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# **NEW SOURCE PRELIMINARY DETERMINATION to APPROVE:**

Terminal 4 Expansion and  
Redevelopment – Establish a  
Transload Facility

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Ag Processing, Inc.

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23NOC1627

April 16, 2024

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## Table of Contents

1. Summary .....	1
2. Regulatory Background .....	1
3. Facility Background .....	2
4. Facility Description .....	3
5. Project Description .....	6
6. Emission Increases .....	10
7. Administrative Requirements for NOC Applications .....	11
8. SEPA Review .....	12
9. Criteria for Approval .....	12
10. Applicable Performance Standards (Summary) .....	12
11. Best Available Control Technology (BACT).....	15
12. Ambient Impact Analysis (Criteria Pollutants) .....	16
13. Ambient Impact Analysis (Toxic Air Pollutants).....	18
14. Requirements for Major Stationary Sources and Major Modifications to Major Stationary Sources.....	20
15. Title V Air Operating Permit (AOP) Implications.....	20
16. Environmental Justice Considerations .....	20
17. Conditions of Approval .....	22



## NOTICE OF CONSTRUCTION PRELIMINARY DETERMINATION TO APPROVE

Olympic Region Clean Air Agency

<b>Issued to:</b>	<b>Ag Processing, Inc.</b>	<b>County:</b>	<b>Grays Harbor - 27</b>
<b>Location:</b>	<b>Terminal Way, Terminal 4 at POGH Hoquiam, WA</b>	<b>Source:</b>	<b>24</b>
<b>Application #:</b>	<b>23NOC1627</b>	<b>RC:</b>	<b>2</b>
<b>Prepared on:</b>	<b>April 16, 2024</b>	<b>File:</b>	<b>233</b>

### 1. Summary

Ag Processing, Inc. (AGP) seeks approval from Olympic Region Clean Air Agency (ORCAA) to establish a transload facility and associated equipment at Terminal Way, Terminal 4 at the Port of Grays Harbor, Hoquiam, Washington. The transload facility will consist of a rail receiving building and receiving pits, a bulk commodity scale and conveyors, and a shiploader. The processes pneumatically conveying materials are considered stationary sources of air pollution and the emissions will be controlled by a total of nine baghouses. Establishing a stationary source of air pollution requires prior approval through ORCAA which is accomplished through a Notice of Construction permit. ORCAA staff reviewed AGP's proposal and concluded it may be conditionally approved. Recommended conditions of approval are detailed in Section 17 of this Preliminary Determination report.

### 2. Regulatory Background

Pursuant to the Washington Clean Air Act under chapter 70A.15 of the Revised Code of Washington, ORCAA's Rule 6.1 and the Washington State Implementation Plan under 40 CFR part 52.2470(c)<sup>1</sup> require New Source Review (NSR) for new stationary sources of air pollution (referred to as new sources) in ORCAA's jurisdiction. NSR is also required prior to installing, replacing, or substantially altering any air pollution control technology. NSR generally refers to the process of evaluating air quality impacts and the likelihood of compliance with applicable air regulations and standards. NSR and approval of an air permit by ORCAA is required prior to commencing construction or modification of any new source or prior to installing, replacing, or substantially altering air pollution control technology. The goal of NSR is to assure compliance

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<sup>1</sup> A State Implementation Plan (SIP) is a collection of regulations and documents used by a state, territory, or local air district to implement, maintain, and enforce the National Ambient Air Quality Standards, or NAAQS, and to fulfill other requirements of the federal Clean Air Act. The Clean Air Act requires the EPA to review and approve all SIPs. ORCAA's SIP was last approved by EPA in 1995.

with applicable air regulations and standards, including equipment performance standards and ambient air quality standards.

NSR is initiated by a project proponent submitting an air permit application referred to as Notice of Construction (NOC) application<sup>2</sup>, which provides ORCAA information on the proposed project of sufficient detail to characterize air impacts. NOC applications are posted on ORCAA's website and may undergo a public notice and comment period if requested by the public or if emissions increases trigger an automatic public notice. Approval of a NOC in an attainment or unclassifiable area<sup>3</sup> is contingent on verifying a proposed project meets the following criteria from ORCAA's Rule 6.1 and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6:

1. **Performance Standards** - The new stationary source will likely comply with applicable air-performance standards such as federal new source performance standards (NSPS), national emission standards for hazardous air pollutants (NESHAPs), or any performance standards adopted under chapter 70A.15 RCW;
2. **BACT** - The new stationary source will employ "Best Available Control Technology" (BACT) to control all air pollutants emitted;
3. **RACT** – Replaced or substantially altered air pollution control technology meets the standard of "Reasonably Available Control Technology" (RACT) as defined in ORCAA Rule 1.4;
4. **Ambient Air Quality** – Emissions from the new stationary source will not cause or contribute to a violation of any ambient air quality standard;
5. **Federal Air Permitting Requirements** - The new stationary source secures all applicable federal air permits that may apply; and,
6. **Air Toxics** - If there are increases in toxic air pollutant (TAP) emissions, the requirements of Washington's Controls for New Sources of Toxic Air Pollutants under Chapter 173-460 WAC are met.

In this case, AGP is proposing to establish a new transload operation and associated equipment at their existing facility located at Terminal 4 of the Port of Grays Harbor, located in Hoquiam, Washington. The pneumatic material transfer systems are each considered new stationary sources of particulate emissions. Establishing a stationary source of air pollution requires prior review and approval through ORCAA.

### 3. Facility Background

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<sup>2</sup> There are two categories of NOC applications: Notice of Construction (NOC) and Notice of Construction Revision (NOR). NOCs are required for new or modified sources, new control technology, replacing an existing stationary source or control technology, and substantially altering control technology. NORs are required when an owner or operator requests a revision to an existing air permit issued by ORCAA.

<sup>3</sup> Unclassified area or "attainment area" means an area that has not otherwise been designated by EPA as nonattainment with ambient air quality standards for a particular regulated pollutant. Attainment area means any geographic area in which levels of a given criteria air pollutant (e.g., ozone, carbon monoxide, PM10, PM2.5, and nitrogen dioxide) meet the health-based National Ambient Air Quality Standards (NAAQS) for that pollutant. An area may be an attainment area for one pollutant and a nonattainment area for others.

AGP is an existing grain terminal located at the Port of Grays Harbor’s Terminal 2. The current expansion extends the facility into the Port of Grays Harbor’s adjacent Terminal 4. This is the first AGP permit at Terminal 4 with ORCAA. The Terminal 2 facility was originally permitted by ORCAA in 2002 and has been registered as an air emissions source since this date. The Terminal 2 facility has undergone several modifications subject to NOC approval since originally built. The only currently effective NOC Approval Order (AKA: Air Permit) is 22NOC1652, which is described below.

**Table 3.1. Permitting History with ORCAA**

Permit # (date)	Description	Status
<b>02NOC219 (6/7/2002)</b>	Conditional approval of the Notice of Construction (NOC) application by Port of Grays Harbor to construct a new bulk loading facility at Terminal 2 in the Port of Grays Harbor.	Superseded by 10NOC762
<b>06NOC497 (8/10/2006)</b>	Replace baghouse #3 at the loading terminal with a larger, more efficient baghouse.	Superseded by 10NOC762
<b>10NOC762 (12/3/2010)</b>	Construct additional commodity receiving, storage and handling facilities and to assume management of the entire operation from the Port.	Superseded by 11NOC830
<b>11NOC830 (4/15/2011)</b>	Construct two (2) additional silos.	Superseded by 12MOD905
<b>12MOD905 (8/14/2012)</b>	Modify approved commodities list to include soda ash.	Superseded by 22NOC1562
<b>21NOC1532 (10/12/2021)</b>	Temporary approval to install and operate a temporary shiploader and telescoping chutes for commodity transfer from the terminal to shipping vessels while the existing ship loading facility was inspected and repaired. Condition 1 required temporary operations discontinue by 12/31/2022.	Temporary approval, expired.
<b>22NOC1562 (9/22/2022)</b>	install and operate six (6) new baghouses, four (4) new storage silos, and reroute portions of the existing aspiration system for commodity transfer and ship loading	Active

#### 4. Facility Description

AGP’s Terminal 2 facility is a grain terminal. All existing Emission Units and Control Devices are located at Terminal 2 (currently permitted under 22NOC1562), and are included in Tables 4.1 and 4.2 for informational purposes.

The new Terminal 4 facility is adjacent to the Terminal 2 facility, though the two facility operations can be considered wholly independent of each other. The new Terminal 4 facility subject to this 23NOC1627 permitting action will be a dry bulk facility primarily handling soy meal, with the potential to handle other grain-derived commodities, like distiller grains. Whole grains will not be handled at the facility, as described later. All Terminal 4 Emissions Units are new and are included in this permitting action.

