequency of the monitoring should be reduced after a demonstrated track record of compliance.
   - The monitoring should be reduced to quarterly.
   - Facility inspections for leaks should be weekly rather than requiring several hours of visible observations.

DEQ will review the monitoring requirements when the permit is up for renewal.

6. DEQ emissions estimates are based on erroneous and incorrect assumptions.

DEQ disagrees. However, DEQ acknowledges that the emission estimates may be conservative on the high side.

7. The average wind speed, not the 24-hour worst case wind speed should be used to calculate emissions. Average wind speeds were used to calculate the emissions from the PGE Boardman facility and the Tansalta Centralia power plant.

DEQ disagrees. See response to Earthrise comments.

8. The barge design was not taken into consideration for estimating the emissions. The point at which coal will come out of the chute will be inside the hull of the barge so that the coal coming out of the chute will not be exposed to wind.

DEQ disagrees. The barge hatch must be open to load coal. Wind blowing across the open hatch can generate turbulence within the barge hold and potential emissions of the smaller size coal particles.

9. There should not be any emissions from the coal cars prior to the unloading operations because the coal will not be disturbed and a surfactant will be applied after the coal is loaded into the coal cars. (see AP-42, 13.2.5).

DEQ is not certain that this is true. There is the potential that some fine material may build up on the surface of the coal while in transit due to the eddy effects of wind blowing over the coal. The effects of wind are generally in one direction while in transit and the cars are being jostled on the tracks. Once the railcars get on site, they will be subject to winds from different directions, but probably will not be "disturbed" any further until they are unloaded. DEQ is concerned that fine/loose material accumulated on the surface will be emitted from the facility during high wind conditions.

10. Oregon's rules do not require a permit for coal transloading facilities because they are not a listed category. In addition, the design of the facility (e.g., building enclosures) should not be considered controls when determining "uncontrolled" emissions under category 85.

DEQ has determined that the conveyor enclosures and storage buildings are "controls" for the purpose of determining "uncontrolled" emissions under category 85. The enclosures are not necessarily control devices, but they are intended to prevent (i.e., control) fugitive emissions.

Golder Associates

Although modeling is not required for the proposed facility, Golder Associates provided a dispersion modeling assessment in response to modeling performed by AMI Environmental for Earthrise. Golder Associates concluded that the modeling performed by AMI was not correct so they provided a corrected version of the modeling to be included in the public record.

DEQ acknowledges receipt of Golder Associates' review and critique of the AMI Environmental modeling report, but has no comment, except to re-iterate that modeling is not required for the permit action. As with all comments received, Golder Associates' review and critique will be maintained in the permit record.

