TECHNICAL SUPPORT DOCUMENT

Air Discharge Permit ADP 23-3607
Air Discharge Permit Application CO-1075

Issued: November 20, 2023

EGT, LLC

SWCAA ID - 2292

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Air Quality Engineer
Southwest Clean Air Agency

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ABBREVIATIONS

List of Acronyms

ADP	Air Discharge Permit
AERMOD	AMS/EPA Regulatory Model
AP-42	Compilation of Emission Factors, AP-42, 5th Edition, Volume 1, Stationary Point and Area Sources – published by EPA
ASIL	Acceptable Source Impact Level
BACT	Best available control technology
CAM	Compliance Assurance Monitoring
CAS#	Chemical Abstracts Service registry number
CFR	Code of Federal Regulations
EPA	U.S. Environmental Protection Agency
EU	Emission Unit
mfr	Manufacturer
NOV	Notice of Violation/
NSPS	New Source Performance Standard
PSD	Prevention of Significant Deterioration
RCW	Revised Code of Washington
SDS	Safety Data Sheet
SEPA	State Environmental Policy Act
SQER	Small Quantity Emission Rate listed in WAC 173-460
Standard	Standard conditions at a temperature of 68°F (20°C) and a pressure of 29.92 in Hg (760 mm Hg)
SWCAA	Southwest Clean Air Agency
USDA	U. S. Department of Agriculture
WAC	Washington Administrative Code

List of Units and Measures

µg/m³	Micrograms per cubic meter
µm	Micrometer (10^{-6} meter)
acfm	Actual cubic feet per minute
bu	Bushel
bph	Bushels per hour
cfm	Cubic feet per minute
DDG	Dried distiller's grain
dscfm	Dry Standard cubic feet per minute
fpm	Feet per minute
gpm	Gallons per minute
gr/dscf	Grain per dry standard cubic foot
MMBtu	Million British thermal unit
ppm	Parts per million
ppmv	Parts per million by volume
ppmvd	Parts per million by volume, dry
scfm	Standard cubic feet per minute
tph	Tons per hour
tpy	Tons per year
VMT	Vehicle miles travelled

List of Chemical Symbols, Formulas, and Pollutants

CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
NO_2	Nitrogen dioxide
NO_X	Nitrogen oxides
O_2	Oxygen
O_3	Ozone
PM	Particulate Matter with an aerodynamic diameter 100 µm or less
PM_{10}	PM with an aerodynamic diameter 10 µm or less
$PM_{2.5}$	PM with an aerodynamic diameter 2.5 µm or less
SO_2	Sulfur dioxide
SO_X	Sulfur oxides
TAP	Toxic air pollutant pursuant to Chapter 173-460 WAC
VOC	Volatile organic compound

Terms not otherwise defined have the meaning assigned to them in the referenced regulations or the dictionary definition, as appropriate.

1. FACILITY IDENTIFICATION

Applicant Name:	EGT, LLC
Applicant Address:	150 E Mill Rd, Longview, WA 98632
Facility Name:	EGT, LLC
Facility Address:	150 E Mill Rd, Longview, WA 98632
Contact Person:	Matthew Kerrigan, Operations Manager Kim Roberts, Environmental Manager
SWCAA Identification:	2292
Primary Process:	Export Grain Terminal Elevator
SIC/NAICS Code:	5153 - Grain and Field Beans (agents and brokers) 424510 - Grain Elevators Merchant Wholesalers Grain
Facility Classification:	Synthetic Minor

2. FACILITY DESCRIPTION

EGT, LLC (EGT) operates an export grain terminal operation located at the Port of Longview. The facility has the capability to receive and export up to 1,166,832,000 bu/yr (35,004,960 tpy) of several types of commodities, including corn, soybeans, wheat, barley, oats, rapeseed, canola, meals, dried distiller's grains (DDG), and pelletized alfalfa (hereafter referred to collectively as "grain"). This estimate is based upon the maximum design of the two shipping conveyors each capable of 583,416,000 bu/yr (17,502,480 tpy) throughput. Grain is received via rail and barge, screened, and loaded onto ocean-going ships. The facility has approximately 5,693,430 bu (170,820 ton) of storage. EGT has requested a federally enforceable limit on fine particulate matter (PM_{10}) emissions of less than 100 tpy to remain out of the Title V Air Operating Permit program.

Note: The conversion from volume (bushels) to mass (ton) varies according to grain type. Unless otherwise noted, wheat is used by default when converting mass and volume (assumed density 60 lb/bu).

3. CURRENT PERMITTING ACTION

This permitting action is in response to Air Discharge Permit (ADP) Application CO-1075 dated May 12, 2023. EGT submitted ADP Application CO-1075 requesting approval of the following:

- Installation of three new storage silos (Annex Storage Silos 401, 402, 403);
- Installation of three new belt conveyors (Northwest Annex Fill Conveyor BC24, Northwest Annex Reclaim Conveyor BC42, Northwest Annex Reclaim Conveyor BC43);
- Installation of a new bucket elevator (Recirculation Bucket Elevator BE44);
- Install new dust collectors (F40401, F40402, F40403, F2410, F4410, F4415, F1450, F1550, F1623, F1723, F3120, F3220, F3320, F3424, F5327, F5427, F20202, F20210);
- Relocate and rerate existing dust collectors (F1625, F1635, F1725, F1735, F3422, F3425, F5325, F5425);
- Remove an existing dust collector from service (F2321); and
- Modify existing approval conditions and testing requirements.

The current permitting action provides approval for the new equipment and permit modifications proposed in ADP Application CO-1075.

ADP 23-3607 will supersede ADP 19-3320 in its entirety.

4. PROCESS DESCRIPTION

4.a. Grain Receiving (*Existing*).

Rail Receiving. Grain is delivered by unit trains (comprised of approximately 110 railcars) to the rail receiving area, which is a partially enclosed building approximately three railcars long. The rail receiving building extends across two parallel tracks and contains three shallow receiving pits – two pits (H101 and H102) on one track and a single pit (H103) on the other; the facial area of each pit is approximately 295 ft²; the building extends approximately 25' beyond the ends of the pits and the building openings (entrance and exit) are minimized in size with adjustable curtain walls. As the railcars move into the receiving area, the hopper gates (three gates are located at the bottom of each railcar) are opened by a powered wrench (Calbrandt robot) and the grain flows into the receiving pit. The pits have rows of "pit baffles" that are located at the top of each receiving pit. Each baffle consists of a hinged gate that, when closed, hangs vertically. A narrow slot (approximately ½" by 24") is between the bottom of the baffle and angled stationary plate that allows air to flow; the minimum inflow/face velocity of the slots is 200 fpm. When the falling grain impacts the hinged baffle, the baffles open to allow grain to fall into the pit (Fig. 1). The speed of the railcars through the rail receiving area is adjusted so that each railcar is completely unloaded by the time it reaches the end of the pit and prior to exiting the receiving area. Grain delivered to a pit that is empty or partially filled creates fugitive dust as the grain free falls and impacts the grain pile. Each pit has air pickups at regular intervals along the sides of the pit, which are aspirated to baghouse F1040 and F1050 at 30,000 acfm each. At any time, a maximum of two pits are in operation – H101 and/or H102, or H103. One baghouse controls emissions from H101 and a second baghouse controls emissions from either H102 or H103. As the grain fills the pit, the free fall distance from the bottom of the railcar to the top of the pile in the pit decreases and the area through which air can be drawn through the grate decreases causing the face velocity across the pit baffles to increase. Eventually, the pile in the pit rises to the level of the railcar hopper gate and choked flow (or choke unload) develops, i.e. the grain in the pit and the grain in the railcar are connected through a continuous column of grain. At this point, there is no free-falling grain and the majority of the fugitive dust arises from the individual grains flowing past one another and from grain rolling down the sides of the pile. Aspiration air through the pit pickups and vents along the rail track is continually drawn during this process. The conveyors in the pit are operated in such a manner as to maintain the connection between the grain and the railcar as it unloads, reducing fugitive dust. The drop points from the bottom of the pits are totally enclosed and hard-flanged to the respective receiving conveyors which are aspirated to the railcar receiving pit baghouses located outside of the southeast of the building.

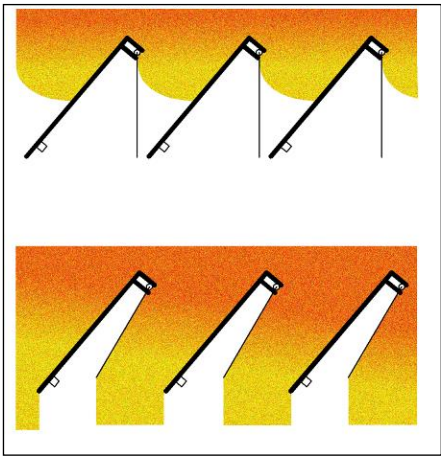

Fig. 1: Diagram showing the pit baffles in the closed position (top) just as grain is being delivered and in the open position as grain is being delivered into the pit (bottom).

Barge Receiving. Grain arriving by Columbia River barge is unloaded using marine leg BE40. The marine leg is a split casing bucket elevator attached to an arm that extends the leg into the barge. The barge has a center sump cap that covers an opening typically measuring 12' by 12'. The cap is removed, and the marine leg is inserted into the hold. The marine leg buckets dig into the grain and elevate it out of the barge. Once the marine leg reaches the bottom of the hold, screw augers in the base of the barge move the grain towards the center of the barge to the marine leg. The leg is aspirated to baghouse F4010 at 5,000 acfm. A maximum of 40,000 bph (1,200 tph) of grain can be unloaded; this equates to approximately 10,512,000 tpy of grain depending on the type of grain being handled.

4.b. Grain Handling (*Existing*). The majority of the conveyances at the export terminal are totally enclosed and hard flanged at the inlet and outlet such that no commodity handled or any conveyor surface which has touched a commodity is exposed to the ambient environment. However, fourteen (14) of these conveyors – BC14, BC15,

BC16, BC17, BC18, BC19, BC21, BC22, BC23, BC34, BC35, BC41, BC53, and BC54 – are sufficiently long that the belt take-up for the belts creates a small area where the return belting is exposed to the ambient air. Only the belt surface is exposed; no commodity is exposed to ambient air. The belt conveyors at the facility are enclosed "air belt" conveyors where the belts are supported on a layer of air. Blowers draw in ambient air, pressurizing the chambers below the belts. The belt support plates are perforated to enable air in the pressurized chambers to pass under and provide the air cushion to support the belts. Conveyor air is discharged through cartridge filters located at regular intervals along the conveyors. During normal operations there are no PM emissions from any conveyor, conveyor-to-conveyor transfer point, or conveyor drop point.

4.c. Grain Storage (*Existing*). Grain is stored in 12 western silos (1,635,908 bu capacity total), in 7 center silos (936,054 bu capacity total), in 12 eastern silos (1,488,594 bu capacity total), and in five shipping bins (433,369 bu capacity total). Each of the silos and bins is vented to a baghouse or powered filter specific to the silo or vented through an attached conveyor system and its associated baghouse or powered filter.

4.d. Grain Cleaning and Screening (*Existing*). Grain is distributed to one of two Rotex Global, LLC Megatex™ high capacity screeners. These screeners consist of multiple deck vibrating screens. This primary system serves to sort the grain according to size and to remove unwanted foreign material (rocks, and other medium sized debris) to trash bins; grain may be further processed by a secondary system consisting of two Megatex cleaners or Rotex Global, LLC Rotex® cleaners. Coarse and fine screenings are cleaned and classified in separate systems of scalperators, classifiers, and threshers. Once the unwanted material is removed (i.e. the grain cleaned and graded), the grain is transferred to storage or shipping.