**Table 4.1: Existing Emission Units**

Emissions Unit	Description	Control Device
<b>EU-1: Receiving</b>		
EU-1(a): <i>Railcar Receiving</i> - Railcars are unloaded within 2 enclosed buildings. Commodities are dropped directly from the bottom of the railcars into below-grade receiving pits using portable car vibrators.	Railcar Receiving Building #1	C-1 BH-1
	Railcar Receiving Building #2	BH-6
EU-1(b): <i>Scale Feeder Belt</i>	Transfers commodities from the Railcar Receiving Building #1 to the top of the Scale Tower	BH-1 BH-2
EU-1(c): <i>Scale Tower</i>	Bulkweigher weighs incoming commodities from the Scale Feeder Belt prior to transfer to Storage (EU-2) or Shipping (EU-3)	BH-2
EU-1(d): <i>Receiving Transfer Bridge</i>	Transfers incoming commodities from the Scale Tower to the Transfer Building for routing to the Shipping Bins (EU-3) or the Storage Bins (EU-2)	BH-9
EU-1(e): <i>Receiving and Transfer Leg</i>	Bucket elevator that raises commodities from the Receiving Transfer Bridge to the Distribution Belt Conveyors above the Storage Bins	Receiving Leg BH-10  Transfer Leg BH-12
<b>EU-2: Storage</b>	<b>Fourteen (14) Storage Silos</b>	
EU-2(a): <i>Distribution Belt Conveyors</i>	Transfer commodities from the top of the Receiving Leg to the Storage Bins	BH-13 BH-14
EU-2(b): <i>Reclaim Belt Conveyors</i>	Transfer commodities bound for shipment from the bottom of the Storage Bins to the bottom of the Shipping Legs	BH-7
<b>EU-3 Shipping</b>		
EU-3(a): <i>Shipping Legs</i>	Bucket elevators transfer commodities from the Receiving Transfer Bridge, the Railcar Receiving Belt Conveyor or the Reclaim Belt Conveyors to the top of the Shipping structure	BH-11
EU-3(b): <i>Shipping Bins</i>	Temporary storage for commodities prior to shipment	BH-7
EU-3(c): <i>Gravity Cleaners</i>	Screen commodities to remove impurities Catch goes to Screening Bin and Dust Bin	C-4 BH-8
EU-3(d): <i>Shipping Scales</i>	Weigh commodities prior to shipment	C-4 BH-8
EU-3 (e): <i>Turnhead or Distributor</i>	Distributes commodities which have been cleaned and weighed to the Shipping Bins	BH-7
EU-3(f): <i>Transfer Bridge Belts</i>	Transport commodities to the Jump Transfer Leg inlet at the Scale Tower Shipping Belt via the Transfer Bridge	BH-12
EU-3(g): <i>Jump Transfer Leg</i>	Bucket elevator transfers commodities from the outlet of the Transfer Bridge to the inlet of the Shipping Belt atop the Scale Tower	BH-12
EU-3(h): <i>Shipping Belt</i>	Transfers commodities from the Scale Tower to the reversing shuttle and shiploader	BH-2 BH-4
EU-3(i): <i>Traveling Shiploader and Ship Loading Spout</i>	Loads commodity directly into ships Enclosed conveyor belt and retractable ship loading spout	BH-5

**Table 4.1: Existing Control Devices at Terminal 2.**

Control Device	Description
Baghouse #1 (BH-1) Receiving Building #1	<ul style="list-style-type: none"> <li>▪ 0.01 gr/dscf (limit)</li> <li>▪ 30,100 acfm</li> <li>▪ Serves the receiving pit, receiving pit vacuum cyclone, commodity receiving conveyor discharge, scale feeder belt inlet</li> </ul>
Baghouse #2 (BH-2) Shipping Belt Inlet	<ul style="list-style-type: none"> <li>▪ 0.01 gr/dscf (limit)</li> <li>▪ 8,550 acfm</li> <li>▪ Serves the scale feeder belt discharge, scale, shipping vacuum cyclone, shipping vacuum inlet</li> </ul>
Baghouse #4 (BH-4) Shipping Belt Outlet	<ul style="list-style-type: none"> <li>▪ 0.01 gr/dscf (limit)</li> <li>▪ 6,150 acfm</li> <li>▪ Serves head or discharge of the shipping belt and inlet of the shuttle conveyor</li> </ul>
Baghouse #5 (BH-5) Shiploader	<ul style="list-style-type: none"> <li>▪ 0.01 gr/dscf (limit)</li> <li>▪ 6,000 acfm</li> <li>▪ Serves the traveling shiploader and the retractable ship loading spout</li> </ul>
Baghouse #6 (BH-6) Railcar Receiving Building #2	<ul style="list-style-type: none"> <li>▪ 0.003 gr/dscf (limit)</li> <li>▪ 49,200 acfm</li> <li>▪ Serves Railcar Receiving Building #2</li> </ul>
Baghouse #7 (BH-7)	<ul style="list-style-type: none"> <li>▪ 0.003 gr/dscf (limit)</li> <li>▪ 17,900 acfm</li> <li>▪ Serves shipping and handling operations in the Shipping Structure and the Transfer Building</li> </ul>
Baghouse #8 (BH-8)	<ul style="list-style-type: none"> <li>▪ 0.003 gr/dscf (limit)</li> <li>▪ 30,000 acfm</li> <li>▪ Serves the gravity cleaners and the scale in the Shipping Structure via Cyclone #4</li> </ul>
Baghouse #9 (BH-9) Pit #1 to Storage Baghouse	<ul style="list-style-type: none"> <li>▪ 0.003 gr/dscf (limit)</li> <li>▪ 6,500 acfm</li> <li>▪ Aspirates head of belt from Pit #1, CTF receiving belt conveyor, and dust return cyclone.</li> </ul>
Baghouse #10 (BH-10) Receiving Leg to Baghouse	<ul style="list-style-type: none"> <li>▪ 0.003 gr/dscf (limit)</li> <li>▪ 3,600 acfm</li> <li>▪ Aspirates receiving leg EL-0209</li> </ul>
Baghouse #11 (BH-11) Shipping Legs	<ul style="list-style-type: none"> <li>▪ 0.003 gr/dscf (limit)</li> <li>▪ 7,200 acfm</li> <li>▪ Aspirates receiving legs EL-0216 and EL-0217</li> </ul>
Baghouse #12 (BH-12) Storage to Loadout	<ul style="list-style-type: none"> <li>▪ 0.003 gr/dscf (limit)</li> <li>▪ 12,750 acfm</li> <li>▪ Aspirates reclaim conveyance from Storage Bins 6 through 17 to Shipping Tower and dust return cyclone</li> </ul>
Baghouse #13 (BH-13) South Storage Baghouse	<ul style="list-style-type: none"> <li>▪ 0.003 gr/dscf (limit)</li> <li>▪ 11,875 acfm</li> <li>▪ Aspirates Bins #6 through 11 and fill conveyance to these bins</li> </ul>
Baghouse #14 (BH-14) North Storage Baghouse	<ul style="list-style-type: none"> <li>▪ 0.003 gr/dscf (limit)</li> <li>▪ 12,550 acfm</li> <li>▪ Aspirates Bins #12, 13, 14, 15, 16, 17, and fill conveyance to these bins</li> </ul>
Cyclone #1 (C-1) Receiving Building #1 Scale Feeder Belt	<ul style="list-style-type: none"> <li>▪ Serves the vacuum systems for Railcar Receiving Building #1</li> <li>▪ Exhausts to BH-1</li> <li>▪ 960 acfm</li> </ul>
Cyclone #2 (C-2) Shipping Belt	<ul style="list-style-type: none"> <li>▪ Serves the vacuum system for the Shipping Belt</li> <li>▪ Exhausts to BH-2</li> <li>▪ 960 acfm</li> </ul>



Control Device	Description
Cyclone #3 (C-3) Shiploader	<ul style="list-style-type: none"> <li>Serves the vacuum system for the shiploader</li> <li>Exhausts to BH-4</li> <li>960 acfm</li> </ul>
Cyclone #4 (C-4) Screenings	<ul style="list-style-type: none"> <li>Serves the gravity cleaners and the scale in the Shipping Structure</li> <li>Exhausts to BH-8</li> </ul>

**Figure 4.1: Facility Location**



\* Imagery taken from Port of Grays Harbor Terminal 4 Expansion & Redevelopment Project Website

<https://www.portofgraysharbor.com/t4-project>

\*\*"AGP – Terminal 2" annotation by ORCAA

AGP calculated PTE of the existing facility as part of the 22NOC1562 permit application, shown below.

**Table 4.2. Potential to Emit (Existing facility)**

Pollutant	Classification (Criteria <sup>a</sup> /HAP <sup>b</sup> /TAP <sup>c</sup> )	Annual Emissions	Units
PM (Total Particulate)	N/A	36.15	TPY
PM <sub>10</sub> (Total Particulate) (<= 10 µm)	Criteria	36.15	TPY
PM <sub>2.5</sub> (Total Particulate) (<= 2.5 µm)	Criteria	36.15	TPY

<sup>a</sup> EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants—carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as “criteria” air pollutants (or simply “criteria pollutants”).

<sup>b</sup> HAP means Hazardous Air Pollutant. Hazardous Air Pollutants are those known to cause cancer and other serious health impacts and are regulated under the federal Clean Air Act.

<sup>c</sup> TAP means any toxic air pollutant regulated in Washington and listed in WAC 173-460-150.

## 5. Project Description

*The Port of Grays Harbor (Port) is proposing the Terminal 4 (T4) Expansion and Redevelopment Project to increase rail and shipping capacity at T4 at the Port located in the cities of Hoquiam*



and Aberdeen, WA, to accommodate growth of dry bulk, breakbulk, and roll-on/roll-off cargos. As part of this larger project, AGP is proposing to construct facilities to support a new commodity transload facility at Terminal 4B (T4B) at the Port of Grays Harbor (referred to as the AGP Project). The dry bulk facility will primarily handle soy meal, with the potential to handle other grain-derived commodities, like distiller grains. Whole grains will not be handled at the facility.

All material handling activities, including drop points, transfers, unloading and loading, will occur in enclosed, aspirated areas or equipment. Meal particles captured by the fabric filters are recovered and sold as product. Because the transload facility would not function properly without the product recovery mechanism of enclosures and fabric filters, these systems are considered inherent to the process.

AGP is proposing to construct the following facilities:

- Rail Receiving Facility:** A new rail receiving building with two receiving pits
- Shiploader:** A new three-tower shiploader with three spouts at the T4B dock
- Commodity Handling Systems:** Several commodity handling structures including conveyors, a bulk scale tower, and baghouses.

Additional non-emitting facilities including landside and dockside motor control centers will be build, and the existing T4B dock will undergo reconstruction to support the shiploader. Existing terminal utilities and lighting systems will be upgraded to serve the new transload facility.

The Primary pollutant is dust originating from soy meal, and the means of control is enclosure when possible, with aspiration to prevent fugitive emissions and baghouses to recover product and control exhaust. There are nine planned baghouses aspirating the receiving building, two receiving pits, parallel dry bulk handling equipment, and the three-tower shiploader. The facility will also house two central vacuum baghouses with 40-horsepower blowers used for cleaning the facility. These units will not be used for process aspiration and will not be running continuously.

#### **Rail Receiving Building and Receiving Pits**

The AGP Project will include a dual-track commodity transload facility to receive product via railcar and load this product directly to ship. The rail receiving building will consist of two receiving tracks, each equipped with a receiving pit and dedicated conveyance for transfer to the ship. The two lead tracks into the building will hold up to 55 railcars.