James D. Chase

Draft ACDP Condition #	Comment	DEQ Response
2.1	The phrase "must not equal or exceed… in any one hour" is open ended. How long can the limit be exceeded and what happens if the limit is exceeded.	*The emissions cannot equal or exceed 20% opacity for more than 3 minutes in any hour. If the limit is exceeded, it is a violation that is subject to enforcement action in accordance with OAR 340-214-0300 through 340-214-0360 and OAR 340, Division 12.*
2.3.b	The term "adequately" does not define the problem or a limit. Options as to what is adequate will vary.	*Condition 5.2 is the monitoring for condition 2.3.b. As such, "adequate" is either "no visible emissions" or visible emissions that have been corrected right away. Ongoing visible emissions are not "adequate", which is why condition 5.2.a.vi and 5.2.b.vi require the permittee to notify DEQ of visible emissions that continue for more than 24 hours.*
2.3.e	This language allows the permittee to continue spills and fugitive particulate emission while attempting to cleanup – which greatly reduces the urgency to correct the fault.	*This is a good housekeeping requirement that can be evaluated at any time by DEQ during an unannounced inspection. Otherwise, the routine monitoring required by condition 5.2 will determine whether spills are being addressed. Not all spills result in fugitive emissions.*
2.4	The terms "sufficient duration or quantity" and "observable" are imprecise and should be defined in quantifiable terms.	*This condition is based on OAR 340-208-0450. DEQ agrees that the regulation is difficult to implement because of the undefined terms, but to define the terms in this permit could change the meaning of the rule. DEQ has successfully used this requirement to work with companies to resolve some issues.*
2.5	The term "nuisance" is vague and subject to individual interpretation. Needs to be defined in quantifiable terms.	*This condition is based on OAR 340-208-0300. DEQ agrees that there is a subjective element to the regulation.*
3.1	This says only that the Best Management Practices Plan will be reviewed for "completeness". What does that mean? Shouldn't DEQ at least attempt to judge the effectiveness of such a plan? Also, the term "reasonable measures" is subject to individual interpretation and seems contradictory to the concept of "Best Management Practices". The permit as written fails to specify that, or when such a plan must be place in force – only that the plan need be submitted.	*DEQ is relying on the operators of the facility to develop a site specific plan that addresses the activities listed in the condition. Whether or not the plan is effective will be determined by the testing and monitoring required in conditions 5.1 through 5.4, 6.1.g., and 6.1. The permittee is also required to review and update the plan every year. DEQ will go over the plan and discuss its effectiveness during inspections.*
3.1.b and d	"Minimize" is imprecise and subject to individual interpretation. Needs to be defined in quantifiable terms.	*1. The word "minimize" has been removed from Condition 3.1.b. The word is retained in Condition 3.1.d because the unloading building is enclosed, but not "totally" enclosed.*

Draft ACDP Condition #	Comment	DEQ Response
3.1.e	After "…system" add "of adequate capacity".	*DEQ added provisions for identifying scrubber parameter ranges for verifying that the equipment is being operated properly.*
3.1.f and h	"effective" is imprecise and subject to individual interpretation. Needs to be defined in quantifiable terms.	*The monitoring in condition 5.2 will be used to determine whether the best management practices are effective. In addition, DEQ will review complaints.*
5.2.a.v. and 5.2.b	This language essentially says that the permittee may knowingly continue operation in excess of the prescribed emissions limit indefinitely as long as the DEQ is notified within 48 hours and some sort of corrective action is being attempted.	*The permit language says that the permittee must take corrective action if there are any visible emissions. The actual emission limit is 20% opacity. If the opacity limit is exceeded. it is a violation subject to DEQ enforcement.*
6.1.d and e	How does the permittee know that a topping agent has been applied and that the cars had been loaded using the prescribed loading profiles?	*DEQ has added a condition to the recordkeeping section of the permit requiring the permittee to maintain records of coal shipments, including how the coal was loaded and the topping agents applied during loading.*
6.1.h	The language permits continuing operation when knowingly exceeding standards and using ineffective measure.	*This condition requires the permittee to develop a plan if required by DEQ based on monitoring data and complaints. It does not authorize continued operation if the permittee is exceeding the standard provided in condition 2.1 (20% opacity). Monitoring conditions 5.2.a.v and 5.2.b.v require the permittee to conduct a Method 9 test to determine compliance with the opacity limit in condition 2.1 if the visible emissions/corrective actions continue for more than 24 hours.*
7.2	Permittee is allowed to continue operations while exceeding limits for 48 hours. Permittee should be required to cease operations immediately when an excess emission occurs.	*This provision is based on OAR 340-214-0330(4). DEQ does not have the authority to change the regulation within a specific permit.*
8.2.b.ii	The identification of the topping agents should include a full chemical description, and this information should be disclosed to the public.	*DEQ does not agree. Topping agents are applied offsite. If the topping agents are applied on site, DEQ will require the permittee to maintain records of the material data sheets associated with the topping agents. Considering the amount of coal handled and the estimated coal emissions, the amount of topping agent emitted from the facility will be negligible if it could even be detected..*
Review report 22.c	The permit requires that a best work practices plan be developed, but states nothing about requiring its implementation.	*Permit condition 3.1 has been revised to include a requirement for implementing the plan.*
	The term "minimize emissions to the extent practicable" is imprecise and subject to individual interpretation.	*The permit condition requires that the plan identify "reasonable measures" for minimizing emissions and goes on to list what reasonable measure should be addressed in the plan, at a minimum. The plan can be reviewed and updated, but it must at least address the items listed in permit condition 3.1.*