The reject material from the screening system, in addition to the screenings system baghouse catch, is stored and eventually loaded out. The truck screenings loadout area is a fully enclosed building with rollup doors at both ends of the building. A telescoping loading spout and an aspirated loading hood completes the system. The rollup doors are closed prior to truck loading. The hood is lowered to cover the entirety of the truck trailer during loading (Fig. 2). The loading hood includes a skirt that extends below the top of the trailer on all four sides. The discharge of the telescoping loading spout is always below the top of the hood during loading. An inverted auger conveys the material from the spout discharge to enable filling the trailer. Three cartridge filters located on the top of the loadout hood provide a negative pressure under the hood in the truck trailer during material transfer to control airborne dust in the trailer. These cartridge filters discharge inside the screenings loadout building, not directly to ambient air.

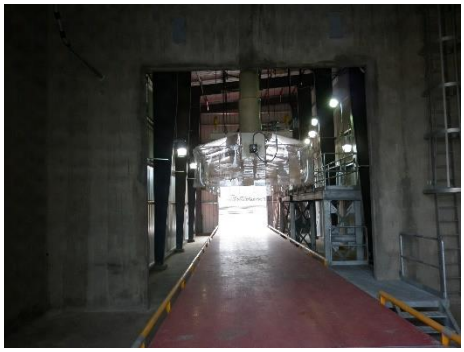

Fig 1: Loadout Hood

4.e. Grain Shipping and Loadout (*Existing*). Grain is moved from the storage silos into one of five shipping bins, which have a total capacity of 433,369 bu. Grain is delivered to the ship dock for loadout on the Long Shipping Conveyors BC53 and BC54. The grain is discharged into a ship by one of three Midwest International Grain ship loader spouts. The ship loader spouts are mounted and designed in such a way as to facilitate the spout reaching all areas of the ship's holds.

Each spout has a set of sealed and nested tubes through which the grain flows. Free falling grain in the spout eventually hits the dead box near the bottom of the spout, which slows down the flow of grain. As the grain transitions from free fall to a slow flow of grain within the dead box, dust is created and is controlled by the aspirated bustle

Midwest Shiploading Spout

filters located inside the spout. Grain then flows out of the dead box and on to the pile. The bottom of the spout has a skirt consisting of a series of rubber strips attached to the bottom of the spout that conform to the top of the grain pile. During topping off, in which grain is loaded in the last 5% of the ship hold, the skirt is removed, and a semi-enclosed trimming spoon is installed. A skirt is attached to the discharge of the spoon isolating the area inside of the spoon. This skirt allows any displaced air and airborne dust inside the spoon to be captured by aspiration and withdrawn into the bustle filter.

As originally proposed, the ship loader spouts were to be capable of fully extending to the bottom of any ship hold being loaded. As actually installed, a number of structural and mechanical issues limit the practical length of spout extension, and the ship loader spouts are not capable of extending to the bottom of most ship holds. The lack of extension results in longer and more emissive initial filling periods versus the originally proposed loading scheme.

5. EQUIPMENT/ACTIVITY IDENTIFICATION

Grain Receiving – Rail Receiving

5.a. Rail Receiving Pits H101, H102, and H103 and Rail Conveyors BC11, BC12, BC13, BC14 and BC15 (*Existing*).
The rail receiving pits are aspirated at 30,000 acfm during unloading through aspiration pickups under the grating at the top of the pits. There is a minimum of 200 fpm face velocity across the open face of the pits. This face velocity increases once the pile within the pit rises above the open face of the pit towards the railcar hopper gate (i.e. choked loading) and provides additional capture efficiency. Rail receiving pits H101, H102, and H103 contain conveyors BC12, BC11, and BC13 (maximum 60,000 bph, or 1,800 tph, each), respectively, at the bottom of the pits. These conveyors in turn convey grain to conveyors BC14 or BC15 (maximum 60,000 bph, or 1,800 tph, each) to the rail receiving and shipping sample/scale system. The free fall points from each pit onto the conveyors are hard-flanged and totally enclosed. The discharge hoods for conveyors BC11, BC12, and BC13 are aspirated to the baghouses at 3,000 acfm. The loader hoods for conveyors BC14 and BC15 are aspirated to the baghouses at 6,000 acfm. The loader hoods for conveyors BC12 and BC14 hoods are aspirated to baghouse F1040. The loader hoods for conveyors BC11, BC13 and BC15 hoods are aspirated to baghouse F1050.

Emission Point ID#:	**1**
Facility ID:	EP01 / F1040
Manufacturer/Model:	Donaldson-Torit 356RFWH10, Baghouse
Air-to-Cloth Ratio:	6.5:1
Filter Type:	Dura-Life™
Number of Bags:	356
Filtration Area:	4,632 ft²
Stack Height:	70 ft
Air Flow:	30,000 acfm
Stack Dimensions:	Circular, 3.67 ft diameter

Emission Point ID#:	**2**
Facility ID:	EP02 / F1050
Manufacturer/Model:	Donaldson-Torit 356RFWH10, Baghouse
Air-to-Cloth Ratio:	6.5:1
Filter Type:	Dura-Life
Number of Bags:	356
Filtration Area:	4,632 ft²
Stack Height:	70 ft
Air Flow:	30,000 acfm
Stack Dimensions:	Circular, 3.67 ft diameter

5.b. Rail Receiving Pits H101, H102, and H103 Fugitive Emissions (*Existing*). Any PM that is not captured by the rail receiving building and aspirated pit or controlled by the baghouse is released as fugitive PM, PM_{10}, and $PM_{2.5}$.

Emission Point ID#:	**3**
Facility ID:	EP01A

5.c. Rail Scale Receiving Conveyors BC14, BC15, BC16 and BC17 and Rail Receiving Sampling/Scale Systems BW201 and BW202 (*Modified*). These completely enclosed conveyors transport grain at a maximum of 60,000 bph (1,800 tph) each from the rail receiving pit conveyors to the rail receiving sampling/scale system, which discharges to the annex fill or shipping bin fill conveyors. The loader hoods of BC 14 and BC15 are aspirated as described above in 5.a.

Emission Point ID#:	**4**
Facility ID:	EP109 / F1430
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web®
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	57 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.50 ft diameter

Emission Point ID#:	***118***
Facility ID:	*EP120 / F1450*
Manufacturer/Model:	*Donaldson DFE3-18, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*18*
Filtration Area:	*4,572 ft²*
Stack Height:	*51 ft*
Air Flow:	*10,000 acfm*
Stack Dimensions:	*Circular, 1.67 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as an additional control device for the rail receiving conveyors.

Emission Point ID#:	**5**
Facility ID:	EP110 / F1530
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	57 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.50 ft diameter

Emission Point ID#: ***119***
Facility ID: *EP121 / F1550*
Manufacturer/Model: *Donaldson DFE3-18, Filter*
Filter Type: *Ultra-Web*
Number of Cartridges: *18*
Filtration Area: *4,572 ft²*
Stack Height: *51 ft*
Air Flow: *10,000 acfm*
Stack Dimensions: *Circular, 1.67 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as an additional control device for the rail receiving conveyors.

Emission Point ID#: **6**
Facility ID: EP05 / F1620
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 47 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: ***120***
Facility ID: *EP122 / F1623*
Manufacturer/Model: *Donaldson CPV-12, Filter*
Filter Type: *Ultra-Web*
Number of Cartridges: *12*
Filtration Area: *804 ft²*
Stack Height: *90 ft*
Air Flow: *5,000 acfm*
Stack Dimensions: *Circular, 1.33 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as a replacement for F1625 on the Rail Scale Receiving Conveyor BC16.

Emission Point ID#: **7**
Facility ID: EP06 / F1625
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: *120 ft*
Air Flow: *6,000 acfm*
Stack Dimensions: *Circular, 1.33 ft diameter*

ADP Application CO-1075. EGT proposes to move this filter to the opposite side of the drive tower on Rail Scale Receiving Conveyor BC16, and increase the flowrate from 5,000 acfm to 6,000 acfm.

Emission Point ID#: **8**
Facility ID: EP111 / F1630
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 135 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **9**
Facility ID: EP07 / F1635
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 169 ft
Air Flow: *6,000 acfm*
Stack Dimensions: *Circular, 1.33 ft diameter*

ADP Application CO-1075. EGT proposes to increase the flowrate of this unit from 5,000 acfm to 6,000 acfm.

Emission Point ID#: **10**
Facility ID: EP09 / F1720
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 47 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: ***121***
Facility ID: *EP123 / F1723*
Manufacturer/Model: *Donaldson CPV-12, Filter*
Filter Type: *Ultra-Web*
Number of Cartridges: *12*
Filtration Area: *804 ft²*
Stack Height: *90 ft*
Air Flow: *5,000 acfm*
Stack Dimensions: *Circular, 1.33 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as a replacement for F1725 on the Rail Scale Receiving Conveyor BC17.

Emission Point ID#: **11**
Facility ID: EP10 / F1725
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.21

Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	*120 ft*
Air Flow:	*6,000 acfm*
Stack Dimensions:	*Circular, 1.33 ft diameter*

ADP Application CO-1075. EGT proposes to move this unit to the other side of the drive tower on Rail Scale Receiving Conveyor BC17 and increase the flowrate of this unit from 5,000 acfm to 6,000 acfm.

Emission Point ID#:	**12**
Facility ID:	EP112 / F1730
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	135 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**13**
Facility ID:	EP11 / F1735
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	169 ft
Air Flow:	*6,000 acfm*
Stack Dimensions:	Circular, 1.33 ft diameter

ADP Application CO-1075. EGT proposes to increase the flowrate of this unit from 5,000 acfm to 6,000 acfm.

Emission Point ID#:	**14**
Facility ID:	EP13 / F2011
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	192 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID#:	**15**
Facility ID:	EP113 / F2012
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²

Stack Height:	192 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID#:	**16**
Facility ID:	EP14 / F2021
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	192 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID#:	**17**
Facility ID:	EP114 / F2022
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	192 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Grain Receiving – Barge Receiving

5.d. Barge Receiving Bucket Elevator BE40 (*Existing*). Barges are unloaded through a center sump. The marine leg is inserted into the grain after the sump cap is removed. The leg is essentially a bucket elevator which moves the grain upwards to the receiving conveyor. As the marine leg operates, it digs into the grain. Gravity moves the grain towards the marine leg initially and towards the end of the unloading, a central auger system located in the base of the barge moves the grain towards the leg. Barges can be unloaded at a maximum 40,000 bph (1,200 tph). The marine leg PM emissions are controlled by a filter F4010.

Emission Point ID#:	**18**
Facility ID:	EP15 / F4010
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	127 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

5.e. Barge Receiving Fugitive Emissions (*Existing*). Any PM that is not captured by the aspirated marine leg and controlled by the filter is released as fugitive PM, PM_{10}, and $PM_{2.5}$.

Emission Point ID#:	**19**
Facility ID:	EP15A

5.f. Barge Receiving Conveyor BC41 (*Existing*). PM emissions from the enclosed barge receiving conveyor transferring grain from the marine leg to the barge grain scale system are controlled by filters F4110, F4115, and F4118.

Emission Point ID#:	**20**
Facility ID:	EP16 / F4110
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	68 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID#:	**21**
Facility ID:	EP17 / F4115
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	96 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID#:	**22**
Facility ID:	EP18 / F4118
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	128 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

5.g. Barge Receiving Sampling/Scale System BW430 (*Existing*). At the end of the barge receiving conveyor, grain is delivered to the barge receiving sampling/scale system. PM emissions from the scale system are controlled by filter F4310.