#### **Bulk Commodity Scale and Conveyors**

After railcars are emptied into the receiving pits, the soybean meal will be routed directly from the receiving building pits to the ship rather than on-site storage. To do this, independent and dedicated conveyor systems will reclaim product from each of the receiving pits. For each receiving pit, there will be a receiving baghouse rated for 43,400 ACFM (FH-4013 and FH-4306). Additional conveyors will elevate and transfer the product to the scale tower. This operation is proposed to be controlled by transfer baghouses rated for 9,600 ACFM (FH-4211 and FH-4511). Product will be conveyed from each of the receiving pits by a series of dedicated drag conveyors,

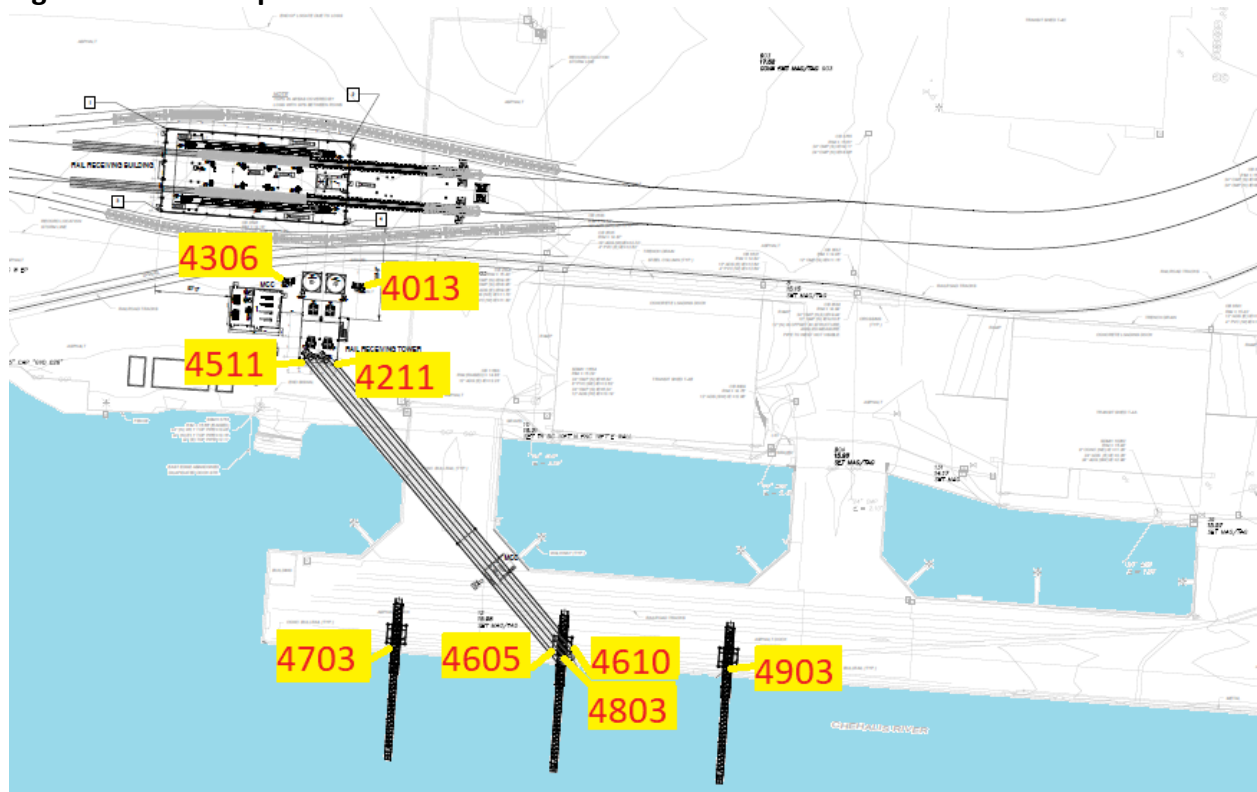
belt conveyors, and bucket elevators to the scale tower, where the product will be weighed and sampled for quality testing.

### Shiploader

The product will be transferred to the shiploader. The shiploader will consist of two conveyors and two 3-way valves, which direct product to any two of the ship loading towers. By design, only two of the three towers will be in operation at any one time. Each initial conveyor will be aspirated by a baghouse rated at 3,500 ACFM (FH-4605 and FH-4610) located 127 feet above grade. Each ship loading tower is designed with a capacity of 2,000 metric tons per hour of dry bulk agricultural product and will be aspirated by a baghouse rated at 6,000 acfm (FH-4703, FH-4803, and FH-4903) 85 feet above grade.

[Excerpt, 23NOC1627 permit application, as amended by ORCAA staff]

Figure 5.1: Site Map



\* Imagery 23NOC1627 Permit Application  
\*\* Baghouses call outs annotated by ORCAA

**Table 5.1: New Emissions Units**

Emissions Unit	Description	Control Device
Receiving Pit 3 (East) Conveyance Line	-Two identical receiving tracks -Consists of receiving pits and conveyors. -Receives product directly from rail cars and conveys to shiploader.	-EP-4013 Pit 3 Receiving Baghouse -EP-4211 Pit 3 Transfer Baghouse
Receiving Pit 4 (West) Conveyance Line	-Aspirated by receiving and transfer baghouses.	-EP-4306 Pit 4 Receiving Baghouse -EP-4511 Pit 4 Transfer Baghouse
Shiploader	-Two conveyors -Two 3-way valves -Only two of the three shiploaders operate at any time -Aspirated by shiploader baghouses.	-EP-4605 Shiploader Baghouse 1 -EP-4610 Shiploader Baghouse 2 -EP-4703 West Shiploader Baghouse -EP-4803 Center Shiploader Baghouse -EP-4903 East Shiploader Baghouse

**Table 5.2: Baghouse Specifications**

Baghouse	Location	Specifications
4013	Pit 3 Receiving Baghouse	Manufacturer: Schenck Process LLC M/N: 120MCF1120-500 Pressure Drop: 0-19" W.C. Cleaning Mechanism: Pulse Jet Filter Media: DYNA-MAC 16 oz. Polyester Bags Control Efficiency: 99.99% Air to Cloth Ratio: 7.0:1 Outlet loading: 0.001 gr/dscf
4211	Pit 3 Transfer Baghouse	
4306	Pit 4 Receiving Baghouse	
4511	Pit 4 Transfer Baghouse	
4605	Shiploader Baghouse 1	Manufacturer: Schenck Process LLC M/N: RT (round top) Series Pressure Drop: 0-14" W.C. Cleaning Mechanism: Pulse Jet Filter Media: DYNA-MAC 16 oz. Polyester Bags Control Efficiency: 99.99% Air to Cloth Ratio: 6.8:1 Outlet loading: 0.001 gr/dscf
4610	Shiploader Baghouse 2	
4703	West Shiploader Baghouse	Manufacturer: Schenck Process LLC M/N: LST Series Pressure Drop: 0-14" W.C. Cleaning Mechanism: Pulse Jet Filter Media: DYNA-MAC 16 oz. Polyester Bags Control Efficiency: 99.99% Air to Cloth Ratio: 6.7:1 Outlet loading: 0.001 gr/dscf
4803	Center Shiploader Baghouse	
4903	East Shiploader Baghouse	

## 6. Emission Increases

PM, PM<sub>10</sub>, and PM<sub>2.5</sub> are emitted from material receiving, transfer, and shiploading operations associated with the project. Fugitive emissions resulting from the operation are described below. AGP calculated emissions as part of their permit application. ORCAA staff reviewed calculations and made minor changes as there was a typo in transcribing an emissions factor. Emissions calculations are included in the attachments.

The potential to emit is calculated based on continuous operation of the baghouses over 8,760 hours. ORCAA staff reviewed calculations and agree with the assumptions and emissions factors. Project emissions are shown below in Table 6.1.

### Fugitive Emissions

The doors of the receiving building are not assumed to be closed during unloading, resulting in a partial enclosure. The receiving activity itself occurs in two identical receiving pits inside the building. The belt in each receiving pit is 8 feet below the receiving grate, and the face of each pit is aspirated by a 43,400 acfm fan, which produces a face velocity at the entrance of the pit of about 50 feet per minute. The walls and roof of the receiving building combined with the enclosure provided by the pit are expected to provide dust reduction at least equivalent to a 3-sided enclosure as described in the WRAP Fugitive Dust Handbook<sup>4</sup>, which is credited with 75% control. Combined with the 90% capture efficiency from the aspiration, the effective capture efficiency of the receiving operations is 97.5%.

The ship loading emissions factors provided by AP-42 assume enclosure from a normal ship's hold but were developed assuming a 20- to 40-foot drop from the loading spout into the hold. The AGP ship loading spouts are designed to control flow and are fitted with skirts that initially rest on the floor of the hold and rise during loadout to rest atop the rounded grain pile<sup>5</sup>. This results in a choked flow from the loading spout during loadout. Additionally, the loading spouts are aspirated. The choked flow and skirt are credited with 80% reduction in fugitive dust, which combines with the 90% capture efficiency from aspiration to result in a capture efficiency of 98%.

*[Excerpt, 23NOC1627 permit application addendum dated March 7, 2024]*

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<sup>4</sup> Western Regional Air Partnership (WRAP) Fugitive Dust Handbook, September 7, 2006. Prepared by Countess Environmental. Available at: [https://norcalblobstorage.blob.core.windows.net/stonestown/WRAP\\_2006\\_WRAPFugitiveDustHandbook.pdf](https://norcalblobstorage.blob.core.windows.net/stonestown/WRAP_2006_WRAPFugitiveDustHandbook.pdf)

<sup>5</sup> Per Reference 40 from AP-42 Chapter 9.9.1. Emission Factors for Barges and Marine Vessels, Final Test Report to the National Grain and Feed Association, Washington, DC, October 2001. Available at [www.epa.gov/sites/default/files/2020-10/documents/rel\\_c09s0901.pdf](http://www.epa.gov/sites/default/files/2020-10/documents/rel_c09s0901.pdf)

**Table 6.1. Emission Increases (Project Emissions)**

Pollutant	Classification (Criteria <sup>a</sup> /HAP <sup>b</sup> /TAP <sup>c</sup> )	Emission Rate (lb/hr)	Emission Rate (lb/day)	Emission Rate (ton/yr)
PM (Total Particulate)	N/A	5.96	143	26.1
PM <sub>10</sub> (Total Particulate) (<= 10 μm)	Criteria	1.07	25.8	4.7
PM <sub>2.5</sub> (Fine Particulate (<=2.5 μm))	Criteria	0.179	4.30	0.78

<sup>a</sup> EPA has established national ambient air quality standards (NAAQS) for six of the most common air pollutants—carbon monoxide, lead, ground-level ozone, particulate matter, nitrogen dioxide, and sulfur dioxide—known as “criteria” air pollutants (or simply “criteria pollutants”).