Draft ACDP Condition #	Comment	DEQ Response
	What is the meaning of "review for completeness"? Isn't the goal to judge the effectiveness of the plan?	*DEQ will review the plan to determine whether the "reasonable measures" provided in the permit have been addressed in the plan.*
Review report 27.a	If the topping agents applied at the point of loading coal into the railcars and the loading profiles are not effective for controlling fugitive emissions from the railcars when they are on the site of the permitted facility, the permit should require that operations be ceased immediately until more effective measures can be implemented.	*DEQ does not agree because the fugitive emissions may not be causing a violation of the opacity standard.*
Review report 30.a	Requiring only that "corrective action" be taken is open ended and does not require that the fault truly be corrected.	*If, upon reviewing the monitoring data, DEQ determines that the same problems keep occurring, DEQ may require additional operation and maintenance requirements in accordance with OAR 340-226-0120.*
General comment	The permit does not have a requirement that the permittee demonstrate sufficient fiscal resources for remediation of a significant spill, fire, or other major incident.	*The permittee is responsible for complying with the terms of the permit. DEQ can only include requirements in permit that are based on regulations. DEQ is not aware of a regulation authorizing DEQ to include the requirement proposed by the commenter.*

Robert Innes

Draft ACDP Condition #	Comment	DEQ Response
2.3	This condition should include a requirement for washing the railcars after unloading.	*DEQ considered this, but determined that it would have more negative effects than positive effects. Although it might help to prevent fugitive dust emissions, it would generate waste water. If the railcars are a source of fugitive emissions, DEQ may require additional operation and maintenance requirements in accordance with OAR 340-226-0120.*
3.1	The public should be provided an opportunity to review and comment on the best management practices plan.	*The public may request a copy of the plan or visit the DEQ offices to review the plan. DEQ will not seek public input on the plan, but the public may comment on the permit and the plan when the permit is renewed in five years.*
	Replacing "reasonable" with "most effective available" ensures that the permittee will not discount measure simply based on cost.	*DEQ does not agree that a minor source of emissions should be held to a "most effective available" criteria.*
3.1.j	Routine inspections should include sampling of residues on pave road surfaces to determine PM deposition. In addition to serving as an indicator that fugitive coal dust is escaping into the atmosphere, such sampling provides warning of potentially dangerous road conditions in wet weather. Wet coal dust can result in dangerously slippery road surfaces.	*DEQ does not agree that these detailed measurements are necessary. Coal is a pretty obvious substance*