Emission Point ID#:	**23**
Facility ID:	EP19 / F4310
Manufacturer/Model:	Donaldson-Torit CPV-6, Filter
Air-to-Cloth Ratio:	5.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	6
Filtration Area:	402 ft²
Stack Height:	142 ft
Air Flow:	2,200 acfm
Stack Dimensions:	Circular, 1.17 ft diameter

Emission Point ID#:	**24**
Facility ID:	EP115 / F4311
Manufacturer/Model:	Donaldson-Torit CPV-6, Filter
Air-to-Cloth Ratio:	5.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	6
Filtration Area:	402 ft²
Stack Height:	142 ft
Air Flow:	2,200 acfm
Stack Dimensions:	Circular, 1.17 ft diameter

Grain Handling and Storage

5.h. Annex Fill Conveyors BC18 and BC19 (*Existing*). Grain received from the rail receiving sample/scale system is transferred by the Annex Fill Conveyors to the annex for distribution to storage at a maximum rate of 60,000 bph (1,800 tph), each conveyor. PM is controlled by filters F1820, F1821, F1822, F1823, F1920, F1921, F1922 and F1923.

Emission Point ID#:	**25**
Facility ID:	EP20 / F1820
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	77 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**26**
Facility ID:	EP21 / F1821
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	137 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**27**
Facility ID:	EP22 / F1822
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	192 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: **28**
Facility ID: EP23 / F1823
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 250 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **29**
Facility ID: EP25 / F1920
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 77 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **30**
Facility ID: EP26 / F1921
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 137 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **31**
Facility ID: EP27 / F1922
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 192 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **32**
Facility ID: EP28 / F1923
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 250 ft

Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

5.i. Annex Distribution Shuttle Conveyors BC21 (north) and BC23 (south) (*Modified*). The annex shuttle conveyors transfer grain received from the clean grain system or the annex fill conveyors to the silos at a maximum rate of 120,000 bph (3,600 tph), each conveyor. There are a total of 22 filters located on these conveyors. Primary emissions from the transfer of grain from conveyor BC21 to the silos are controlled by filters F2110 through F2120. Primary emissions from the transfer of grain from conveyor BC23 to the silos are controlled by filters F2310 through F2321. A small amount of fugitive emissions may be emitted from the tripper drive pulley area on each belt. These emissions are accounted for under emission units 62, 63 and 64.

Emission Point ID#:	**33**
Facility ID:	EP30 / F2110
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**34**
Facility ID:	EP31 / F2111
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**35**
Facility ID:	EP32 / F2112
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**36**
Facility ID:	EP33 / F2113
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft

Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: 37

Facility ID:	EP34 / F2114
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: 38

Facility ID:	EP35 / F2115
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: 39

Facility ID:	EP36 / F2116
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: 40

Facility ID:	EP37 / F2117
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: 41

Facility ID:	EP38 / F2118
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web

Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**42**
Facility ID:	EP39 / F2119
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**43**
Facility ID:	EP40 / F2120
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**44**
Facility ID:	EP42 / F2310
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**45**
Facility ID:	EP43 / F2311
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: **46**
Facility ID: EP44 / F2312
Manufacturer/Model: Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 8
Filtration Area: 536 ft²
Stack Height: 187 ft
Air Flow: 4,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **47**
Facility ID: EP45 / F2313
Manufacturer/Model: Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 8
Filtration Area: 536 ft²
Stack Height: 187 ft
Air Flow: 4,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **48**
Facility ID: EP46 / F2314
Manufacturer/Model: Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 8
Filtration Area: 536 ft²
Stack Height: 187 ft
Air Flow: 4,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **49**
Facility ID: EP47 / F2315
Manufacturer/Model: Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 8
Filtration Area: 536 ft²
Stack Height: 187 ft
Air Flow: 4,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **50**
Facility ID: EP48 / F2316
Manufacturer/Model: Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 8
Filtration Area: 536 ft²
Stack Height: 187 ft

Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**51**
Facility ID:	EP49 / F2317
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**52**
Facility ID:	EP50 / F2318
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**53**
Facility ID:	EP51 / F2319
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**54**
Facility ID:	EP52 / F2320
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	187 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

~~***Emission Point ID#:***~~	~~***55***~~
~~***Facility ID:***~~	~~***EP53 / F2321***~~
~~***Manufacturer/Model:***~~	~~***Donaldson-Torit CPV-8, Filter***~~
~~***Air-to-Cloth Ratio:***~~	~~***7.5:1***~~
~~***Filter Type:***~~	~~***Ultra-Web***~~

~~*Number of Cartridges: 8*~~
~~*Filtration Area: 536 ft²*~~
~~*Stack Height: 187 ft*~~
~~*Air Flow: 4,000 acfm*~~
~~*Stack Dimensions: Circular, 1.33 ft diameter*~~

ADP Application CO-1075. EGT has removed filter F2321 from service.

5.j. Annex Reclaim Conveyors BC31, BC32, and BC33 (*Modified*). These conveyors transfer grain from storage or shipping silos to various locations within the facility at a maximum rate of 120,000 bph (3,600 tph) each. Conveyor BC31 moves grain from the storage silos/shipping bins to the shipping system. Conveyors BC32 and BC33 move grain to the cleaning system, shipping system, or back to the storage silos/shipping bins. The conveyors are enclosed and controlled by filters F3110, F3115, F3120, F3210, F3215, F3220, F3310, F3315, and F3320.

Emission Point ID#:	**56**
Facility ID:	EP55 / F3110
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	34 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID#:	**57**
Facility ID:	EP56 / F3115
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	51 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID#:	***122***
Facility ID:	*EP137 / F3120*
Manufacturer/Model:	*Donaldson CPC-12, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*12*
Filtration Area:	*756 ft²*
Stack Height:	*46 ft*
Air Flow:	*6,000 acfm*
Stack Dimensions:	*Circular, 1.5 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as a control device on the lower return tail box of Annex North Reclaim Conveyor BC31.

Emission Point ID#: **58**
Facility ID: EP57 / F3210
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 34 ft
Air Flow: 6,000 acfm
Stack Dimensions: Circular, 1.5 ft diameter

Emission Point ID#: **59**
Facility ID: EP58 / F3215
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 51 ft
Air Flow: 6,000 acfm
Stack Dimensions: Circular, 1.5 ft diameter

Emission Point ID#: ***123***
Facility ID: *EP136 / F3220*
Manufacturer/Model: *Donaldson CPC-12, Filter*
Filter Type: *Ultra-Web*
Number of Cartridges: *12*
Filtration Area: *756 ft²*
Stack Height: *46 ft*
Air Flow: *6,000 acfm*
Stack Dimensions: *Circular, 1.5 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as a control device on the lower return tail box of Annex North Reclaim Conveyor BC32.

Emission Point ID#: **60**
Facility ID: EP59 / F3310
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 34 ft
Air Flow: 6,000 acfm
Stack Dimensions: Circular, 1.5 ft diameter

Emission Point ID#: **61**
Facility ID: EP60 / F3315
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 12

Filtration Area:	804 ft²
Stack Height:	51 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID#:	***124***
Facility ID:	*EP134 / F3320*
Manufacturer/Model:	*Donaldson CPC-12, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*12*
Filtration Area:	*756 ft²*
Stack Height:	*46 ft*
Air Flow:	*6,000 acfm*
Stack Dimensions:	*Circular, 1.5 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as a control device on the lower return tail box of Annex North Reclaim Conveyor BC33.

5.k. West Storage Bins/Silos Fugitive Emissions (*Existing*). The average storage capacity of these 12 silos is 136,326 bu (non-packed factor). Grain is delivered to all silos by two enclosed air belt shuttle conveyors, BC21 and BC23. Each conveyor has filters that maintain the conveyors under negative pressure. Any PM that is not captured by the baghouses is released as fugitive PM, PM_{10}, and $PM_{2.5}$.

Emission Point ID#:	**62**
Facility ID:	EP117

5.l. Center Storage Bins/Silos Fugitive Emissions (*Existing*). The average storage capacity of these 7 silos is 133,722 bu (non-packed factor). Grain is delivered to all silos by spouting fed by conveyors BC18, BC19, BC22 or BC35 or the two enclosed air belt shuttle conveyors, BC21 and BC23. Each conveyor has filters that maintain the conveyors under negative pressure. Any PM that is not captured by the baghouses is released as fugitive PM, PM_{10}, and $PM_{2.5}$. Of these storage units, only Bin/Silo 106 is provided a dedicated filter to control filling/breathing particulate emissions. This is identified as Emission Point ID # 65 and is identified in section 5.n below, with the other bins/silos provided with a dedicated filter.

Emission Point ID#:	**63**
Facility ID:	EP118

5.m. East Storage Bins/Silos Fugitive Emissions (*Existing*). The average storage capacity of these 12 silos is 124,050 bu (non-packed factor). Grain is delivered to all silos by two enclosed air belt shuttle conveyors, BC21 and BC23. Each conveyor has filters that maintain the conveyors under negative pressure.

Emission Point ID#:	**64**
Facility ID:	EP119

5.n. West/East Storage Intervent Systems (New). The West and East storage silos are intervented between themselves. These filters will serve to provide negative pressure on the intervented silos as a whole, to further reduce any possible fugitive emissions. F20210 is connected to the intervent system for the West Storage Bins/Silos. F20202 is connected to the intervent system for the East Storage Bins/Silos.

Emission Point ID#:	***125***
Facility ID:	*EP135 / F20210*
Manufacturer/Model:	*Donaldson CPV-14, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*14*
Filtration Area:	*756 ft²*
Stack Height:	*183 ft*
Air Flow:	*6,600 acfm*
Stack Dimensions:	*Circular, 1.83 ft diameter*

Emission Point ID#:	***126***
Facility ID:	*EP127 / F20202*
Manufacturer/Model:	*Donaldson CPV-14, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*14*
Filtration Area:	*756 ft²*
Stack Height:	*183 ft*
Air Flow:	*6,600 acfm*
Stack Dimensions:	*Circular, 1.83 ft diameter*

ADP Application CO-1075. EGT proposes to install these units to improve fugitive emissions control for the intervented silos.

5.o. Storage Bin/Silo 106 and Shipping Bins/Silos 107, 207, 208, 306 and 307 (*Existing*). Grain is transferred to the storage and shipping bins from Annex Fill Conveyors BC18 and BC19 (at 60,000 bph, or 1,800 tph, each) and from the Shipping Bin Fill Conveyor BC35 (at 120,000 bph, or 3,600 tph, each). The filling/breathing emissions from these bins/silos are aspirated to individual filters F35106, F35107, F35207, F35208, F35306, and F35307.

Emission Point ID#:	**65**
Facility ID:	EP84 / F35106
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	173 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**66**
Facility ID:	EP85 / F35107
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	173 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**67**
Facility ID:	EP86 / F35207
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	173 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**68**
Facility ID:	EP87 / F35208
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	173 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**69**
Facility ID:	EP88 / F35306
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	173 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**70**
Facility ID:	EP89 / F35307
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	173 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

5.p. *Annex Storage Silos 401, 402, and 403 (New). These storage silos have an average storage capacity of 440,000 bu (weight limited- not volume). Grain is transferred to the storage silos from conveyor BC24 using enclosed drag chain conveyors (DC25, DC26, DC27 & DC28) at a maximum rate of 80,000 bph (2,400 tph), each conveyor. Each storage silo is equipped with a dedicated filter (F40401, F40402, F40403). Conveyor BC24 is equipped with a dedicated filter (F2410). The drag chain conveyors are enclosed and vent to the headspace of silos 401, 402, and 403.*

Grain is transferred from the storage silos to various locations within the facility at a maximum rate of 90,000 bph (2,700 tph) each. Conveyors BC42 and 43 move grain from the storage silos to the shipping or recirculation systems. Conveyor BC33 moves grain to the shipping system or back to the storage silos/shipping bins. Bucket elevator BE44 provides recirculation back to conveyor BC24 and the storage silos with a capacity of 40,000 bph (1200 tph). Bucket elevator BE44 is equipped with dedicated filters (F4410, F4415)

Emission Point ID#:	***130***
Facility ID:	*EP132 / F4410*
Manufacturer/Model:	*Donaldson CPV-3, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*3*
Filtration Area:	*189 ft²*
Stack Height:	*46 ft*
Air Flow:	*900 acfm*
Stack Dimensions:	*Circular, 0.83 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as the control device for a new bucket elevator (Recirculation Bucket Elevator BE44).