<sup>b</sup> HAP means Hazardous Air Pollutant. Hazardous Air Pollutants are those known to cause cancer and other serious health impacts and are regulated under the federal Clean Air Act.

<sup>c</sup> TAP means any toxic air pollutant regulated in Washington and listed in WAC 173-460-150.

**Table 6.2. Facility-Wide PTE (Terminal 2 PTE + Terminal 4 PTE)**

Pollutant	Classification (Criteria <sup>a</sup> /HAP <sup>b</sup> /TAP <sup>c</sup> )	Emission Rate (ton/yr)
PM (Total Particulate)	N/A	62.3
PM <sub>10</sub> (Total Particulate) (<= 10 μm)	Criteria	40.9
PM <sub>2.5</sub> (Fine Particulate (<=2.5 μm))	Criteria	36.9

## 7. Administrative Requirements for NOC Applications

NOC applications are subject to filing fees according to ORCAA Rule 3.3(b) and may incur additional NOC processing fees at an hourly rate according to ORCAA Rule 3.3(c). Applicable NOC filing fees for AGP’s NOC application were paid prior to ORCAA commencing processing of the application. Additional NOC processing fees may apply and will be determined and assessed prior to issuing a Final Determination and the Approval Order (a.k.a.: Air Permit).

NOC applications are subject to a 15-day public notice and an opportunity to request a 30-day public comment period and opportunity for a public hearing. Public notice of AGP’s NOC application was posted on ORCAA’s website on January 5, 2024. The time period for filing comments on the application and requests for a public comment period expired on January 20, 2024. There were no comments received nor requests for a public hearing.

This application requires a mandatory public comment period in accordance with the requirements of ORCAA Rule 6.1.3(b)(1) as the proposed project causes a significant net increase in emissions of PM.

In accordance with ORCAA’s Mandatory public commenting procedures outlined in ORCAA 6.1.3(c), ORCAA issued a Preliminary Determination and initiated the public comment period on April 16, 2024. The public comment period ended at 4:30 p.m. on May 23, 2024.

<When complete, add section summarizing outcome of the public comment period>

<When complete, add section summarizing outcome of the public hearing summary>

## 8. SEPA Review

The State Environmental Policy Act (SEPA) under Chapter 197-11 WAC is intended to provide information to agencies, applicants, and the public to encourage the development of environmentally sound proposals. The goal of SEPA is to assure that significant impacts are mitigated.

The Port of Grays Harbor (the Port) is the lead agency for this project. The Port issued a SEPA Mitigated Determination of Non Significance (MDNS) SEPA# 202303637 for this project on July 28, 2023.

## 9. Criteria for Approval

ORCAA's Rule 6.1 and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6, establish the following general criteria for approving new stationary sources and modifications to existing stationary sources of air pollution in ORCAA's region:

1. **Performance Standards** - Any new stationary source or modification will likely comply with applicable air-performance standards such as the federal new source performance standards (NSPS), national emission standards for hazardous air pollutants (NESHAPs), and any performance standards adopted under chapter 70A.15 RCW;
2. **BACT** - The new or modified stationary source is controlled to a level that meets the standard of "Best Available Control Technology" (BACT);
3. **Ambient Air Quality** – Any increase in air emissions will not cause or contribute to violation of any ambient air quality standard;
4. **Federal Air Permitting Requirements** – All applicable federal air permits, if required, are secured;
5. **Washington Air Toxics Regulations** - If there are increases in toxic air pollutant (TAP) emissions, the requirements of Washington's Controls for New Sources of Toxic Air Pollutants under Chapter 173-460 WAC are met; and,
6. **Public Outreach** – Public notice and comment requirements in ORCAA's regulations and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6 are met.

The following sections provide more detail on each criterion.

## 10. Applicable Performance Standards (Summary)

ORCAA's Rule 6.1.4(a)(1) and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6, require a finding that any new or modified stationary source will likely comply with applicable state, federal and local performance standards for air emissions including emission standards adopted under chapter 70A.15 RCW, emissions standard of ORCAA, and federal emission standards including New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT standards). The

performance standards in Table 10.1 were determined applicable to the proposed transload facility and associated equipment. The performance standards in Table 10.2 were determined relevant to the proposed transload facility, but inapplicable. A comprehensive list of applicable performance standards that apply to all stationary sources of air pollution located at the facility, as well as general air regulations and standards that apply, are included in the Appendix.

**Table 10.1: Applicable Performance Standards specific to the Proposed Transload Facility and Associated Equipment**

Title Citation	Brief Description (Consult rule/regulation for specific requirements)	Applies to
Registration ORCAA Regulation 4	Requires facilities that are minor sources of emissions to register annually with ORCAA and pay annual registration fees.	AGP will continue to be a minor source requiring registration.
Annual Registration Fees ORCAA Rule 3.1	Requires payment of annual registration fees to ORCAA based in part on air pollutants emitted during the previous year.	AGP is required to register and pay annual registration fees.
Interference or Obstruction ORCAA Rule 7.1	Prohibits willfully interfering with or obstructing the Control Officer or any Agency employee in performing any lawful duty.	Applies generally to all air pollution sources
False or Misleading Statements ORCAA Rule 7.2	Prohibits any person from willfully making a false or misleading statement to the Board or its representative as to any matter within the jurisdiction of the Board.	Applies generally to all air pollution sources
Unlawful Reproduction or Alteration of Documents ORCAA Rule 7.3	Prohibits reproducing or altering, or causing to be reproduced or altered, any order, registration certificate or other paper issued by the Agency if the purpose of such reproduction or alteration is to evade or violate any provision of these Regulations or any other law.	Applies generally to all air pollution sources
Display of Orders and Certificates ORCAA Rule 7.4	Any order or registration certificate required to be obtained by these Regulations shall be available on the premises designated on the order or certificate. In the event that the Agency requires order or registration certificate to be displayed, it shall be posted. No person shall mutilate, obstruct or remove any order or registration certificate unless authorized to do so by the Board or the Control Officer.	All Approval Orders and Registration Certificates must be available on site
General Requirements WAC 173-400-040(1)(c) ORCAA Rule 8.2	All emissions units are required to use reasonably available control technology (RACT).	Applies generally to all air pollution sources. BACT applies to the current project. The controls proposed by AGP for the transload facility meet the RACT criteria.
Visible Emissions WAC 173-400-040(2) ORCAA Rule 8.2(a)	Prohibits emissions with opacity of greater than 20% for more than three (3) minutes in any one hour.	Applies generally to all air pollution sources



Title Citation	Brief Description (Consult rule/regulation for specific requirements)	Applies to
Particulate Matter (process units) WAC 173-400-060 ORCAA Rule 8.3(a)	No person shall cause or allow the emission of particulate material from any general process operation in excess of 0.23 grams per dry cubic meter at standard conditions (0.1 grain/dscf) of exhaust gas.	Applies to stationary process units that exhaust to the atmosphere.
Control Equipment Maintenance and Repair ORCAA Rule 8.8	ORCAA Rule 8.8 requires that all air contaminant sources keep any process and/or air pollution control equipment in good operating condition and repair.	Applies to maintenance and repair of the baghouses.
Fallout WAC 173-400-040(3) ORCAA Rule 8.3(e)	Prohibits particulate emissions from any source to be deposited, beyond the property under direct control of the owner or operator of the source, in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material was deposited.	Applies generally to all air pollution sources.
Fugitive Emissions WAC 173-400-040(4)(a) ORCAA Rule 8.3(c)	The owner or operator of any emissions unit engaging in materials handling, construction, demolition or other operation which is a source of fugitive emission shall take reasonable precautions to prevent the release of air contaminants from the operation.	Applies to any activity that results in fugitive emissions.
Odor WAC 173-400-040(5) ORCAA Rule 8.5	ORCAA Rule 8.5 contains general requirements for controlling odors and a general prohibition of odors that unreasonably interfere with the use or enjoyment of a person's property.	Applies generally to all air pollution sources.
Emissions Detrimental to Persons or Property WAC 173-400-040(6) ORCAA Rule 7.6	Prohibits causing or allowing the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.	Applies generally to all air pollution sources
Concealment and Masking WAC 173-400-040(8) ORCAA Rule 7.5	Prohibits installation or use of any device or means to conceal or mask emissions of an air contaminant, which causes detriment to health, safety, or welfare of any person, or causes damage to property or business.	Applies generally to all air pollution sources
Fugitive Dust WAC 173-400-040(9)	The owner or operator of a source or activity that generates fugitive dust must take reasonable precautions to prevent that fugitive dust from becoming airborne and must maintain and operate the source to minimize emissions.	Applies to any activity that results in fugitive dust.
Excess Emissions Provisions WAC 173-400-108; ORCAA 8.7	Requires excess emissions be reported to the Authority as soon as possible and within 24 hours and establishes criteria qualifying excess emissions as unavoidable.	Applies generally to all air pollution sources
Record Keeping and Reporting. ORCAA Rule 8.11	Requires the following: 1. Maintenance of records on the nature and amounts of emissions and other related information as deemed necessary by ORCAA; 2. Reporting of emissions to ORCAA upon request.	Required of all facilities registered with ORCAA.