Draft ACDP Condition #	Comment	DEQ Response
3.1.l	In addition to sub-heading a-k, the paragraph should require that the Best Management Practices plan include a sub-heading "I": "Management and operations procedures to ensure that untreated dust-bearing air flows do not escape from barges as coal being poured into the barge displaces air with the cargo holds of the barges.	*DEQ does not agree that this is necessary considering the monitoring required by condition 5.2.b.*
	Sub-headings h and I deal with the retractable telescoping loading chute and the resitain valve assembly to control PM emissions. None of the existing sub-headings deal with how air displace by coal flowing into holds will excape from the holds. Visual observations and air sampling should be performed on the deck of the barge or on the dock to which the barge is tied during the coal loading process in order to detect escaping dust-bearing air flows.	*Condition 5.2.b requires the permittee to periodically monitor for visible emissions escaping from the barges during the coal loading operations.*
5.1	Air tightness of barges during loading should be tested during the first 30 days of terminal operation. Locations tested should include the part of the barge being loaded or of the adjacent dock furthest away from the active telescoping loading chute. If the barges are not air tight, the volume of PM escaping during and immediately after loading needs to be measured to understand the full scope of contaminant discharge associated with Coyote Island coal transfer operations.	*The permittee is required to observe the entire loading operation during the initial performance test.*
5.3	Rather than once a day, wet scrubber system flow rates and pressure readings should be performed once per active work shift. Variances in work performance from shift to shift are likely to affect flow rates and pressures.	*DEQ disagrees. Daily is sufficient for these types of control devices, which do not vary significantly over short periods of time.*
6.1.d	Revise text to indicate that "The facility must only accept and transfer coal that has been shown by railroad monitoring near the coal source to suppress at least 90 percent of the fugitive coal dust that would otherwise be emitted." Usage of 90-percent effective standard would force shippers and topping suppliers to improve n the 85-percent effectiveness that was demonstrated by BNSF testing. Accumulation of fugitive dust over time can lead to serious environmental degradation, and for that reason, measures such as topping agents must be as close to 100-percent as possible. DEQ should mandate that shoppers identify and apply increasingly effective measure to prevent fugitive coal dust.	*DEQ is concerned with the effectiveness of the topping agent while in transit, but its effectiveness for minimizing emission while in transit is beyond DEQ's authority. However, DEQ does have the authority to evaluate the effectiveness of the topping emissions for minimizing emissions when the railcars are on site. The monitoring in the permit will be used to determine whether additional measures are necessary to minimize fugitive dust emissions from the railcars while on site.*

Draft ACDP Condition #	Comment	DEQ Response
6.1.f	Add "Permittee must advise DEQ of the chemical composition and the quantity of toppings applied." PM escaping from topped cards may bear traces of the chemicals used as topping agents. Knowing the chemical composition of the topping agents will help define the potential threat to air quality posed by such chemicals.	*DEQ does not agree. Topping agents are applied offsite. If the topping agents are applied on site, DEQ will require the permittee to maintain records of the material data sheets associated with the topping agents. Considering the amount of coal handled and the estimated coal emissions, the amount of topping agent emitted from the facility will be negligible if even detectable.*
6.1.h	Add "90-percent effective" in front of "topping agent." See comment for 6.1.d.	*See response to condition 6.1.d above*
7.1	Under sub-heading a and b, "daily observation and recording" should be replaced with "each 8-hour work shift should observe and record…" Given the high volume of coal to be handled by the facility, small maladjustments or failures in the coal handling systems could rapidly produce discharges in excess of permitted limits. Early detection and correction is essential if such discharges are to be prevented. A truly state-of-the-art system would use wireless sensors to provide real-time awareness of any variations in operating conditions.	*DEQ does not agree that monitoring is necessary during each shift of operation. Daily monitoring is sufficient.*
7.1.c	"Daily" should replace "weekly".	*DEQ disagrees*
7.1.d and e	"weekly should replace "monthly"	*DEQ disagrees*
8.2.b.i	The reference to "a topping agent" should be modified with a statement of the topping agent's minimum efficacy. It could, for example, refer to "a topping agent at least 90-percent effective when applied to coal loaded in an open railcar to form an appropriately rounded contour at the top" Testing by the BNSF railroad has identified at least three topping agents that meet an 85-percent criteria (see www.bnsf.com/customers/what-can-i-ship/coal). Union Pacific may have identified others. The requirement to use a topping agent of a specified efficacy should be specified in the SACDP to prevent the shipper from seeking to avoid railroad recommendations or requirements by appealing to the federal Surface Transportation Board for relief from the railroad's requirements. The efficacy of the topping agent should be specified to prevent the shopper from using a less expensive, less effective topping agent that will result in excessive fugitive coal dust emissions.	*DEQ does not agree that this is necessary. See response to condition 6.1.d. and 6.1.f*
8.2.b.ii	Revise to read "The identification, to include chemical composition, of all topping agents…" The specific chemical composition of topping agents needs to be known to guard against the toppings themselves becoming a new environmental issue.	*DEQ does not agree. See response to condition 6.1.d and 6.1.f.*

Charles B Miller

1. It appears that the wind speeds used in the AP-42 calculations were selected to come up with emission estimates just below the significant emission rates for PM, PM_{10}, and $PM_{2.5}$.