Emission Point ID#:	***131***
Facility ID:	*EP133 / F4415*
Manufacturer/Model:	*Donaldson CPV-3, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*3*
Filtration Area:	*189 ft²*
Stack Height:	*46 ft*
Air Flow:	*900 acfm*
Stack Dimensions:	*Circular, 0.83 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as the control device for a new bucket elevator (Recirculation Bucket Elevator BE44).

Emission Point ID#:	***132***
Facility ID:	*EP131 / F2410*
Manufacturer/Model:	*Donaldson CPV-12, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*12*
Filtration Area:	*756 ft²*
Stack Height:	*163 ft*
Air Flow:	*6,000 acfm*
Stack Dimensions:	*Circular, 1.5 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as the control device for a new belt conveyor (Annex Fill Conveyor BC24).

Emission Point ID#:	***133***
Facility ID:	*EP128 / F40401*
Manufacturer/Model:	*Donaldson CPV-14, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*14*
Filtration Area:	*756 ft²*
Stack Height:	*183 ft*

Air Flow: *6,600 acfm*
Stack Dimensions: *Circular, 1.83 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as the control device for a new storage silo (Annex Storage Silo 401).

Emission Point ID#: ***134***
Facility ID: *EP129 / F40402*
Manufacturer/Model: *Donaldson CPV-14, Filter*
Filter Type: *Ultra-Web*
Number of Cartridges: *14*
Filtration Area: *756 ft²*
Stack Height: *183 ft*
Air Flow: *6,600 acfm*
Stack Dimensions: *Circular, 1.83 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as the control device for a new storage silo (Annex Storage Silo 402).

Emission Point ID#: ***135***
Facility ID: *EP130 / F40403*
Manufacturer/Model: *Donaldson CPV-14, Filter*
Filter Type: *Ultra-Web*
Number of Cartridges: *14*
Filtration Area: *756 ft²*
Stack Height: *183 ft*
Air Flow: *6,600 acfm*
Stack Dimensions: *Circular, 1.83 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit as the control device for a new storage silo (Annex Storage Silo 403).

Grain Cleaning and Screening

5.q. Cleaning system (*Modified*). Grain is delivered to the cleaning system by Annex North, Center, and South Reclaim Conveyors BC31, BC32, and BC33 and bucket elevators BE70, BE71, and BE72 at a maximum rate of 60,000 bph (1,800 tph) each. The primary cleaning system consists of two Megatex M4280-2-S cleaners, two Megatex 5350-1-S cleaners, and two Apex A7D95L-2M cleaners; the secondary systems include numerous scalperators, classifiers and threshers. Aspiration pickups are provided for the equipment in the cleaning process and all of the pickups are aspirated to baghouse F8701.

Materials screened from the grain in the cleaning system, are transferred to bucket elevator BE81. The bucket elevator delivers these materials to drag conveyor DC8115 at a maximum transfer rate of 5,000 bph (150 tph), which discharges into the four screenings storage bins. Bucket elevator BE81 is aspirated to filter F8105.

Grain and non-grain (meal, etc.) overages from storage bins via Annex North Reclaim Conveyor BC31 are transferred to bucket elevator BE70, which discharges into screenings storage bins 801 & 803 at a maximum transfer rate of 60,000 bph (1500 tph).

Grain Cleaning

Emission Point ID#:	**71**
Facility ID:	EP61 / F8701
Manufacturer/Model:	Donaldson-Torit 776RFPH10, Baghouse
Air-to-Cloth Ratio:	7.3:1
Filter Type:	Dura-Life
Number of Bags:	776; 10.5 oz/yd² fabric
Filtration Area:	10,088 ft²
Stack Height:	69 ft
Air Flow:	73,385 acfm
Stack Dimensions:	Circular, diameter 5.67 ft

Emission Point ID#:	**72**
Facility ID:	EP62 / F8105
Manufacturer/Model:	Donaldson-Torit CPV-2, Filter
Air-to-Cloth Ratio:	5.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	2
Filtration Area:	134 ft²
Stack Height:	46 ft
Air Flow:	700 acfm
Stack Dimensions:	Circular, 0.58 ft diameter

Dust Transfer

Emission Point ID#:	**117**
Facility ID:	EP61A / F8715
Manufacturer/Model:	Donaldson-Torit CPC-8, Filter
Air-to-Cloth Ratio:	1.5:1
Filter Type:	Ultra-Web
Number of Filters:	8
Filtration Area:	504 ft²
Stack Height:	155 ft
Air Flow:	780 acfm
Stack Dimensions:	Circular, 0.67 ft diameter

5.r. Screenings Storage Bins DB801, DB802, DB803 and DB804 (*Existing*). Screenings are stored in any of four bins (10,000 bu capacity, each). Each bin has an unpowered bin vent filter that is rated at 700 acfm maximum.

Emission Point ID#:	**73**
Facility ID:	EP63 / F801
Manufacturer/Model:	Donaldson-Torit CPV-2, Filter
Air-to-Cloth Ratio:	5.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	2
Filtration Area:	134 ft²
Stack Height:	126 ft
Air Flow:	700 acfm (displacement)
Stack Dimensions:	Circular, 0.92 ft diameter
Stack Velocity:	17.55 ft/s

Emission Point ID#:	**74**
Facility ID:	EP64 / F802
Manufacturer/Model:	Donaldson-Torit CPV-2, Filter
Air-to-Cloth Ratio:	5.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	2
Filtration Area:	134 ft²
Stack Height:	126 ft
Air Flow:	700 acfm (displacement)
Stack Dimensions:	Circular, 0.92 ft diameter
Stack Velocity:	17.55 ft/s

Emission Point ID#:	**75**
Facility ID:	EP65 / F803
Manufacturer/Model:	Donaldson-Torit CPV-2, Filter
Air-to-Cloth Ratio:	5.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	2
Filtration Area:	134 ft²
Stack Height:	126 ft
Air Flow:	700 acfm (displacement)
Stack Dimensions:	Circular, 0.92 ft diameter
Stack Velocity:	17.55 ft/s

Emission Point ID#:	**76**
Facility ID:	EP66 / F804
Manufacturer/Model:	Donaldson-Torit CPV-2, Filter
Air-to-Cloth Ratio:	5.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	2
Filtration Area:	134 ft²
Stack Height:	126 ft
Air Flow:	700 acfm (displacement)
Stack Dimensions:	Circular, 0.92 ft diameter
Stack Velocity:	17.55 ft/s

5.s. Screenings Loadout (*Existing*). Screenings removed from storage are conveyed by auger conveyor SC8200 to the screenings loadout system. The loadout system delivers the screenings at a maximum rate of 7,000 bph (210 tph) to the telescoping spout and loadout hood auger SC8402, which is located under the loadout hood. The loadout hood is equipped with three filters located on the loadout hood (F8405, F8406 and F8407), which discharge into the loadout building, but are not considered to be emission units. It is assumed that a certain portion of the emissions emitted into the building during loadout are fugitive; these emissions are aggregated with the loadout hood filter emissions. The emission points for the loadout PM (and diesel truck fumes) are three powered roof vents located in the roof of the loadout building.

Screenings Loadout Point Emissions

Emission Point ID#:	**77**
Roof Vent #1	
Stack Height:	52 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 3.58 ft diameter

Emission Point ID#: **78**
Roof vent #2
Stack Height: 52 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 3.58 ft diameter

Emission Point ID#: **79**
Roof Vent #3
Stack Height: 52 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 3.58 ft diameter

Loadout Hood Filter #1
Facility ID: EP67 / F8405
Manufacturer/Model: Donaldson-Torit CPV-3, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 3
Filtration Area: 201 ft²
Stack Height: Not Applicable
Air Flow: 1,500 acfm
Stack Dimensions: Circular, 0.83 ft diameter

Loadout Hood Filter #2
Facility ID: EP68 / F8406
Manufacturer/Model: Donaldson-Torit CPV-3, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 3
Filtration Area: 201 ft²
Stack Height: Not Applicable
Air Flow: 1,500 acfm
Stack Dimensions: Circular, 0.83 ft diameter

Loadout Hood Filter #3
Facility ID: EP69 / F8407
Manufacturer/Model: Donaldson-Torit CPV-3, Filter
Air-to-Cloth Ratio: 7.5:1
Filter Type: Ultra-Web
Number of Cartridges: 3
Filtration Area: 201 ft²
Stack Height: Not Applicable
Air Flow: 1,500 acfm
Stack Dimensions: Circular, 0.83 ft diameter

Screenings Loadout Fugitive Emissions

The screenings are transferred from the loadout system into trucks to be shipped off-site. Screening loadout is performed under an aspirated hood at a maximum transfer rate of 7,000 bph.

5.t. Clean Grain Conveyor BC22 (*Existing*). Once the grain has been cleaned, it is (a) elevated in BE71 or BE72 to the clean grain conveyor, which moves the grain to the annex for distribution to storage or (b) spouted direct to the Shipping Scale Conveyor BC34. The enclosed clean grain conveyor is capable of 60,000 bph (1,800 tph) transfer and is aspirated to filters F2209 and F2210.

Emission Point ID#:	**80**
Facility ID:	EP70 / F2209
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	536 ft²
Stack Height:	190 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**81**
Facility ID:	EP71 / F2210
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	536 ft²
Stack Height:	231 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Grain Shipping and Loadout

5.u. Shipping Scale Conveyor (BC34) and Shipping Scale (BW203) System (*Existing*). The three Annex Reclaim conveyors (maximum 120,000 bph, or 3,600 tph) and drag conveyor DC8301 (maximum 7,000 bph, or 210 tph) and direct spouts from the Grain Cleaning System deliver grain to the Shipping Scale Conveyor. The conveyor is aspirated to filters F3420, F3421, F3422, F3423, and F3425 and the scale system is aspirated to filters F2031 and F2032.

Emission Point ID#:	**82**
Facility ID:	EP72 / F3420
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	28 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**83**
Facility ID:	EP73 / F3421
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12

Filtration Area:	804 ft²
Stack Height:	56 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**84**
Facility ID:	EP74 / F3422
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	*115 ft*
Air Flow:	*7,700 acfm*
Stack Dimensions:	*Circular, 1.33 ft diameter*

ADP Application CO-1075. EGT proposes to move this unit to the other side of the drive tower on Shipping Scale Receiving Conveyor BC34 and increase the flowrate of this unit from 5,000 acfm to 7,700 acfm.

Emission Point ID#:	**85**
Facility ID:	EP75 / F3423
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	125 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	***127***
Facility ID:	*EP124 / F3424*
Manufacturer/Model:	*Donaldson CPV-12, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*12*
Filtration Area:	*804 ft²*
Stack Height:	*90 ft*
Air Flow:	*5,000 acfm*
Stack Dimensions:	*Circular, 1.50 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit on Shipping Scale Conveyor BC43 as a replacement for F3422.

Emission Point ID#:	**86**
Facility ID:	EP77 / F3425
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	166 ft

Air Flow: *6,000 acfm*
Stack Dimensions: *Circular, 1.33 ft diameter*

ADP Application CO-1075. EGT proposes to increase the flowrate of this unit from 5,000 acfm to 6,000 acfm.