**Table 10.2: Relevant Performance Standards Determined Inapplicable to the Proposed Transload Facility and Associated Equipment**

Regulation Title Citation	Relevant Performance Standard Determined Inapplicable	Basis
Standards of Performance for Grain Elevators 40 CFR Part 60, Subpart DD	The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator.	Operations at Terminal 4 (T4) are completely physically separate from the Terminal 2 (T2) facility. There are no shared equipment or process linkages between the two terminals, and the T4 transload operations have no access to commodity storage. Based on this and the definitions of “grain terminal elevator” and “grain storage elevator” in 40 CFR 60.301, it is AGP’s position that T4 is not an “affected facility” under NSPS Subpart DD, even if handling grains as defined in Subpart DD. Should future modifications to the facility include the addition of permanent storage capacity or interconnection between process equipment at T2 and T4, further permitting action would be required and NSPS Subpart DD applicability could be reevaluated at that time. ORCAA staff concur with AGP’s position.
Particulate Matter (combustion units) WAC 173-400-050 ORCAA Rule 8.3(a)	Prohibits emissions from any combustion unit in excess of 0.1 grain/dscf. EPA test methods from 40 CFR Appendix A must be used if demonstration of compliance is required.	AGP currently does not include any stationary combustion units.
Sulfur Dioxide WAC 173-400-040(7)	No person shall cause or allow the emission from any emissions unit in excess of one thousand ppm of sulfur dioxide on a dry basis, corrected to seven percent oxygen for combustion sources, and based on the average of any period of sixty consecutive minutes.	AGP currently does not emit any Sulfur Dioxide.

## 11. Best Available Control Technology (BACT)

ORCAA Rule 6.1.4(a)(2) and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6, require the finding that a new source or modification to an existing source of air pollution in an attainment or unclassifiable area will employ best available control technology for all pollutants (BACT) not previously emitted or whose emissions would increase as a result of the new source or modification. ORCAA Rule 6.1.4(a)(2) applies to AGP’s proposal to install and operate nine (9) new baghouses for the new transload facility.

New sources of air pollution and modifications to existing sources of air pollution are required to use BACT to control all pollutants not previously emitted, or those for which emissions would increase as a result of the new source or modification. BACT is defined in WAC 173-400-030 as, *“an emission limitation based on the maximum degree of reduction for each air pollutant subject to regulation under chapter 70A.15 RCW emitted from or which results from any new or*

*modified stationary source, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes and available methods, systems, and techniques, including fuel cleaning, clean fuels, or treatment or innovative fuel combustion techniques for control of each pollutant.”*

AGP proposed a grain loading BACT of 0.001 gr/dscf and control efficiency of 99.99% for particulates, which are both the manufacturer’s guaranteed level of control for the baghouses. Based on experience with similar cases, ORCAA staff agree the proposed standards meet BACT for this case. Additionally, ORCAA will require an opacity BACT standard of 0% (zero percent) for all point source emissions (baghouse exhausts), 5% for railcar unloading fugitive emissions, and 20% for shiploading fugitive emissions associated with shiploading operations, consistent with the BACT requirements at the T2 facility.

**Table 11.1 BACT Summary**

Emission Source	BACT	Pollutant
Baghouse Exhaust Vents	0.001 gr/dscf	Particulates
Baghouse Exhaust Vents	0% (zero percent)	Opacity
Commodity Transfer Points	0% (zero percent)	
Railcar Unloading Operations	5%	
Shiploading Operations	20%	

-Grains per dry standard cubic foot, as determined by EPA Reference Method 5 of 40 CFR Part 60, Appendix A

-Opacity as determine by EPA Reference Method 9

## 12. Ambient Impact Analysis (Criteria Pollutants)

ORCAA’s Rule 6.1.4(a)(3) and the Washington State Implementation Plan under 40 CFR part 52.2470(c), Table 6, require emissions from any new stationary source or modification not delay the attainment date of an area not in attainment, nor cause or contribute to a violation of any Ambient Air Quality Standard (AAQS).

The pollutants emitted by the project are classified as PM, PM<sub>10</sub>, and PM<sub>2.5</sub>. PM<sub>10</sub> and PM<sub>2.5</sub> both have associated AAQS’s while PM does not. As part of the permit application AGP modeled emissions associated with the project using AERSCREEN with default regulatory settings. ORCAA staff reviewed the modeling analysis and agree with the methodology and results, except that AGP used SCREEN3 scaling factors instead of AERSCREEN scaling factors. The data provided in Table 12.2 was corrected by ORCAA to include the AERSCREEN scaling factors.

All modeled concentrations except PM<sub>2.5</sub> 24-hour basis were found to be less than their respective Significant Impact Level in WAC 173-400-113 Table 4a. Therefore, emissions of PM<sub>2.5</sub> 24-hour basis must be compared to the respective NAAQS.

Local background concentrations must be used when comparing modeled maximum concentrations with the NAAQS. Local background concentrations are currently available from NW-AIRQUEST based on ambient background data from 2014-2017. ORCAA staff reviewed

regulated sources located within a one-mile radius of the project and looked at permits issued for those sources since and including 2017. The results are summarized in Table 12.1.

**Table 12.1: Nearby Emissions Increases**

Facility	Emissions Increases Since and Including 2017 (TPY PM)	Equipment or Process Causing Increase
BWC Terminals LLC	0.55	Storage tanks, boilers, mobile vapor extraction unit)
City of Aberdeen WWTP	0.11	Flare
Paneltech International LLC	0.07	Facility-wide PTE documented in TSD; not an actual increase but conservatively included for comparison completeness
REG Grays Harbor LLC	0.003	Dust collection unit
<b>Total tons PM</b>	<b>0.73</b>	-

During the same time period, since and including 2017, AGP received temporary approval for a temporary shiploader (21NOC1532) which is no longer active and received permanent approval for the Terminal 2 upgrade (22NOC1562) which actually resulted in a *decrease* of the facility's PM PTE from 37.0022 TPY to 36.14 TPY (a net decrease of 0.862 TPY) as a result of more stringent baghouse standards during the upgrade.

ORCAA staff therefore determined emissions from permitted sources within a one-mile radius of the project have therefore decreased since the design background values were last calculated by 0.129 tons per year (0.862 tpy decreased from AGP compared to 0.733 tpy added from all other sources in a one-mile radius). ORCAA staff conclude the design background concentrations are likely more conservative than current background concentrations and determined the new project emissions combined with the design background concentrations are sufficiently representative to demonstrate compliance with the NAAQS. The NAAQS comparison is shown below in Table 12.2.

**Table 12.2: NAAQS Comparison**

Pollutant	Averaging Period	Modeled Maximum Concentration (ug/m <sup>3</sup> )	Background Concentration (ug/m <sup>3</sup> )	Combined Concentration (ug/m <sup>3</sup> )	NAAQS (ug/m <sup>3</sup> )	Pass/Fail
PM <sub>10</sub>	Annual	0.593	n/a	n/a	n/a	n/a
	24-hr	3.56	42.31	<b>45.9</b>	<b>150</b>	Pass
PM <sub>2.5</sub>	Annual	0.223	5.16	<b>5.4</b>	<b>9</b>	Pass
	24-hr	1.34	12.69	<b>14.0</b>	<b>35</b>	Pass

Notes:

1. NAAQS – National Ambient Air Quality Standard
2. ug/m<sup>3</sup> – micrograms per meter cubed
3. Criteria Pollutant Design Values Background Concentrations 2014 – 2017 from <https://lar.wsu.edu/nw-airquest/>
4. The EPA issued final revised PM<sub>2.5</sub> Annual NAAQS that will be effective May 6, 2024.

As demonstrated above, the project's modeled concentrations plus background design concentrations are below the NAAQS for all project pollutants and their associated averaging times. ORCAA staff concluded the project as proposed should not cause or contribute to a violation of an ambient air quality standard.

### 13. Ambient Impact Analysis (Toxic Air Pollutants)

Washington's regulation titled Controls for New Sources of Toxic Air Pollutants (Air Toxics Rule) under Chapter 173-460 of the Washington Administrative Code applies to new stationary sources of Toxic Air Pollutants (TAP), including modifications to existing emissions units that increase TAP. The purpose of the Air Toxics Rule is to, "... maintain such levels of air quality as will protect human health and safety." The TAPs covered under the Air Toxics Rule include carcinogens and non-carcinogens. TAP emissions increases for determining applicability are the increases attributable to the new or modified emissions unit - Decreases from existing emissions units are not allowed to be subtracted from project-attributable TAP increases when determining applicability. Also, the Air Toxics Rule provides that review of modifications are limited to the emission unit or units proposed to be modified and the TAPs whose emissions would increase as a result of the modification.

The Air Toxics Rule has two independent requirements for new sources and modifications that increase TAP emissions above de-minimis levels:

- 1) **tBACT:** The new or modified emission units must use Best Available Control Technology to control TAP emissions (WAC 173-460-040(3)(a)).
- 2) **Ambient Impact:** The NOC application must demonstrate that any increase in TAP from the new or modified emission units are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects (WAC 173-460-070).

#### **tBACT**

The tBACT requirement applies to any new or modified emission units that triggers the Air Toxics Rule (results in a TAP increase above de-minimis levels), regardless of facility-wide or "net" TAP emissions. The term tBACT means Best Available Control Technology, as that term is defined in WAC 173-400-030, but applied to control of TAP (see BACT definition in Section 11).

The proposed Terminal 4 transload facility and associated equipment is not expected to result in the emissions of any toxic air pollutants, therefore, tBACT does not apply to this project.

#### **Ambient Impact Review**

The Air Toxics Rule provides a multi-tiered, screening approach under WAC 173-460-080 to assess health impacts and demonstrate compliance with the ambient impact requirement under WAC 173-460-070, which is that TAP increases must be sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects.

The "First Tier Review" (Tier 1 Review) is a two-step process. First, the emissions increase of each TAP is compared to its unique Small Quantity Emission Rate (SQER). SQERs are listed for

each TAP under WAC 173-460-150. An SQER is the level of emissions of a TAP below which dispersion modeling is not required to demonstrate compliance with the ambient impact requirement. TAP emissions increases used in this first step must be based on the maximum potential to emit considering control or reduction in emissions achievable using the air pollution control technology or methods proposed to meet the tBACT requirement. Any TAP with an increase below its SQER can be presumed to be in compliance with the ambient impact requirement. If this is the outcome, further analysis is not required for that TAP. However, TAPs with emissions increases above their SQER must undergo the second step of the Tier 1 Review.