No, the calculated emissions are well below the significant emission rates. Since the projected emissions are well below the significant emission rate, the permit includes the Generic Plant Site Emission Limits in accordance with OAR 340-222-0040.

2. The permit should not allow the terminal to accept untreated train loads (i.e., cars that have not been loaded following loading profile specifications and/or do not have topping agents). All train cars carrying coal to the transfer point should be treated with certifiably-innocuous and chemically-identified topping agents.

The permit requires the permittee to certify that the topping agents were applied and loading profiles were followed when the coal was loaded in the railcars. See permit conditions 6.1.d, 6.1.e, 7.1.a, and 8.2.

3. DEQ should conduct more frequent inspections of the facility and not rely on the company to monitor its own activities.

DEQ can conduct more inspections, if necessary, based on complaints or other information.

Brian King: Schwabe, Williamson & Wyatt:

1. DEQ should not require a permit for this facility because the enclosures should not be considered controls when determining uncontrolled emissions.

See response to comment 10 provided by The Morrow Pacific Project.

2. Conditions 5.1 and 5.2 require corrective action if there is visible emissions more than 30 seconds. This requirement is far more stringent than those applicable to any other Oregon air emissions source.

The monitoring in the permit is based on the design of the facility, which includes enclosures for most activities. If the facility is built and operated as designed, there should not be visible emissions, at least not for any extended period of time.

3. Condition 3.1 requires a best management practices plan (BMPP) that is far more detailed than what is typically required for any other bulk transfer facility.

The best management practices plan is required to ensure that the facility will be built and operated as proposed in the permit application.

Paul Langner: Teevin Bros. Land & Timber Co.

1. There are specific items in The BMPs that go beyond the voluntary efforts made by the project to meet or exceed Oregon Standards.

The best management practices plan is required to ensure that the facility will be built and operated as proposed in the permit application.

2. The facility has no control over train operations. It is excessive to restrict the operations of the Resitain valve. It may need to be opened for routine maintenance activities.

DEQ agrees and has modified permit condition 3.1.i to address maintenance and repair.

Chelsey L. Bivens: Jackson Waler, L.L.P.

Concerned that including conditions and requirements not based on regulations, historical practice or any demonstrated need may reflect an unpredictable or inconsistent permitting process.

The permit includes specific operation and maintenance requirements under the authority of OAR 340-226-0120 to ensure that the facility is built and operated as proposed.

Draft ACDP Condition #	Comment	DEQ Response
3.1.b	The facility does not have control over train operations.	*DEQ agrees. Permit condition 3.1.b was revised to remove reference to train engine emissions.*
5.1	The facility should be given 60 – 180 days after startup to conduct the initial testing.	*DEQ disagrees. This type of facility should not require much time to start up and begin normal operations.*
5.1.b	DEQ should allow fenceline fugitive dust monitoring along the full length of the building rather than monitoring of each individual access point.	*DEQ considered fenceline monitoring, but for an enclosure, it is better to observe the openings rather than some distance away.*
5.2	A visibility standard of no visible emissions is not based on any regulatory requirements.	*This is an operation and maintenance requirement based on the design of the facility. OAR 340-226-0120 provides DEQ the authority to establish operation and maintenance requirements in permits.*
	DEQ Title V guidance for monitoring frequency for sources with <5 tpy emissions is quarterly, not weekly.	*The Title V guidance is guidance for Title V permits. DEQ does refer to the guidance for other types of sources, but for this facility, DEQ has determined that weekly monitoring is necessary.*
	Suggest adding that if Method 9 testing demonstrates compliance with the opacity standard, then no further action is required.	*The backup Method 9 testing is to determine if there is an opacity violation. The corrective action requirement is to ensure that the equipment is properly operated and maintained.*
Review report	The calculation of emissions using the maximum 24-hour wind speed instead of the annual average is inconsistent with AP-42 language and how the equation is used at other entities.	*See response to Earthrise comment.*
	The calculation of the barge loading emissions without considering the barge hull as a shelter from the wind overestimates the emissions.	*The barge shelter was considered in the calculation. An estimated control efficiency of 85% was applied in the emission calculation.*
	The AMI modeling report is significantly flawed. The facility will not cause or contribute to an exceedance of the ambient air quality standards.	*See response to Golder Associates' comments.*