Emission Point ID#: **87**
Facility ID: EP78 / F2031
Manufacturer/Model: Donaldson-Torit CPV-14, Filter
Air-to-Cloth Ratio: 7.0:1
Filter Type: Ultra-Web
Number of Cartridges: 14
Filtration Area: 938 ft²
Stack Height: 192 ft
Air Flow: 6,600 acfm
Stack Dimensions: Circular, 1.83 ft diameter

Emission Point ID#: **88**
Facility ID: EP116 / F2032
Manufacturer/Model: Donaldson-Torit CPV-14, Filter
Air-to-Cloth Ratio: 7.0:1
Filter Type: Ultra-Web
Number of Cartridges: 14
Filtration Area: 938 ft²
Stack Height: 192 ft
Air Flow: 6,600 acfm
Stack Dimensions: Circular, 1.83 ft diameter

5.v. Shipping Bin Fill Conveyor BC35 (*Existing*). Grain from the Rail Receiving and Shipping Sampling/Scale systems can be transferred by the Shipping Bin Fill Conveyor to the shipping bins at a maximum rate of 120,000 bph (3,600 tph). PM arising from the conveyor and turnhead distributor TH3531 is controlled by filters F3520, F3521, F3522, F3523, and F3525.

Emission Point ID#: **89**
Facility ID: EP79 / F3520
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12
Filtration Area: 804 ft²
Stack Height: 77 ft
Air Flow: 5,000 acfm
Stack Dimensions: Circular, 1.33 ft diameter

Emission Point ID#: **90**
Facility ID: EP80 / F3521
Manufacturer/Model: Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio: 6.2:1
Filter Type: Ultra-Web
Number of Cartridges: 12

Filtration Area:	804 ft²
Stack Height:	121 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**91**
Facility ID:	EP81 / F3522
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	163 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**92**
Facility ID:	EP82 / F3523
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	209 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**93**
Facility ID:	EP83 / F3525
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	6.2:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	251 ft
Air Flow:	5,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

5.w. Shipping Bin Reclaim Conveyors BC51 and BC52 (*Existing*). Grain from the shipping bins is loaded onto these conveyors (maximum 133,200 bph, or 3,996 tph, each) for transfer to the Long Shipping Conveyors. Conveyors BC51 and BC52 are controlled by filters F5110 and F5210, respectively.

Emission Point ID#:	**94**
Facility ID:	EP90 / F5110
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	66 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**95**
Facility ID:	EP91 / F5210
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	68 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

5.x. Long Shipping Conveyors BC53 and BC54 (*Existing*). The two Long Shipping Conveyors transfer grain to ship loading (maximum of 66,600 bph, or 1,998 tph, each). PM is controlled by filters F5320, F5325, and F5330 on BC53 and by F5420, F5425, and F5430 on BC54.

Emission Point ID#:	**96**
Facility ID:	EP92 / F5320
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	48 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter
Stack Velocity:	56.59 ft/s

Emission Point ID#:	**97**
Facility ID:	EP93 / F5325
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	*90 ft*
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

ADP Application CO-1075. EGT proposes to move this unit to the other side of the drive tower on West Long Shipping Conveyor BC53.

Emission Point ID#:	***128***
Facility ID:	*EP125 / F5327*
Manufacturer/Model:	*Donaldson CPV-12, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*12*
Filtration Area:	*804 ft²*
Stack Height:	*106 ft*
Air Flow:	*6,000 acfm*
Stack Dimensions:	*Circular, 1.5 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit on West Long Shipping Conveyor BC53 as a replacement for F5325.

Emission Point ID#:	**98**
Facility ID:	EP94 / F5330
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	172 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID#:	**99**
Facility ID:	EP95 / F5420
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	48 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

Emission Point ID #:	**100**
Facility ID:	EP96 / F5425
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	90 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

ADP Application CO-1075. EGT proposes to move this unit to the other side of the drive tower on East Long Shipping Conveyor BC54.

Emission Point ID#:	***129***
Facility ID:	*EP126 / F5427*
Manufacturer/Model:	*Donaldson CPV-12, Filter*
Filter Type:	*Ultra-Web*
Number of Cartridges:	*12*
Filtration Area:	*804 ft²*
Stack Height:	*106 ft*
Air Flow:	*6,000 acfm*
Stack Dimensions:	*Circular, 1.5 ft diameter*

ADP Application CO-1075. EGT proposes to install this unit on West Long Shipping Conveyor BC54 as a replacement for F5425.

Emission Point ID#:	**101**
Facility ID:	EP97 / F5430
Manufacturer/Model:	Donaldson-Torit CPV-12, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	12
Filtration Area:	804 ft²
Stack Height:	172 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Circular, 1.5 ft diameter

5.y. West and East Shipping Conveyors BC55 and BC56 (*Existing*). Grain from the Long Shipping Conveyors may be directed either to the West or East Shipping Conveyors. These two conveyors provide grain to three ship loading conveyors at a maximum rate of 66,600 bph (1,998 tph), each. PM is controlled by filters F5510 and F5610, respectively, for each of the conveyors.

Emission Point ID#:	**102**
Facility ID:	EP98 / F5510
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	136 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**103**
Facility ID:	EP99 / F5610
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	136 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

5.z. Ship Loader Conveyors BC61, BC62, and BC63 and Ship Loader Spouts TSP61, TSP62, and TSP63 (*Existing*). Grain from the Long Shipping Conveyors via the east and west shipping conveyors is transferred to any of three Ship Loader Conveyors discharging to the three Ship Loader Spouts. These conveyors can pivot to reach various portions of the ship holds and have a maximum transfer rate of 66,600 bph (1,998 tph), each. PM is controlled by filters F6110 and F6115, F6210 and F6215 and F6310 and F6315, respectively, for each of the conveyors. Each of the Ship Loader Spouts is controlled by filters F6130, F6230, and F6330, respectively.

Emission Point ID#:	**104**
Facility ID:	EP100 / F6110
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²

Stack Height:	108 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: 105

Facility ID:	EP101 / F6115
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft^2
Stack Height:	108 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: 106

Facility ID:	EP102 / F6130
Manufacturer/Model:	Midwest/Donaldson-Torit Vacupac™ II MBF 2120, Filter
Air-to-Cloth Ratio:	2.8:1
Filter Type:	8 oz/yd^2 spunbound polyester
Number of Cartridges:	10
Filtration Area:	2,120 ft^2
Stack Height:	55 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Rectangular, 2 @ 8.5" x 17"

Emission Point ID#: 108

Facility ID:	EP103 / F6210
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft^2
Stack Height:	108 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#: 109

Facility ID:	EP104 / F6215
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft^2
Stack Height:	108 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter

Emission Point ID#:	**110**
Facility ID:	EP105 / F6230
Manufacturer/Model:	Midwest/Donaldson-Torit Vacupac™ II MBF 2120, Filter
Air-to-Cloth Ratio:	2.8:1
Filter Type:	8 oz/yd^2 spunbound polyester
Number of Cartridges:	20
Filtration Area:	2,120 ft²
Stack Height:	55 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Rectangular, 2 @ 8.5" x 17"

Emission Point ID#:	**112**
Facility ID:	EP106 / F6310
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	108 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter
Stack Velocity:	47.75 ft/s

Emission Point ID#:	**113**
Facility ID:	EP107 / F6315
Manufacturer/Model:	Donaldson-Torit CPV-8, Filter
Air-to-Cloth Ratio:	7.5:1
Filter Type:	Ultra-Web
Number of Cartridges:	8
Filtration Area:	536 ft²
Stack Height:	108 ft
Air Flow:	4,000 acfm
Stack Dimensions:	Circular, 1.33 ft diameter
Stack Velocity:	47.75 ft/s

Emission Point ID#:	**114**
Facility ID:	EP108 / F6330
Manufacturer/Model:	Midwest/Donaldson-Torit Vacupac™ II MBF 2120, Filter
Air-to-Cloth Ratio:	2.8:1
Filter Type:	8 oz/yd^2 spunbound polyester
Number of Cartridges:	10
Filtration Area:	2,120 ft²
Stack Height:	55 ft
Air Flow:	6,000 acfm
Stack Dimensions:	Rectangular, 2 @ 8.5" x 17"
Stack Velocity:	59.73 ft/s

5.aa. Ship Loader Spouts TSP61, TSP62, and TSP63 Fugitive Emissions (*Existing*). Any PM that is not captured by the aspirated Midwest Ship Loader Spouts or settled in the ship hold, is released as fugitive PM, PM_{10}, and $PM_{2.5}$.

Emission Point ID#:	**107**
Facility ID:	EP102A

Emission Point ID#: **111**
Facility ID: EP105A

Emission Point ID#: **115**
Facility ID: EP108A

5.ab. Paved Haul Roads/Paved Surfaces (*Existing*). Fugitive emissions resulting from vehicle traffic, mostly trucks carrying screenings loadout, from paved roads.

Emission Point ID#: **116**
Facility ID: N/A

Insignificant Emission Units

5.ac. The following pieces of facility equipment have been determined to have insignificant emissions, and are not registered as emission units:

Diesel Fuel Storage. A small double-walled, above ground storage tank for diesel is maintained on-site. The tank has a nominal capacity of 100 gallons, and was approved with a maximum throughput of 12,000 gal/yr. Emissions from diesel storage at this level are not significant.

Pneumatic Sample Receiver F4124 and Pneumatic Sample Return F9402. Belt-end samplers at the discharge of the Barge Receiving Conveyor BC41 and of the Clean Grain Conveyor BC22 and a cross-cut sampler below the discharge of the Screenings Bucket Elevator BE81 are used to obtain samples of the commodities being conveyed, which are pneumatically conveyed to the grading lab. Receiver cyclones collect the samples which flow by gravity to the grading stations. The discharge cyclone air passes to a pneumatic blower that provides the motive vacuum for the conveying system. The blower is protected by an inline filter at the blower inlet. The extra material from the samples in the lab is pneumatically conveyed (returned) to the grain stream from which it was removed, utilizing a system with components identical to the sample receiving system. The inline filter for the receiver system is F4124 and the filter for the return system is F9402. Based on an assumed emission rate of 0.0020 gr/dscf, a flowrate of 500 acfm, and assuming 8,760 hr/yr operation, this unit is expected to emit approximately 75 lb/yr of PM for each of the inline filters.

House Cleaning Vacuum System F8601. A package vacuum system will be utilized for elevator sanitation. The receiver consists of a cyclonic chamber below a filter section. The filter section discharge air passes to a pneumatic blower, which provides the motive vacuum for the vacuum system. The blower is protected by inline filter F8601 at the blower inlet. Based on an assumed emission rate of 0.0020 gr/dscf, a flowrate of 500 acfm, and assuming 8,760 hr/yr operation, this unit is expected to emit approximately 75 lb/yr of PM.

5.ad. Equipment/Activity Summary.