The second step of the Tier 1 Review requires evaluating TAP impacts against Acceptable Source Impact Levels (ASIL) and is referred to as an ASIL Analysis. An ASIL is the adopted health-based concentration for a TAP below which can be presumed as meeting the ambient impact requirement of WAC 173-460-070. ASILs are provided for each TAP under WAC 173-460-150. An ASIL analysis typically involves using an ambient air dispersion model to estimate ambient concentrations resulting from TAP emissions increases and considering air dispersion and local meteorological characteristics of the source. If the modeled impact of the increase in emissions of a TAP does not exceed its corresponding ASIL, the ambient impact requirement of WAC 173-460-070 may be considered met and the First Tier Review is completed for that TAP.

Emissions rates used to support an ASIL Analysis must be based on the maximum potential to emit considering control or reduction in emissions achievable using the air pollution control technology or methods proposed to meet the tBACT requirement. In addition, the Air Toxics Rule allows TAP reductions from existing emission units not subject to review to be subtracted or “netted out” from TAP increases, provided the reductions are included in the approval order as enforceable voluntary emission limits and meet all the requirements of WAC 173-460-071. These requirements include:

- (1) The voluntary emissions reductions must be enforceable through a regulatory order issued by the air permitting agency.
- (2) The approval order enforcing the voluntary emissions reductions must include monitoring, recordkeeping, and reporting requirements sufficient to ensure the reductions are maintained.
- (3) The agency’s preliminary determination to approve the voluntary emissions reductions are subject to a 30-day public notice and comment period and opportunity for a public hearing.

For pollutants with ambient concentrations found to be greater than their ASIL, a “Second Tier Review” (Tier 2 Review) by the Washington Department of Ecology (Ecology) is required. An application for a Tier 2 Review by Ecology is referred to a Tier 2 petition. Tier 2 petitions must include a Health Impacts Assessment (HRA) and estimated ambient TAP impacts based on refined air dispersion modeling. Ecology will not act on a Tier 2 petition unless a written preliminary determination on the NOC application for the new or modified TAP source and a draft approval order have been completed by the local agency with jurisdiction. Ecology’s review and approval of a Tier 2 petition is contingent on a finding that TAP impacts meet the ambient impact requirement of WAC 173-460-070 that increases in TAP emissions are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. If Ecology recommends denial of a Tier 2 petition, the permitting authority may

not approve the project. The applicant then has the option of submitting a petition for a “Third Tier Review” (Tier 3 Review) by Ecology and a request for a risk management decision.

The proposed Terminal 4 transload facility and associated equipment is not expected to result in the emissions of any toxic air pollutants, therefore, an ambient impact review under Chapter 173-460 WAC is not required.

## **14. Requirements for Major Stationary Sources and Major Modifications to Major Stationary Sources**

Projects that are major stationary sources and major modifications to major stationary sources as defined in 40 CFR 52.21(b) may be subject to permitting requirements under WAC 173-400-700 through 173-400-860.

AGP’s potential to emit is less than the 250 TPY PSD threshold for PM<sub>10</sub>. Therefore, AGP is not a “Major Stationary Source” as defined in 40 CFR 52.21(b) and not subject to the permitting program required by WAC 173-400-700 through WAC 173-400-860. Therefore, these permitting requirements do not apply.

## **15. Title V Air Operating Permit (AOP) Implications**

The State of Washington program pursuant to Title V of the federal Clean Air Act is governed under Chapter 173-401 WAC, the Washington Air Operating Permit Program. Chapter 173-401 WAC requires existing major stationary sources to operate in compliance with an approved Air Operating Permit (AOP). Major stationary sources are those stationary sources with a potential to emit which is greater than 100 tons per year of any criteria pollutant, greater than 10 tons per year of any hazardous air pollutants (HAP), or greater than 25 tons per year of any combination of HAP.

The only criteria pollutants AGP emits are PM<sub>10</sub> and PM<sub>2.5</sub>. AGP’s PM<sub>10</sub> and PM<sub>2.5</sub> PTE emissions are each less than the 100 tons per year Title V applicability threshold. Therefore, AGP is not a “Major Source” under the Title V program and is not subject to the requirement to operate under an AOP.

## **16. Environmental Justice Considerations**

EPA defines Environmental Justice (EJ) as the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. The purpose of an EJ review in conjunction with an air permitting action is to ensure no group of people bear a disproportionate share of the negative environmental consequences as the result of the permitting action. Further, ORCAA strives to engage the affected community effectively and meaningfully regarding the permitting action, and to ensure compliance with obligations



pursuant to Title VI of the Civil Rights Act. With respect to factoring EJ into air permitting decisions, EPA Region 10 expects air agencies to:

- Identify overburdened communities;
- Engage with communities;
- Evaluate cumulative impacts; and,
- Use available authority to minimize emissions.

However, EPA Region 10 does not expect air agencies to use the Clean Air Act's authorities to address existing disproportional impacts to communities when implementing New Source Review in areas that are "attainment/unclassifiable" with respect to meeting the NAAQS.

The following subsections describe how these expectations from EPA Region 10 were met.

### **16.1 Identify Overburdened Communities**

The initial step in an EJ review is to identify any affected populations or communities of concern and to identify whether they are disproportionately impacted. ORCAA used EPA's environmental justice screening and mapping tool, EJScreen, to answer this first part of this question. An EJScreen Community Report was generated for Grays Harbor County. The Community Report estimates a minority population of 22%, with approximately 7% of the total population speaking Spanish and 9% speaking another Non-English language at home. All demographic indicators were below the 80th percentile for the nation. Likewise, the Community Report indicates that Grays Harbor County is below the 80th percentile for all environmental indicators. Environmental indicators above the 80th percentile are an indication that a community is already disproportionately impacted. Therefore, ORCAA staff's conclusion is that the project impact area does not include any preexisting, overburdened communities. A copy of the Community Report with more detailed information will be filed as part of the supporting documentation for the project.

Preexisting air quality impacts were evaluated based on ambient air quality monitoring data and designation of the area with respect to maintaining compliance with the NAAQS. If air quality in a geographic area meets or is cleaner than a national standard based on ambient air monitoring data, it is called an attainment area and designated "attainment/unclassifiable." Areas may also be presumed "attainment/unclassifiable" based on population density and air pollutant emissions being below certain thresholds. For this case, the project impact area and Thurston County as a whole is designated "attainment/unclassifiable." Therefore, there are no preexisting nonattainment issues identified within the County. The project's criteria emissions will not cause or contribute to a violation of an AAQS. Therefore, ORCAA staff's conclusion is that there are no indications of any existing disproportional impacts to communities of concern within the project impact area.

### **16.2 Engage with Communities**

Based on the size and scope of the project, and that there are no overburdened communities near the project, ORCAA staff determined the public noticing procedures outlined in Section 7 above are sufficient notifications.

### 16.3 Evaluate Cumulative Impacts

The air permitting action for this case did not trigger a cumulative impacts analysis under either the Clean Air Act or the Washington Clean Air Act. All criteria pollutants associated with the project were modeled and compared to their associated NAAQS. Therefore, the air analysis can be considered a cumulative analysis with respect to the NAAQS.

### 16.4 Use Available Authority to Minimize Emissions

As described elsewhere in this report, ORCAA applied existing New Source Review authorities provided under the Clean Air Act and the Washington Clean Air Act to minimize emissions from the proposed transload facility and associated equipment. Principally among these authorities is the requirement to use BACT for controlling emissions. The BACT requirement was applied and corresponding BACT emissions limits are included in the air permit.

## 17. Conditions of Approval

The following conditions of approval were determined necessary for assuring compliance with applicable air regulations and standards and protecting air quality. Recommended conditions of approval will become effective once the Approval Order is issued:

1. **Approved Equipment.** The transload facility and associated equipment as described in Notice of Construction application No. 23NOC1627 and the associated Final Determination is approved for construction and operation subject to conditions in this Order of Approval. [Regulatory Basis: ORCAA 6.1(a); ORCAA 6.1.2(l); 40 CFR part 52.2470(c), Table 6]
2. **Preapproval Required.** Prior approval by ORCAA may be required for the following as specified in ORCAA Rule 6.1:
  - a. Construction, installation, or establishment of any stationary source;
  - b. Modification to any existing stationary source;
  - c. Replacement or substantial alteration of emission control technology installed on an existing stationary source; or,
  - d. Deviations from the approved plans, drawings, data, and specifications of the stationary sources listed in Table 1 and Table 2 below.

**Table 1 Stationary Sources Located at AGP Terminal 4**

Emissions Unit	Description	Baghouse Control Device
Receiving Pit 3 (East)	-Two identical receiving tracks	-BH-4013 Pit 3 Receiving Baghouse -BH-4211 Pit 3 Transfer Baghouse

Conveyance Line	-Consists of receiving pits and conveyors.	
Receiving Pit 4 (West) Conveyance Line	-Receives product directly from rail cars and conveys to shiploader. -Aspirated by receiving and transfer baghouses. -Enclosures and aspiration sufficient to effectively capture 97.5% of receiving operations emissions.	-BH-4306 Pit 4 Receiving Baghouse -BH-4511 Pit 4 Transfer Baghouse
Shiploader	-Two conveyors -Two 3-way valves -Only two of the three shiploaders operate at any time -Aspirated by shiploader baghouses. -Enclosures and aspiration sufficient to effectively capture 98% of receiving operations emissions.	-BH-4605 Shiploader Baghouse 1 -BH-4610 Shiploader Baghouse 2 -BH-4703 West Shiploader Baghouse -BH-4803 Center Shiploader Baghouse -BH-4903 East Shiploader Baghouse

**Table 2 Control Devices Located at AGP Terminal 4**

Baghouse	Location	Specifications
4013	Pit 3 Receiving Baghouse	Manufacturer: Schenck Process LLC M/N: 120MCF1120-500
4211	Pit 3 Transfer Baghouse	Pressure Drop: 0-19" W.C. Cleaning Mechanism: Pulse Jet
4306	Pit 4 Receiving Baghouse	Filter Media: DYNA-MAC 16 oz. Polyester Bags Control Efficiency: 99.99%
4511	Pit 4 Transfer Baghouse	Air to Cloth Ratio: 7.0:1 Outlet loading: 0.001 gr/dscf
4605	Shiploader Baghouse 1	Manufacturer: Schenck Process LLC M/N: RT (round top) Series Pressure Drop: 0-14" W.C. Cleaning Mechanism: Pulse Jet
4610	Shiploader Baghouse 2	Filter Media: DYNA-MAC 16 oz. Polyester Bags Control Efficiency: 99.99%
4703	West Shiploader Baghouse	Air to Cloth Ratio: 6.8:1 Outlet loading: 0.001 gr/dscf
4803	Center Shiploader Baghouse	Manufacturer: Schenck Process LLC M/N: LST Series Pressure Drop: 0-14" W.C. Cleaning Mechanism: Pulse Jet
4903	East Shiploader Baghouse	Filter Media: DYNA-MAC 16 oz. Polyester Bags Control Efficiency: 99.99%
		Air to Cloth Ratio: 6.7:1 Outlet loading: 0.001 gr/dscf

[Regulatory Basis: WAC 173-400-113; ORCAA 6.1(a); ORCAA 6.1.2(l)]

**3. Commodity Limits:** The transload facility must only transfer the following commodities:

Soda ash, corn gluten meal, corn gluten feed, beet pulp pellets, soybean meal, distiller’s dried grains with solubles (DDGS), corn, soybeans, wheat, milo, and other similar agricultural commodities. Transferring other commodities may require preapproval through ORCAA.