Alexandra Amonette

1. The wind speeds used in the emission calculations is not correct.

See response to Earthrise comments.

2. There is no mention of wind power density in the emission calculations.

The AP-42 factors address wind power.

3. The strong pressure gradients that develop along the Cascades and force air to flow rapidly through the gorge were not adequately considered in the emissions calculations.

DEQ used monitoring data collected very close to the proposed facility.

4. Coal dust emissions and health hazard data are not provided for the coal trains transporting the coal. Canada found the coal terminals emit roughly 715 metric tons of coal dust each year. In addition, according to a BNSF operator, as much as 500 pounds of coal is emitted from each coal car while in transit.

The proposed permit is for the activities at the terminal in Boardman. DEQ does not have the regulatory authority to require air contaminant discharge permits for trains.

5. "Visible emissions should not occur" and, if they do, they "should not last long" are not accurate statements.

DEQ disagrees, but the monitoring in the permit, as well as inspections, will be used to verify the facility will have minimal emissions.

6. Self monitoring won't work because employees will be afraid of losing their jobs.

DEQ disagrees. There are serious penalties for knowingly falsifying data.

7. Two DEQ inspections per year are not enough.

DEQ will evaluate whether more or less inspections are necessary for this facility based on the monitoring data, as well as any complaints.

8. The facility should be fool-proof so that emissions will not occur.

DEQ has included operation and maintenance requirements in the permit to ensure that it is built and operated as proposed.

9. The Umatilla National Wildlife Refuge is 5 miles downwind and it will impacted by the fugitive emissions.

The permit is designed to minimize fugitive emissions.

Michael Riorden, Ph. D.

Fugitive dust emission calculations:

1. Covered versus uncovered activities:
   AMI calculations are based on uncovered barges, but the barges will be covered.

   DEQ agrees.

Golder Associates did not include emissions from uncovered railcars before and after they are unloaded.

DEQ will observe this activity during inspections. The permitte claims that there will be no residual material on the coal cars after they are emptied. DEQ estimated emissions from the loaded railcars.

2. Wind speeds
   AMI used highest daily wind speeds for all activities.

   DEQ does not agree with this approach.

   Golder Associates used average wind speed for open activities and 4 mph for enclosed activities. Even though the barges are enclosed the wind blowing across the hatches may generate higher wind speeds inside the barge due to the Bernoulli affect.

   DEQ agrees with the wind speeds inside the enclosures. DEQ has required monitoring of the barge loading activities.

3. Coal moisture content
   Golder Associates used 20% moisture, but the moisture will evaporate quickly especially when the coal is broken up into smaller pieces or dust.

   DEQ agrees that the moisture content of the coal will vary. DEQ has used 20% moisture (i.e., the low end of the moisture range provided in AP-42) in all calculations, except 5% moisture was used for the emissions from the loaded railcars. Coal at the surface of the railcars will be drier due to evaporation.

Stanley Niemiec

False information was provided in the application: Wind speeds used in the emission calculation are not correct. There will be some emissions from the uncovered railcars before they are unloaded. DEQ should not issue a permit the proposed facility because the applicant provided false information in the application.

DEQ evaluates information provided in applications and, in some cases, does not agree with assumptions that may have been used in emission calculations. Where engineering judgment is involved, DEQ does not consider the information provided by the application to be necessarily "false" information.