ID No.	Facility ID	Equipment/Activity	Control Equipment / Measure
Grain Receiving			
1	EP01	Rail Receiving Pit H101 and Receiving Conveyor BC12 & Rail Scale Receiving Conveyor BC14	Enclosure, Aspirated Pit, Choke Unload Pit, and Baghouse F1040
2	EP02	Rail Receiving Pits H102 and H103 and Receiving Conveyors BC11 & BC13 and Rail Scale Receiving Conveyor BC15	Enclosure, Aspirated Pit, Choke Unload Pit, and Baghouse F1050

ID No.	Facility ID	Equipment/Activity	Control Equipment / Measure
3	EP01A	Rail Receiving Pit H101, H102 and H103 Fugitive Emissions	None
4	EP109	Rail Scale Receiving Conveyor BC14	Filter F1430
118	EP120	Rail Scale Receiving Conveyor BC14	Filter F1450
5	EP110	Rail Scale Receiving Conveyor BC15	Filter F1530
119	EP121	Rail Scale Receiving Conveyor BC15	Filter F1550
6	EP05	Rail Scale Receiving Conveyor BC16	Filter F1620
120	EP122	Rail Scale Receiving Conveyor BC16	Filter F1623
7	EP06	Rail Scale Receiving Conveyor BC16	Filter F1625
8	EP111	Rail Scale Receiving Conveyor BC16	Filter F1630
9	EP07	Rail Scale Receiving Conveyor BC16	Filter F1635
10	EP09	Rail Scale Receiving Conveyor BC17	Filter F1720
121	EP123	Rail Scale Receiving Conveyor BC17	Filter F1723
11	EP10	Rail Scale Receiving Conveyor BC17	Filter F1725
12	EP112	Rail Scale Receiving Conveyor BC17	Filter F1730
13	EP11	Rail Scale Receiving Conveyor BC17	Filter F1735
14	EP13	Rail Receiving Scale BW201	Filter F2011
15	EP113	Rail Receiving Scale BW201	Filter F2012
16	EP14	Rail Receiving Scale BW202	Filter F2021
17	EP114	Rail Receiving Scale BW202	Filter F2022
18	EP15	Barge Receiving Bucket Elevator BE40	Filter F4010
19	EP15A	Barge Receiving Bucket Elevator BE40 Fugitive Emissions	None
20	EP16	Barge Receiving Conveyor BC41	Filter F4110
21	EP17	Barge Receiving Conveyor BC41	Filter F4115
22	EP18	Barge Receiving Conveyor BC41	Filter F4118
23	EP19	Barge Receiving Scale BW430	Filter F4310
24	EP115	Barge Receiving Scale BW430	Filter F4311
Grain Handling and Storage			
25	EP20	Annex Fill Conveyor BC18	Filter F1820
26	EP21	Annex Fill Conveyor BC18	Filter F1821
27	EP22	Annex Fill Conveyor BC18	Filter F1822
28	EP23	Annex Fill Conveyor BC18	Filter F1823
29	EP25	Annex Fill Conveyor BC19	Filter F1920
30	EP26	Annex Fill Conveyor BC19	Filter F1921
31	EP27	Annex Fill Conveyor BC19	Filter F1922
32	EP28	Annex Fill Conveyor BC19	Filter F1923

ID No.	Facility ID	Equipment/Activity	Control Equipment / Measure
33	EP30	Annex North Shuttle Conveyor BC21	Filter F2110
34	EP31	Annex North Shuttle Conveyor BC21	Filter F2111
35	EP32	Annex North Shuttle Conveyor BC21	Filter F2112
36	EP33	Annex North Shuttle Conveyor BC21	Filter F2113
37	EP34	Annex North Shuttle Conveyor BC21	Filter F2114
38	EP35	Annex North Shuttle Conveyor BC21	Filter F2115
39	EP36	Annex North Shuttle Conveyor BC21	Filter F2116
40	EP37	Annex North Shuttle Conveyor BC21	Filter F2117
41	EP38	Annex North Shuttle Conveyor BC21	Filter F2118
42	EP39	Annex North Shuttle Conveyor BC21	Filter F2119
43	EP40	Annex North Shuttle Conveyor BC21	Filter F2120
44	EP42	Annex South Shuttle Conveyor BC23	Filter F2310
45	EP43	Annex South Shuttle Conveyor BC23	Filter F2311
46	EP44	Annex South Shuttle Conveyor BC23	Filter F2312
47	EP45	Annex South Shuttle Conveyor BC23	Filter F2313
48	EP46	Annex South Shuttle Conveyor BC23	Filter F2314
49	EP47	Annex South Shuttle Conveyor BC23	Filter F2315
50	EP48	Annex South Shuttle Conveyor BC23	Filter F2316
51	EP49	Annex South Shuttle Conveyor BC23	Filter F2317
52	EP50	Annex South Shuttle Conveyor BC23	Filter F2318
53	EP51	Annex South Shuttle Conveyor BC23	Filter F2319
54	EP52	Annex South Shuttle Conveyor BC23	Filter F2320
~~*55*~~	~~*EP53*~~	~~*Annex South Shuttle Conveyor BC23*~~	~~*Filter F2321*~~
56	EP55	Annex North Reclaim Conveyor BC31	Filter F3110
57	EP56	Annex North Reclaim Conveyor BC31	Filter F3115
122	EP137	Annex North Reclaim Conveyor BC31	Filter F3120
58	EP57	Annex Center Reclaim Conveyor BC32	Filter F3210
59	EP58	Annex Center Reclaim Conveyor BC32	Filter F3215
123	EP136	Annex Center Reclaim Conveyor BC32	Filter F3220
60	EP59	Annex South Reclaim Conveyor BC33	Filter F3310
61	EP60	Annex South Reclaim Conveyor BC33	Filter F3315
124	EP134	Annex South Reclaim Conveyor BC33	Filter F3320
62	EP117	West Storage System – 12 silos Fugitive Emissions	None
125	EP135	West Storage Intervent System	Filter F20210
63	EP118	Center Storage System – 12 Silos Fugitive Emissions	None

ID No.	Facility ID	Equipment/Activity	Control Equipment / Measure
64	EP119	East Storage System – 12 Silos Fugitive Emissions	None
126	EP127	East Storage Intervent System	Filter F20202
65	EP84	Storage Bin 106	Filter F35106
66	EP85	Shipping Bin 107	Filter F35107
67	EP86	Shipping Bin 207	Filter F35207
68	EP87	Shipping Bin 208	Filter F35208
69	EP88	Shipping Bin 306	Filter F35306
70	EP89	Shipping Bin 307	Filter F35307
130	EP132	Recirculation Bucket Elevator BE44	Filter F4410
131	EP133	Recirculation Bucket Elevator BE44	Filter F4415
132	EP131	Annex Fill Conveyor BC24	Filter F2410
133	EP128	Annex Storage Silo 401	Filter F40401
134	EP129	Annex Storage Silo 402	Filter F40402
135	EP130	Annex Storage Silo 403	Filter F40403
Grain Cleaning and Screening			
71	EP61	Grain Cleaning System	Baghouse F8701
72	EP62	Screenings Bucket Elevator BE81	Filter F8105
73	EP63	Screenings Bin DB801	Filter F801, unpowered
74	EP64	Screenings Bin DB802	Filter F802, unpowered
75	EP65	Screenings Bin DB803	Filter F803, unpowered
76	EP66	Screenings Bin DB804	Filter F804, unpowered
77	EP67	Screenings Loadout Roof Vent #1	Enclosure and Filter F8405
78	EP68	Screenings Loadout Roof Vent #2	Enclosure and Filter F8406
79	EP69	Screenings Loadout Roof Vent #3	Enclosure and Filter F8407
80	EP70	Clean Grain Conveyor BC22	Filter F2209
81	EP71	Clean Grain Conveyor BC22	Filter F2210
Grain Shipping and Loadout			
82	EP72	Shipping Scale Conveyor BC34	Filter F3420
83	EP73	Shipping Scale Conveyor BC34	Filter F3421
84	EP74	Shipping Scale Conveyor BC34	Filter F3422
85	EP75	Shipping Scale Conveyor BC34	Filter F3423
127	EP124	Shipping Scale Conveyor BC34	Filter F3424
86	EP77	Shipping Scale Conveyor BC34	Filter F3425
87	EP78	Shipping Scale BW203	Filter F2031
88	EP116	Shipping Scale BW203	Filter F2032
89	EP79	Shipping Bin Fill Conveyor BC35	Filter F3520

ID No.	Facility ID	Equipment/Activity	Control Equipment / Measure
90	EP80	Shipping Bin Fill Conveyor BC35	Filter F3521
91	EP81	Shipping Bin Fill Conveyor BC35	Filter F3522
92	EP82	Shipping Bin Fill Conveyor BC35	Filter F3523
93	EP83	Shipping Bin Fill Conveyor BC35	Filter F3525
94	EP90	Shipping Bin Reclaim Conveyor BC51	Filter F5110
95	EP91	Shipping Bin Reclaim Conveyor BC52	Filter F5210
96	EP92	West Long Shipping Conveyor BC53	Filter F5320
97	EP93	West Long Shipping Conveyor BC53	Filter F5325
128	EP125	West Long Shipping Conveyor BC53	Filter F5327
98	EP94	West Long Shipping Conveyor BC53	Filter F5330
99	EP95	East Long Shipping Conveyor BC54	Filter F5420
100	EP96	East Long Shipping Conveyor BC54	Filter F5425
129	EP126	East Long Shipping Conveyor BC54	Filter F5427
101	EP97	East Long Shipping Conveyor BC54	Filter F5430
102	EP98	West Shipping Conveyor BC55	Filter F5510
103	EP99	East Shipping Conveyor BC56	Filter F5610
104	EP100	East Ship Loader Conveyor BC61	Filter F6110
105	EP101	East Ship Loader Conveyor BC61	Filter F6115
106	EP102	East Ship Loader Spout TSP61	Filter F6130
107	EP102A	East Ship Loader Spout TSP61 Fugitive Emissions	None
108	EP103	Center Ship Loader Conveyor BC62	Filter F6210
109	EP104	Center Ship Loader Conveyor BC62	Filter F6215
110	EP105	Center Ship Loader Spout TSP62	Filter F6230
111	EP105A	Center Ship Loader Spout TSP62 Fugitive Emissions	None
112	EP106	West Ship Loader Conveyor BC63	Filter F6310
113	EP107	West Ship Loader Conveyor BC63	Filter F6315
114	EP108	West Ship Loader Spout TSP63	Filter F6330
115	EP108A	West Ship Loader Spout TSP63 Fugitive Emissions	None
116	N/A	Paved Haul Roads/Paved Surfaces	None
Screenings Transfer			
117	EP61A	Dust Transfer System	Filter F8715

6. EMISSIONS DETERMINATION

Emissions to the ambient atmosphere from the grain handling facility, as proposed in ADP Application CO-1075, consist of particulate matter (PM).

Unless otherwise specified by SWCAA, actual emissions must be determined using the specified input parameter listed for each emission unit and the following hierarchy of methodologies:

(a) Continuous emissions monitoring system (CEMS) data;
(b) Source emissions test data (EPA reference method). When source emissions test data conflicts with CEMS data for the time period of a source test, source test data must be used;
(c) Source emissions test data (other test method); and
(d) Emission factors or methodology provided in this TSD.

6.a. Baghouse/Bin Vent/Cartridge Filter Emissions (*Modified*). Baghouses, powered and unpowered bin vents, and cartridge bin vent filters operating in support of facility operations are point sources of PM emissions. Maximum potential emissions can be calculated assuming the maximum hours of operation (8,760 hr/yr), a grain loading of 0.0020 gr/dscf for PM and PM_{10}, a grain loading of 3.4×10^{-4} gr/dscf for $PM_{2.5}$ (17% of the PM factor) and the rated flow rate.