[Regulatory Basis: WAC 173-400-113; ORCAA 6.1.2(l)]

**4. Air Pollution Control Equipment Requirements:**

- a. Baghouses must be equipped with bags made from 16 oz. Singed Polyester felt material and capable of at least 99.99% filtering efficiency, or equivalent bags.
- b. *Railcar Receiving Buildings:* The air pollution control equipment (baghouses) associated with the Railcar Receiving Buildings must be operated while commodities are being offloaded from railcars.
  - i The rate of aspiration must be sufficient to maintain compliance with the opacity limit for railcar unloading in Condition 5a.
- c. *Transfer Points:* All transfer points must be enclosed or shrouded, and vented to a baghouse while commodities are being received, transferred or loaded.
- d. *Shiploading:*
  - i. Commodities may be loaded into ships only through the ship loading spouts.
  - ii. The airspace between the spouts and the shrouds surrounding the spouts must be aspirated to a baghouse at all times during shiploading.
  - iii. The rate of aspiration must be sufficient to maintain compliance with the opacity limit for shiploading in Condition 5a.
  - iv. The ship loading spouts must extend inside the ship hold and as close as practically possible to the commodity pile.
  - v. The spout shrouds must provide sufficient separation of the commodity stream and surrounding air inside the hold such that there are no gaps resulting in excess fugitive emissions during loading operations.
  - vi. The spout shrouds must be in contact with the surface of the commodity pile whenever commodity is being loaded.
  - vii. Only two of the three spouts may operate concurrently.

[Regulatory Basis: WAC 173-400-113; ORCAA 6.1.4(a)(2)]

**5. Emission Limits:** The following emission limits apply at all times.

- a. *Opacity:* Visible emissions from each of the following sources must not exceed the opacity limit listed below. Compliance must be demonstrated using EPA Reference Method 9 of 40 CFR Part 60, Appendix A.

Source	Opacity Limit (6-minute average)
<i>Point Sources</i>	
Baghouse exhaust vents	0% (zero percent)
Commodity transfer points	0% (zero percent)
<i>Fugitive Sources</i>	
Railcar unloading	5%

Shiploading	20%
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b. *Particulate Matter:* The concentration of particulate matter in emissions from each baghouse exhaust vent must not exceed 0.001 grains per dry standard cubic foot of exhaust air on an hourly average basis (gr/dscf, 1-hr avg), as determined by EPA Reference Method 5 of 40 CFR Part 60, Appendix A.  
 [Regulatory Basis: WAC 173-400-113(3); ORCAA 6.1.4(a)(2)]

6. **Source Testing:** When required by ORCAA, the owner or operator must perform emissions testing to determine compliance with the emissions limits in this Order of Approval and applicable air quality standards as follows:

- a. Testing of all baghouses in accordance with Conditions 6b through 6d below must be conducted when required by ORCAA. Provided a source test protocol is approved by ORCAA, AGP may test a representative baghouse to meet this requirement for other baghouses considered 'identical units.'
- b. All testing will be in accordance with the applicable Federal Reference Methods found at 40 CFR Part 60, Appendix A.
- c. Test results must be forwarded to ORCAA no later than 45 days after any such testing has been completed.
- d. The owner or operator must provide ORCAA at least 30 days prior notice of any performance test. The notice must include a test plan describing the proposed test methods, procedures, and conditions for testing.

[Regulatory Basis: WAC 173-400-105(4); WAC 173-400-113(1); ORCAA 1.5(i)]

7. **Operations and Maintenance Plan:** The owner or operator must devise, implement, and update, when necessary, an Operations and Maintenance (O&M) plan for assuring air pollution control systems are maintained in good operating condition and repair. The plan must include but is not limited to standard procedures for the following:

- a. Minimizing dust generation during receiving, handling, transfer and loading operations.
- b. Daily visual surveys of the facility for fugitive dust emissions and excess opacity on those days when the commodity transfer and handling equipment is operating.
- c. Regularly scheduled inspection and maintenance of process equipment and pollution control equipment.
- d. Identification of minimum and maximum pressure drops which are indicative of good operation and repair for all baghouses.
- e. Daily monitoring of baghouse pressure drops when the facility is operating.
- f. Corrective actions to be taken to minimize the emission of air contaminants in the event of malfunction or breakdown of the process or pollution control equipment.
- g. Cleanup of commodity spills and accumulated dust.
- h. Investigation and response to citizen complaints. Complaint response procedures must include a means for documenting:
  - i. The complainant's contact information.
  - ii. The time and duration of any alleged impacts.
  - iii. A description of atmospheric conditions and facility operations which may have

contributed to the complaint.

- iv. Any steps taken by the owner or operator to investigate the complaint, including corrective actions taken in an attempt to reduce emissions to minimize potential offsite impacts.

[Regulatory Basis: WAC 173-400-101; ORCAA 8.8]

8. **Monitoring:** The owner or operator must monitor equipment and processes as follows to assure compliance with applicable emission standards:

a. *Baghouse Pressure Drop:*

- i. The pressure drop of each baghouse must be monitored and recorded on days that the commodity transfer and handling equipment is operating.
- ii. Monitoring results which are within the target operating range identified in the current O&M Plan will be considered to be indicative of good operating condition of the baghouses.
- iii. If monitoring results indicate out-of-range conditions, appropriate corrective actions must be taken as soon as possible, but in no case later than 24 hours from the time that the out of range readings were noted. At a minimum, appropriate corrective action must include an inspection of the air pollution control system.

b. AGP must conduct a daily visual survey of fugitive dust emissions and excess opacity using the daily visual surveying procedures in the current O&M Plan.

c. AGP must monitor process and pollution control equipment inspection and maintenance activities according to the procedures in the current O&M Plan.

d. AGP must monitor and respond to air quality-related complaints according to the procedures in the current O&M Plan.

[Regulatory Basis: WAC 173-400-105; ORCAA 8.11]

9. **Required Records:** The following information must be recorded at the prescribed frequencies, maintained on-site for no less than 2 years from origination, and made available for inspection upon request:

a. The written O&M plan required by Condition 7.

b. Monthly record of the types and quantities of commodities received and loaded onto ships in terms of tons or bushels.

c. The recorded pressure drop across each baghouse when operating.

d. Records of corrective actions taken in response to out-of-range pressure drop readings.

e. The results of fugitive dust and opacity surveys.

f. Records of inspection and maintenance of pollution generating and control systems.

g. Records of all air quality related complaints.

h. Records of all testing results required by Condition 6.

i. Written recommendations or best practices from the ship loading spouts manufacturer for minimizing fugitive dust from the ship loading spouts during ship load operations.

[Regulatory Basis: WAC 173-400-105; ORCAA 8.11]

10. **Reporting:** The permittee must maintain and make available upon request any records of

information necessary to substantiate any reported emissions, consistent with the averaging times for the applicable standards.

[Regulatory Basis: WAC 173-400-105; ORCAA 8.11]



## Attachments

Applicable Performance Standards that apply to AG Processing, Inc.

Title Citation	Brief Description (Consult rule/regulation for specific requirements)	Applies to
Registration ORCAA Regulation 4	Requires facilities that are minor sources of emissions to register annually with ORCAA and pay annual registration fees.	AGP will continue to be a minor source requiring registration.
Annual Registration Fees ORCAA Rule 3.1	Requires payment of annual registration fees to ORCAA based in part on air pollutants emitted during the previous year.	AGP is required to register and pay annual registration fees.
Initial Notification ORCAA Rule 4.3(a)&(b); 4.3(f)	Requires facilities subject to registration to register by submitting an initial notification with the information in ORCAA Rule 4.3(b) within 30 days from: 1) Commencement of operation of any new or recommissioned stationary source; 2) Change in ownership of existing registered stationary source. The notification must be signed by the owner or operator or by the agent appointed by the owner.	
Administrative Change Notification ORCAA Rule 4.3(e); 4.3(f)	Requires facilities to notify ORCAA of any changes to administrative information within 30 days from the change taking place including, but not limited to, contact names, address, phone numbers, and permanent shut down or decommissioning of a stationary source. The notification must be signed by the owner or operator or by the agent appointed by the owner.	
Annual and/or Periodic Reports ORCAA Rule 4.3(c)&(d); 4.3(f)	Requires stationary sources to submit reports with information directly related to the registration program when requested by the Agency within 30 days of receipt of the request. The submittal must be signed by the owner or operator or by the agent appointed by the owner.	
Interference or Obstruction ORCAA Rule 7.1	Prohibits willfully interfering with or obstructing the Executive Director or any Agency employee in performing any lawful duty.	Applies generally to all air pollution sources
False or Misleading Statements ORCAA Rule 7.2	Prohibits any person from willfully making a false or misleading statement to the Board or its representative as to any matter within the jurisdiction of the Board.	Applies generally to all air pollution sources
Unlawful Reproduction or Alteration of Documents ORCAA Rule 7.3	Prohibits reproducing or altering, or causing to be reproduced or altered, any order, registration certificate or other paper issued by the Agency if the purpose of such reproduction or alteration is to evade or violate any provision of these Regulations or any other law.	Applies generally to all air pollution sources
Display of Orders and Certificates ORCAA Rule 7.4	Any order or registration certificate required to be obtained by these Regulations shall be available on the premises designated on the order or certificate. In the event that the Agency requires order or registration certificate to be displayed, it	The Approval Order issued in conjunction with this NOC approval must be retained on site.