Port of Morrow

1. DEQ included novel conditions and requirements that are not based on regulations or historical practice, and may reflect or portend an unpredictable or inconsistent permitting process.

DEQ included operation and maintenance requirements in accordance with OAR 340-226-0120 to ensure that the facility will be built and operated as proposed in the application.

2. DEQ has avoided using the common standard for opacity, instead using a no visible emissions standard.

Because of the design of the facility (e.g., mostly enclosed), DEQ has included a visible emission action level (e.g., no visible emissions) in accordance with OAR 340-226-0120.

3. DEQ is using maximum wind speeds to calculate annual emissions.

DEQ is not using maximum wind speeds in the calculations. See response to Earthrise comment.

4. DEQ's estimate of uncontrolled emissions is based on the warehouses having no walls.

DEQ disagrees. The emission calculations are based on the building air venting through the wet scrubbers.

Brian Patterson

1. The permit conditions are not consistent with permits for other bulk commodities and are clearly excessive for at least two reasons.

The permit conditions are based on the design of the facility.

2. This facility will have some of the lowest actual emission of any bulk material handling facility in the state required to obtain an air quality permit.

The low emissions are due to enclosures. The permit will ensure that the facility will be built and operated as designed.

3. Coal is not exceptional bulk material for an air pollution perspective.

DEQ is concerned with the emissions and not necessarily the type of materials. The low emissions are due to enclosures. The permit will ensure that the facility will be built and operated as designed.

Laurie Dougherty

The capacity of the facility appears to be much higher than 8.8 million tons per year. How will the total tonnage be monitored? Who will monitor the actual tonnage?

The owner or operator is required to maintain records of the amount of coal handled at the facility (see condition 7.1).

Elizabeth Graser-Lindsey

The PSEL rules (OAR 340, Division 222) require DEQ to evaluate the facility with respect to the GHG airshed, which is the entire planet or could be local if the coal were to catch on fire at the facility.

The PSEL rules apply to stationary sources. This source, which is designed to handle coal, will not burn the coal so the emissions from the combustion of coal are not included in the PSEL. For any facility, there is the potential for an accidental fire, but DEQ does not set emission limits for "accidents". DEQ did provide an estimate of the GHG emissions due to the off-gassing of methane while the coal is on site. The emission estimates are included in the emission detail sheet provided in the review report for the draft permit. The emission estimates are below the level that would require a PSEL for the facility.

Confederated Tribes of the Umatilla Indian Reservations (CTUIR)

1. CTUIR believes the state and federal agencies with permitting authority over the proposed CIT should be analyzing the impacts of the project in a more coordinated manner.

DEQ understands this concern. DEQ has prepared a draft permit in accordance with the regulations that apply to the facility and DEQ.

2. DEQ needs to do more to analyze and address the coal dust emission associated with the CIT and should impose permit requirements designed to reduce such emissions.

DEQ has carefully reviewed the application and comments. The ACDP includes specific requirements for minimizing emissions.

3. Oregon must take a cumulative look at the impacts of this project rather than examining the footprint of only one element of the project in isolation.

DEQ understands this concern. DEQ has prepared a draft permit in accordance with the regulations that apply to the facility and DEQ.

Confederated Tribes and Bands of the Yakama Nation

1. Yakama Nation will not mitigate nor negotiate its Treaty rights or resources.

DEQ understands this concern. DEQ has prepared a draft permit in accordance with the regulations that apply to the facility and DEQ.

2. DEQ must require all coal to be 100% contained upon entering the proposed facility.

The permit, which ensures that the facility will be built and operated as proposed in the application, contains specific requirements for minimizing emissions mostly by preventing emissions. Most activities will be totally enclosed. However, it is not possible to fully contain the barge loading operation and there may be some emissions from the loaded rail cars. The permit includes monitoring and corrective action if emissions are observed from any activity at the site. If the preventive measures or corrective actions are not effective, DEQ may require the permittee to develop and implement a plan to further control the emissions from the railcars.