Facility ID	Unit Description	Operating Hours	Air Flow (acfm)	PM/PM_{10} Emission Rate (lb/hr)	$PM_{2.5}$ Emission Rate (lb/hr)
EP01	Rail Pit H101, Receiving Conveyor BC12, Rail Scale Receiving Conveyor BC14, F1040	8,760	30,000	0.51	0.087
EP02	Rail Pits H102 & H103, Receiving Conveyors BC11 & BC13, Rail Scale Receiving Conveyor BC15, F1050	8,760	30,000	0.51	0.087
EP109	Rail Scale Receiving Conveyor BC14, F1430	8,760	6,000	0.10	0.017
EP110	Rail Scale Receiving Conveyor BC15, F1530	8,760	6,000	0.10	0.017
EP05	Rail Scale Receiving Conveyor BC16, F1620	8,760	5,000	0.086	0.015
EP06	Rail Scale Receiving Conveyor BC16, F1625	8,760	6,000	0.10	0.017
EP111	Rail Scale Receiving Conveyor BC16, F1630	8,760	5,000	0.086	0.015
EP07	Rail Scale Receiving Conveyor BC16, F1635	8,760	6,000	0.10	0.017
EP09	Rail Scale Receiving Conveyor BC17, F1720	8,760	5,000	0.086	0.015
EP10	Rail Scale Receiving Conveyor BC17, F1725	8,760	6,000	0.10	0.017
EP112	Rail Scale Receiving Conveyor BC17, F1730	8,760	5,000	0.086	0.015
EP11	Rail Scale Receiving Conveyor BC17, F1735	8,760	6,000	0.10	0.017
EP13	Rail Receiving Scale BW201, F2011	8,760	4,000	0.069	0.012
EP113	Rail Receiving Scale BW201, F2012	8,760	4,000	0.069	0.012
EP14	Rail Receiving Scale BW202, F2021	8,760	4,000	0.069	0.012
EP114	Rail Receiving Scale BW201, F2022	8,760	4,000	0.069	0.012
EP15	Barge Receiving Bucket Elevator BE40, F4010	8,760	5,000	0.086	0.015
EP16	Barge Receiving Conveyor BC41, F4110	8,760	6,000	0.10	0.017
EP17	Barge Receiving Conveyor BC41, F4115	8,760	6,000	0.10	0.017
EP18	Barge Receiving Conveyor BC41, F4118	8,760	6,000	0.10	0.017
EP19	Barge Receiving Scale BW430 filter, F4310	8,760	2,200	0.038	0.0064

Facility ID	Unit Description	Operating Hours	Air Flow (acfm)	PM/PM_{10} Emission Rate (lb/hr)	$PM_{2.5}$ Emission Rate (lb/hr)
EP115	Barge Receiving Scale BW430 filter, F4311	8,760	2,200	0.038	0.0064
EP20	Annex Fill Conveyor BC18, F1820	8,760	5,000	0.086	0.015
EP21	Annex Fill Conveyor BC18, F1821	8,760	5,000	0.086	0.015
EP22	Annex Fill Conveyor BC18, F1822	8,760	5,000	0.086	0.015
EP23	Annex Fill Conveyor BC18, F1823	8,760	5,000	0.086	0.015
EP25	Annex Fill Conveyor BC19, F1920	8,760	5,000	0.086	0.015
EP26	Annex Fill Conveyor BC19, F1921	8,760	5,000	0.086	0.015
EP27	Annex Fill Conveyor BC19, F1922	8,760	5,000	0.086	0.015
EP28	Annex Fill Conveyor BC19, F1923	8,760	5,000	0.086	0.015
EP30	Annex North Shuttle Conveyor BC21, F2110	8,760	4,000	0.069	0.012
EP31	Annex North Shuttle Conveyor BC21, F2111	8,760	4,000	0.069	0.012
EP32	Annex North Shuttle Conveyor BC21, F2112	8,760	4,000	0.069	0.012
EP33	Annex North Shuttle Conveyor BC21, F2113	8,760	4,000	0.069	0.012
EP34	Annex North Shuttle Conveyor BC21, F2114	8,760	4,000	0.069	0.012
EP35	Annex North Shuttle Conveyor BC21, F2115	8,760	4,000	0.069	0.012
EP36	Annex North Shuttle Conveyor BC21, F2116	8,760	4,000	0.069	0.012
EP37	Annex North Shuttle Conveyor BC21, F2117	8,760	4,000	0.069	0.012
EP38	Annex North Shuttle Conveyor BC21, F2118	8,760	4,000	0.069	0.012
EP39	Annex North Shuttle Conveyor BC21, F2119	8,760	4,000	0.069	0.012
EP40	Annex North Shuttle Conveyor BC21, F2120	8,760	4,000	0.069	0.012
EP42	Annex South Shuttle Conveyor BC23, F2310	8,760	4,000	0.069	0.012
EP43	Annex South Shuttle Conveyor BC23, F2311	8,760	4,000	0.069	0.012
EP44	Annex South Shuttle Conveyor BC23, F2312	8,760	4,000	0.069	0.012
EP45	Annex South Shuttle Conveyor BC23, F2313	8,760	4,000	0.069	0.012
EP46	Annex South Shuttle Conveyor BC23, F2314	8,760	4,000	0.069	0.012
EP47	Annex South Shuttle Conveyor BC23, F2315	8,760	4,000	0.069	0.012
EP48	Annex South Shuttle Conveyor BC23, F2316	8,760	4,000	0.069	0.012
EP49	Annex South Shuttle Conveyor BC23, F2317	8,760	4,000	0.069	0.012
EP50	Annex South Shuttle Conveyor BC23, F2318	8,760	4,000	0.069	0.012
EP51	Annex South Shuttle Conveyor BC23, F2319	8,760	4,000	0.069	0.012
EP52	Annex South Shuttle Conveyor BC23, F2320	8,760	4,000	0.069	0.012
EP55	Annex North Reclaim Conveyor BC31, F3110	8,760	6,000	0.10	0.017
EP56	Annex North Reclaim Conveyor BC31, F3115	8,760	6,000	0.10	0.017
EP57	Annex Center Reclaim Conveyor BC32, F3210	8,760	6,000	0.10	0.017
EP58	Annex Center Reclaim Conveyor BC32, F3215	8,760	6,000	0.10	0.017
EP59	Annex South Reclaim Conveyor BC33, F3310	8,760	6,000	0.10	0.017
EP60	Annex South Reclaim Conveyor BC33, F3315	8,760	6,000	0.10	0.017
EP61	Grain Cleaning system, F8701	8,760	73,385	1.3	0.21

Facility ID	Unit Description	Operating Hours	Air Flow (acfm)	PM/PM_{10} Emission Rate (lb/hr)	$PM_{2.5}$ Emission Rate (lb/hr)
EP62	Screenings Bucket Elevator BE81, F8105	8,760	700	0.012	0.002
EP63	Screenings Bin DB801, F801	8,760	700	0.012	0.002
EP64	Screenings Bin DB802, F802	8,760	700	0.012	0.002
EP65	Screenings Bin DB803, F803	8,760	700	0.012	0.002
EP66	Screenings Bin DB804, F804	8,760	700	0.012	0.002
EP70	Clean Grain Conveyor BC22, F2209	8,760	4,000	0.069	0.012
EP71	Clean Grain Conveyor BC22, F2210	8,760	4,000	0.069	0.012
EP72	Shipping Scale Conveyor BC34, F3420	8,760	5,000	0.086	0.015
EP73	Shipping Scale Conveyor BC34, F3421	8,760	5,000	0.086	0.015
EP74	Shipping Scale Conveyor BC34, F3422	8,760	7,700	0.13	0.022
EP75	Shipping Scale Conveyor BC34, F3423	8,760	5,000	0.086	0.015
EP77	Shipping Scale Conveyor BC34, F3425	8,760	6,000	0.10	0.017
EP78	Shipping Scale BW203, F2031	8,760	6,600	0.11	0.019
EP116	Shipping Scale BW203, F2032	8,760	6,600	0.11	0.019
EP79	Shipping Bin Fill Conveyor BC35, F3520	8,760	5,000	0.086	0.015
EP80	Shipping Bin Fill Conveyor BC35, F3521	8,760	5,000	0.086	0.015
EP81	Shipping Bin Fill Conveyor BC35, F3522	8,760	5,000	0.086	0.015
EP82	Shipping Bin Fill Conveyor BC35, F3523	8,760	5,000	0.086	0.015
EP83	Shipping Bin Fill Conveyor BC35, F3525	8,760	5,000	0.086	0.015
EP84	Storage Bin 106, F35106	8,760	5,000	0.086	0.015
EP85	Shipping Bin 107, F35107	8,760	5,000	0.086	0.015
EP86	Shipping Bin 207, F35207	8,760	5,000	0.086	0.015
EP87	Shipping Bin 208, F35208	8,760	5,000	0.086	0.015
EP88	Shipping Bin 306, F35306	8,760	5,000	0.086	0.015
EP89	Shipping Bin 307, F35307	8,760	5,000	0.086	0.015
EP90	Shipping Bin Reclaim Conveyor BC51, F5110	8,760	4,000	0.069	0.012
EP91	Shipping Bin Reclaim Conveyor BC52, F5210	8,760	4,000	0.069	0.012
EP92	West Long Shipping Conveyor BC53, F5320	8,760	6,000	0.10	0.017
EP93	West Long Shipping Conveyor BC53, F5325	8,760	6,000	0.10	0.017
EP94	West Long Shipping Conveyor BC53, F5330	8,760	6,000	0.10	0.017
EP95	East Long Shipping Conveyor BC54, F5420	8,760	6,000	0.10	0.017
EP96	East Long Shipping Conveyor BC54, F5425	8,760	6,000	0.10	0.017
EP97	East Long Shipping Conveyor BC54, F5430	8,760	6,000	0.10	0.017
EP98	West Shipping Conveyor BC55, F5510	8,760	4,000	0.069	0.012
EP99	East Shipping Conveyor BC56, F5610	8,760	4,000	0.069	0.012
EP100	East Ship Loader Conveyor BC61, F6110	8,760	4,000	0.069	0.012
EP101	East Ship Loader Conveyor BC61, F6115	8,760	4,000	0.069	0.012
EP102	East Ship Loader Spout TSP61, F6130	8,760	6,000	0.10	0.017

Facility ID	Unit Description	Operating Hours	Air Flow (acfm)	PM/PM_{10} Emission Rate (lb/hr)	$PM_{2.5}$ Emission Rate (lb/hr)
EP103	Center Ship Loader Conveyor BC62, F6210	8,760	4,000	0.069	0.012
EP104	Center Ship Loader Conveyor BC62, F6215	8,760	4,000	0.069	0.012
EP105	Center Ship Loader Spout TSP62, F6230	8,760	6,000	0.10	0.017
EP106	West Ship Loader Conveyor BC63, F6310	8,760	4,000	0.069	0.012
EP107	West Ship Loader Conveyor BC63, F6315	8,760	4,000	0.069	0.012
EP108	West Ship Loader Spout TSP63, F6330	8,760	6,000	0.10	0.017
EP61A	Dust Transfer System, F8715	8,760	780	0.013	0.002
EP120	Rail Scale Receiving Conveyor BC14, F1450	8,760	10,000	0.17	0.029
EP121	Rail Scale Receiving Conveyor BC15, F1550	8,760	10,000	0.17	0.029
EP122	Rail Scale Receiving Conveyor BC16, F1623	8,760	5,000	0.086	0.015
EP123	Rail Scale Receiving Conveyor BC17, F1723	8,760	5,000	0.086	0.015
EP137	Annex North Reclaim Conveyor BC31, F3120	8,760	6,000	0.10	0.017
EP136	Annex Center Reclaim Conveyor BC32, F3220	8,760	6,000	0.10	0.017
EP134	Annex South Reclaim Conveyor BC33, F3320	8,760	6,000	0.10	0.017
EP135	West Storage Intervent System, F20210	8,760	6,600	0.11	0.019
EP127	East Storage Intervent System, F20202	8,760	6,600	0.11	0.019
EP124	Shipping Scale Conveyor BC34, F3424	8,760	5,000	0.086	0.015
EP125	West Long Shipping Conveyor BC53, F5327	8,760	6,000	0.10	0.017
EP126	East Long Shipping Conveyor BC54, F5427	8,760	6,000	0.10	0.017
EP132	Recirculation Bucket Elevator BE44, F4410	8,760	900	0.015	0.003
EP133	Recirculation Bucket Elevator BE44, F4415	8,760	900	0.015	0.003
EP131	Annex Fill Conveyor BC24, F2410	8,760	6,000	0.10	0.017
EP128	Annex Storage Bin, F40401	8,760	6,600	0.11	0.019
EP129	Annex Storage Bin, F40402	8,760	6,600	0.11	0.019
EP130	Annex Storage Bin, F40403	8,760	6,600	0.11	0.019

Actual annual emissions will be calculated using recorded hours of operation for each baghouse or filter and the applicable emission rate above. If a lower emission rate is determined during a subsequent source test, EGT may request a new emission limit by submitting an ADP application.