## Attachments

Title Citation	Brief Description (Consult rule/regulation for specific requirements)	Applies to
	shall be posted. No person shall mutilate, obstruct, or remove any order or registration certificate unless authorized to do so by the Board or the Executive Director.	
General Requirements WAC 173-400-040(1)(c) ORCAA Rule 8.3	All emissions units are required to use reasonably available control technology (RACT).	Applies generally to all air pollution sources.
Visible Emissions WAC 173-400-040(2) ORCAA Rule 8.2(a)	Prohibits emissions with opacity of greater than 20% for more than three (3) minutes in any one hour.	Applies generally to all air pollution sources
Sulfur Dioxide WAC 173-400-040(7)	No person shall cause or allow the emission from any emissions unit in excess of one thousand ppm of sulfur dioxide on a dry basis, corrected to seven percent oxygen for combustion sources, and based on the average of any period of sixty consecutive minutes.	Applies generally to facilities that emit Sulfur Dioxide.
Control Equipment Maintenance and Repair  ORCAA Rule 8.8	ORCAA Rule 8.8 requires that all air contaminant sources keep any process and/or air pollution control equipment in good operating condition and repair.	Applies generally to all air pollution control devices.
Fallout  WAC 173-400-040(3) ORCAA Rule 8.3(e)	Prohibits particulate emissions from any source to be deposited, beyond the property under direct control of the owner or operator of the source, in sufficient quantity to interfere unreasonably with the use and enjoyment of the property upon which the material was deposited.	Applies generally to all air pollution sources.
Fugitive Emissions  WAC 173-400-040(4)(a) ORCAA Rule 8.3(c)	The owner or operator of any emissions unit engaging in materials handling, construction, demolition, or other operation which is a source of fugitive emission shall take reasonable precautions to prevent the release of air contaminants from the operation.	Applies generally to any activity that results in fugitive emissions.
Odor  WAC 173-400-040(5) ORCAA Rule 8.5	ORCAA Rule 8.5 contains general requirements for controlling odors and a general prohibition of odors that unreasonably interfere with the use or enjoyment of a person's property.	Applies generally to all air pollution sources.
Emissions Detrimental to Persons or Property  WAC 173-400-040(6) ORCAA Rule 7.6	Prohibits causing or allowing the emission of any air contaminant from any source if it is detrimental to the health, safety, or welfare of any person, or causes damage to property or business.	Applies generally to all air pollution sources
Concealment and Masking  WAC 173-400-040(8) ORCAA Rule 7.5	Prohibits installation or use of any device or means to conceal or mask emissions of an air contaminant, which causes detriment to health, safety, or welfare of any person, or causes damage to property or business.	Applies generally to all air pollution sources
Fugitive Dust  WAC 173-400-040(9)	The owner or operator of a source or activity that generates fugitive dust must take reasonable precautions to prevent that fugitive dust from	Applies to any activity that results in fugitive dust.

## Attachments

Title Citation	Brief Description (Consult rule/regulation for specific requirements)	Applies to
	becoming airborne and must maintain and operate the source to minimize emissions.	
Excess Emissions Provisions  WAC 173-400-107; WAC 173-400-108 ORCAA 8.7	Requires excess emissions be reported to the Agency as soon as possible and within 24 hours and establishes criteria qualifying excess emissions as unavoidable.	Applies generally to all air pollution sources
Record Keeping and Reporting.  ORCAA Rule 8.11	Requires the following: 1. Maintenance of records on the nature and amounts of emissions and other related information as deemed necessary by ORCAA; 2. Reporting of emissions to ORCAA upon request.	Required of all facilities registered with ORCAA.
Particulate Standards for Process units  ORCAA Rule 8.3(a)  WAC 173-400-060	Prohibits emissions from any process unit in excess of 0.1 grain/dscf. EPA test methods from 40 CFR Appendix A shall be used should demonstration of compliance be required.	Applies to generally to all stationary process units that exhaust to the atmosphere.
Standards of Performance for Grain Elevators 40 CFR Part 60, Subpart DD	The provisions of this subpart apply to each affected facility at any grain terminal elevator or any grain storage elevator.	Applies to Terminal 2. (Does not apply to Terminal 4, as proposed.)

## Attachments

### Calculations

	metric tons/hr	lbs/hr
Maximum Rated Commodity Throughput <sup>1</sup>	4,000	8,818,400

#### Total Particulate

Emission Source	Total PM Emission Factor <sup>2</sup> (lbs/ton)	Uncontrolled Total PM (lbs/hr)	Pneumatic Capture Efficiency <sup>3</sup> (%)	Baghouse Control Efficiency <sup>4</sup> (%)	Controlled Total PM (lbs/hr)	Fugitive Total PM (lbs/hr)	Annual Fugitive PM PTE <sup>5</sup> (tons/yr)	Annual Point Source PM PTE <sup>5</sup> (tons/yr)	Total Annual PM PTE <sup>5</sup> (tons/yr)
Railcar Unloading	0.0320	141	97.5%	99.99%	0.014	3.53	15.45	0.06	15.51
Internal Handling Emissions (belts, scale, shuttle, etc)	0.0610	269	100.0%	99.99%	0.027	0.00	0.00	0.12	0.12
Ship Loading	0.0270	119	98.0%	99.99%	0.012	2.38	10.43	0.05	10.48
<b>Total</b>					0.052	5.91	25.88	0.23	26.11

#### PM10

Emission Source	PM10 Emission Factor (lbs/ton)	Uncontrolled PM10 (lbs/hr)	Pneumatic Capture Efficiency <sup>3</sup> (%)	Baghouse Control Efficiency <sup>4</sup> (%)	Controlled PM10 (lbs/hr)	Fugitive PM10 (lbs/hr)	Annual Fugitive PM10 PTE <sup>5</sup> (tons/yr)	Annual Point Source PM10 PTE <sup>5</sup> (tons/yr)	Total Annual PM10 PTE <sup>5</sup> (tons/yr)
Railcar Unloading	0.0078	34	97.5%	99.99%	0.003	0.86	3.77	0.01	3.78
Internal Handling Emissions (belts, scale, shuttle, etc)	0.0340	150	100.0%	99.99%	0.015	0.00	0.00	0.07	0.07
Ship Loading	0.0022	10	98.0%	99.99%	0.001	0.19	0.85	0.004	0.85
<b>Total</b>		194			0.019	1.05	4.62	0.08	4.70

## Attachments

### PM2.5

Emission Source	PM2.5 Emission Factor (lbs/ton)	Uncontrolled PM2.5 (lbs/hr)	Pneumatic Capture Efficiency <sup>3</sup> (%)	Baghouse Control Efficiency <sup>4</sup> (%)	Controlled PM2.5 (lbs/hr)	Fugitive PM2.5 (lbs/hr)	Annual Fugitive PM2.5 PTE <sup>5</sup> (tons/yr)	Annual Point Source PM2.5 PTE <sup>5</sup> (tons/yr)	Total Annual PM2.5 PTE <sup>5</sup> (tons/yr)
Railcar Unloading	0.0013	6	97.5%	99.99%	0.001	0.14	0.63	0.00	0.63
Internal Handling Emissions (belts, scale, shuttle, etc)	0.0058	26	100.0%	99.99%	0.003	0.00	0.00	0.01	0.01
Ship Loading	0.00037	2	98.0%	99.99%	0.0002	0.03	0.14	0.00	0.14
<b>Total</b>					<b>0.003</b>	<b>0.18</b>	<b>0.77</b>	<b>0.01</b>	<b>0.78</b>

**Notes:**

1. Maximum rated commodity throughput based on 2000 MT/hr rating for each ship loading spout (max 2 spouts)
2. Emission factors from Section 9.9 in EPA AP-42.
3. Pneumatic capture efficiency for internal belt handling assumed to be 100% since this system will be completely enclosed and aspirated to baghouses.  
 Pneumatic capture efficiency for railcar unloading assumed at 90% from aspiration and 75% from enclosure, combining to 97.5%.  
 Pneumatic capture efficiency for ship unloading operations assumed at 90% from aspiration and 80% from choked flow and loading skirt, combining to 98.0%
4. Baghouse control efficiency from manufacturer performance brochure is 99.99%.
5. Annual emissions based on maximum commodity throughput, controls on-line, and 8760 hours per year operation.

## Attachments

### Potential To Emit

Pollutant	Source	PTE by Source Type (tpy)	Total PTE (tpy)
PM	Point	0.23	26.11
	Fugitive	25.88	
PM10	Point	0.08	4.70
	Fugitive	4.62	
PM2.5	Point	0.01	0.78
	Fugitive	0.77	

### Ambient Impacts

#### Model Screening Results – SIL Comparison

Pollutant	Averaging Period	SIL	Scaling Factor	Maximum Impact Concentration			Combined Maximum Impact Concentration	Exceeds SIL?
				Point Sources	Receiving Building Fugitives	Ship Loader Fugitives		
		( $\mu\text{g}/\text{m}^3$ )		( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )	( $\mu\text{g}/\text{m}^3$ )		
<b>Model Default</b>	<b>1-hr</b>	<b>n/a</b>	<b>n/a</b>	<b>0.107</b>	<b>4.700</b>	<b>1.120</b>	<b>5.927</b>	--
PM <sub>10</sub>	Annual	1	0.1	0.011	0.470	0.112	0.593	Pass
	24-hour	5	0.6	0.064	2.820	0.672	3.56	Pass
PM <sub>2.5</sub>	Annual	0.3	0.0377	0.004	0.177	0.042	0.223	Pass
	24-Hour	1.2	0.2262	0.024	1.063	0.253	1.34	Fail

PM<sub>2.5</sub> exceeded 24-hour SIL, triggering NAAQS comparison. NAAQS Comparison shown in Section 12.