Nez Perce Tribal Executive Committee

The project's impacts on the Tribe's treaty-reserved rights need to be acknowledged by ODEQ.

DEQ understands this concern. DEQ has prepared a draft permit in accordance with the regulations that apply to the facility and DEQ.

Ambre Energy

As provided in OAR 340-209-0080(3), Ambre Energy submitted responses to the comments. DEQ acknowledges receipt of Amber Energy's response to the comments and will include the responses in the permit record. DEQ does not believe it is necessary to respond to Ambre Energy's response to the specific comments as they have been addressed in the response to comments provided above. DEQ does not necessarily agree or disagree with the responses. DEQ does take exception to the way in which the responses were written, as if speaking for DEQ. The responses are the opinion of the applicant.

V. SUMMARY OF CHANGES TO AIR CONTAMINANT DISCHARGE PERMIT

Final ACDP Condition #	Change	Reason
Cover page	The table identifying the permitted activities was revised to provide both a description of the permitted activity and the source category for which DEQ's regulations require a permit.	This change makes it clear what activity is permitted.
3.1	The requirement for best management practices plan was revised to make it clear that the permittee must implement the plan and have it available to the personnel responsible for the operation and maintenance of the facility.	This change was made in part in response to the comment provided by James D. Chase (review report section 22.c).
3.1.b	This condition was revised to remove reference to train emissions.	This change was made in response to the comments provided by The Morrow Pacific Project, Paul Langer and Chelsey L. Bivens. The permit does not regulate the emissions from train engines.
3.1.c	This condition was revised to remove reference to the Columbia River and public road system.	This change was made in response to the comments provided by Earthrise.
3.1.e	This condition was revised to correct a typographical error and include reference to scrubber operating parameters.	This change was made in response to comments provided by Oregon Physicians for Social Responsibility, Dr. Theodora Tsongas, and James D. Chase. DEQ agrees that the best management practices plan should identify the scrubber operating parameters that will be used to determine whether they are working properly.
3.1.i	This condition was revised to provide an exception for opening the resitain valve during maintenance and repair activities.	This change was made in response to comments provided by The Morrow Pacific Project and Paul Langer
3.1.j	This condition was revised by deleting reference to the Columbia River and public road system.	This change was made in response to comments provided by Oregon Physicians for Social Responsibility and Dr. Theodora Tsongas. DEQ agrees that the best management practices should be designed to prevent migration of coal material to anywhere off site.
4.2	This condition was revised to clarify that the Plant Site Emission Limits apply to <u>each</u> 12-consecutive month period, not any 12-consecutive month period.	This change was made in response to comments provided by Oregon Physicians for Social Responsibility and Dr. Theodora Tsongas. DEQ agrees that this change is necessary and that it is consistent with permit condition 8.2.c.
5.2.a and 5.2.b	These conditions were revised to clarify that the visible emissions surveys must be conducted during daylight hours.	These changes were made in response to the comments provided by Earthrise. DEQ agrees that visible emissions surveys required by the permit can only be done during daylight hours.

Final ACDP Condition #	Change	Reason
6.1.e	This condition was revised to clarify that the windblown erosion must be minimized <u>on site.</u>	This change was made in response to comments provided by The Morrow Pacific Project and Chelsey L. Bivens. DEQ agrees that the permittee has no control over windblown erosion from the railcars when they are off site.
6.1.h	This condition was revised to add a provision for implementing a control plan in accordance with a schedule approved by DEQ.	This change was made in response to comments provided by Earthrise.
7.1.a	This condition was added to ensure that the permittee will maintain records of the amount of coal handled at the facility.	This change was made in response to a comment provided by James D. Chase.
7.1.f	This condition was revised to clarify that the loading chute inspection records should include the resitain valve.	This change was made by DEQ for clarification.
8.2.b.iii	This condition was revised by deleting reference to windblown erosion during transport.	This change was made in response to comments provided by The Morrow Pacific Project and Chelsey L. Bivens.

VI. INDEX OF COMMENTERS