ADP Application CO-1075. The emissions table above has been revised to add new proposed dust collectors and modify the flowrate of existing units as proposed in ADP Application CO-1075.

6.b. Screenings Loadout Roof Vent Emissions (*Existing*).
ID Number: 80, 81, and 82
Facility IDs: EP67, EP68, and EP69

Based upon review of other grain handling facilities within the SWCAA jurisdiction, the amount of screenings loaded out ranges from 0.15% to 0.30% of the total weight of grain processed. This determination is based on the total amount of screenings loadout reported by the facility to SWCAA and by the total amount of grain processed by the facility. SWCAA has determined that using the highest determined value of 0.30% is the most conservative assumption; although for actual emissions inventory purposes, actual tonnage of dust and screenings will be used.

The screenings loadout building is a completely enclosed structure with rollup doors on each end. This building has a drive-through configuration and can only load trucks. A dust-tight, telescoping hood is lowered over the truck trailer until the sides of the hood extended below the top of the sides of the trailer. An inverted screw auger inside the hood conveys the screenings from the fixed overhead conveyor to below the hood and into the trailer. The hood is aspirated to three vent filters, which discharge inside the building. The building as whole is assumed to be under negative airflow provided by three dedicated roof vents (5,000 acfm each).

Screenings loadout operations generate PM emissions from two different points. Emissions from both points are contained within the building envelope and eventually emitted to the ambient atmosphere through the three roof vents. Point #1 consists of emissions that are not captured by the loadout hood and escape into the building headspace from the top of the trailer during loading. Point #2 consists of emissions discharged directly into the building headspace from the exhaust of the loadout hood vent filters. Using the assumptions above, the following emission factors are used for determining emissions.

Point #1 – Uncaptured Emissions from Truck Trailer. The material in the screenings loadout is expected to be dustier than grain itself because it is comprised mostly of the dirt and fine material removed during cleaning and screening. Therefore, SWCAA has multiplied the EPA AP-42 §9.9.1 (March 2003) emission factors for grain by 10, consistent with previous permitting actions. The loadout hood is assumed to have a capture efficiency of 98% during truck loading.

Pollutant	Uncontrolled Emission Factor (lb/ton)	Capture Efficiency	Controlled Emission Factor (lb/ton)
PM	0.86	98%	0.0172
PM_{10}	0.29	98%	0.0058
$PM_{2.5}$	0.049	98%	0.00098

Point #2 – Emissions from Loadout Hood Vent Filters. The screenings loadout hood is equipped with three vent filters that capture PM emissions during active loading. Maximum potential emissions are calculated assuming 8,760 hr/yr of operation, a grain loading of 0.0020 gr/dscf for PM and PM_{10}, a grain loading of 3.4×10^{-4} gr/dscf for $PM_{2.5}$ (17% of the PM factor) and the rated flow rate.

Facility ID	Description	Hours	Air Flow (acfm)	PM/PM_{10} Emission Rate (lb/hr)	$PM_{2.5}$ Emission Rate (lb/hr)
EP67	Screenings Loadout Vent Filter F8405	8,760	1,500	0.026	0.0044
EP68	Screenings Loadout Vent Filter F8406	8,760	1,500	0.026	0.0044

Facility ID	Description	Hours	Air Flow (acfm)	PM/PM_{10} Emission Rate (lb/hr)	$PM_{2.5}$ Emission Rate (lb/hr)
EP69	Screenings Loadout Vent Filter F8407	8,760	1,500	0.026	0.0044

6.c. Fugitive Emissions (*Existing*). Emissions from several processes at the facility cannot be reasonably controlled. These emissions primarily arise as a result of loading or unloading of material. Each process producing fugitive emissions is discussed and the maximum emissions are determined.

Rail Receiving Pit H101, H102, and H103 Fugitive Emissions
ID Number: 3
Facility ID: EP01A

The three rail receiving pits H101, H102, and H103 on the two rail lines are enclosed within a building that extends a minimum of 25 ft beyond the ends of the pits. The two rail lines enter and exit the building separately and these openings are equipped with thick hanging plastic strips and rollup doors. The majority of the grain will be delivered to the west track. This track is provided two receiving hoppers (H101 and H102) in series which enable continuous car unloading. The east track has only one receiving hopper (H103) and will be designated for the unloading of product that will not easily flow freely from the cars, requiring stationary car unloading. Whenever a train is not on a track, the associated rollup doors are closed to reduce the chances for fugitive dust. However, both baghouses are operated even during periods when grain is only being delivered to one side. This has the effect of inducing a greater negative flow into the building. Fugitive emissions are discharged through four, unfiltered vents above the building rollup doors. The face velocity through the opening in the plastic sheets surrounding a railcar while it is unloading is expected to be approximately 175 fpm when the baghouses are in operation. It is expected that the greatest velocity will occur nearest the ground at the level of the top of the aspirated pit.

Although most of the other facilities within SWCAA's jurisdiction have similar railcar unloading operations, the extent of control varies. Most of the facilities have, at minimum, a 3-sided enclosure and either aspirated pits or an aspirated building. EGT will be employing multiple capture and control technologies at this facility. SWCAA believes that the combination of control technologies will achieve a minimum of 99% capture/control efficiency. It is assumed that the aspiration air is being applied during the entire unloading process. If aspiration air is not applied during the entire unloading process, the capture efficiency is reduced.

PM emissions from railcar unloading operations are calculated using emission factors from AP-42 Sec. 9.9.1 (March 2003) for railcar unloading and a control efficiency of 99%. The cited emission factors and capture efficiency must be used for annual emissions determinations.

Pollutant	Uncontrolled Emission Factor (lb/ton)	Control Efficiency	Controlled Emission Factor (lb/ton)
PM	0.032	99%	0.00032
PM_{10}	0.0078	99%	0.000078
$PM_{2.5}$	0.0013	99%	0.000013

Barge Receiving Bucket Elevator BE40 Fugitive Emissions
ID Number: 19
Facility ID: EP15A

The AP-42 Sec. 9.9.1 (March 2003) emission factors for barge unloading using a marine leg were determined during loading of a Mississippi River barge instead of a Columbia River barge. There are distinct differences between a

Mississippi River barge and a Columbia River barge. Columbia River barges have a "sump cap" which measures approximately 12 ft by 12 ft on the top deck through which the grain is loaded and unloaded. In contrast, a Mississippi barge generally exposes the entire width of the deck during loading and the entire width and length during unloading.

The barge marine leg has a maximum unloading rate of 1,200 tph. After the marine leg is placed into the sump cap opening, the buckets begin to dig into grain in the barge hold, creating fugitive PM due to mechanical action of the buckets on the grain. As the marine leg digs deeper into the hold, a conical airspace is hollowed out within the hold with the sides of the pile at the angle of repose for the particular grain being unloaded. Grain rolling down the sides of the pile towards the marine leg may also create fugitive PM emissions. SWCAA believes the combination of an enclosed barge and an aspirated marine leg is sufficient to capture at least 98% of the associated fugitive PM emissions. Therefore, the following emission factors are used for determining emissions:

Pollutant	Uncontrolled Emission Factor (lb/ton)	Capture Efficiency	Controlled Emission Factor (lb/ton)
PM	0.15	98%	0.0030
PM_{10}	0.038	98%	0.00076
$PM_{2.5}$	0.0050	98%	0.00010

For purposes of determining maximum emissions from the facility, it is assumed that the maximum emissions would occur when the majority of the grain is received via barge and the remaining portion of the grain is received via railcar since the controlled emission factors for barge unloading are larger than those for railcar unloading. This equates to 10,512,000 tpy receipt via barge and 2,947,000 tpy receipt via railcar. Maximum emissions are calculated using this assumption. When calculating emissions for annual emission inventory, the emission factors for both barge unloading and railcar unloading must be used as appropriate.

West, Center, and East Storage System Fugitive Emissions
ID Numbers: 62, 63, and 64
Facility IDs: EP117, EP118, and EP119

PM emissions arising from the transfer, handling, and storage of the grain in the silos that are not contained within the head space of the silos are controlled by either filters on the bin vents or filters on the conveyors. EGT estimates that 99.5% of the PM is captured and controlled and the remainder is fugitive. Based upon the throughput and AP-42 Sec. 9.9.1 (March 2003) emission factors, and the applied capture efficiency, the following emission factors are used for determining emissions:

Pollutant	Uncontrolled Emission Factor (lb/ton)	Capture Efficiency	Controlled Emission Factor (lb/ton)
PM	0.061	99.5%	0.00031
PM_{10}	0.034	99.5%	0.00017
$PM_{2.5}$	0.0058	99.5%	0.000029

The cited emission factors and capture efficiency above for the storage system must be used for emissions determination.

East, Center, and West Ship Loader Spouts TSP61, TSP62, and TSP63 Fugitive Emissions
ID Numbers: 107, 111, and 115
Facility IDs: EP102A, EP105A, and EP108A

Other grain handling facilities that have been permitted by SWCAA have been required to apply a dust suppressant, typically mineral oil, to the grain prior to ship loading. Various EPA and industry-sponsored studies have established control efficiencies for oiling from 60–73% depending upon the type of grain. The spouts currently used within SWCAA jurisdiction are either vertical or slanted and SWCAA has assumed a minimum capture efficiency of 70% for all aspirated spouts. On average, the combination of the mineral oil control efficiency and the aspirated spout capture efficiency factors gives an overall efficiency of 90% (range is 88–92%). EGT proposes that ship loading commodities using a current design Midwest ship loader spout has inherently higher control efficiency for fugitive dust than oiling. The only other similar loading spout within SWCAA jurisdiction is a smaller DCL® loading spout at the Port of Longview. This loading spout is a multiple cable type, meaning that multiple cables are used to position the loader within a ship's hold, and is aspirated to a baghouse. SWCAA has applied a capture efficiency of 95% to the Port of Longview loading spout.

EGT will be using a larger Midwest ship loader spout equipped with a dead box and a loader spout skirt, and will be aspirating each loader spout to a baghouse built into the base of the spout. This design allows for more loading to be completed prior to initiating topping-off since the loader spout can reach more area of the hold. During topping-off, the loader spout skirt is removed, and a trimming spoon is attached. The spoon allows grain to be delivered to the corners of the ship's hold by horizontally discharging the grain. The dead box is not removed when the trimming spoon is in use and the spout is equipped with a thick plastic aspirated cover on the exit of the spout, which helps to decrease the velocity of the exiting grain and reduce fugitive dust.

The combination of the Midwest dead box, the interior grain delivery chute, and operating the spout so that the spout skirt rests against the top of the pile during loading is expected to achieve a 98% capture efficiency using un-oiled grain. The capture efficiency of the spout is reduced during initial fill and topping-off due to operational factors. The spouts are unable to reach the top of the pile during initial fill, and grain free falls to the floor of the hold. During topping-off, the hold provides less enclosure and there is more exposure to wind.

Emissions calculations assume the following load volume apportionments and control efficiencies for each of the above described loading modes:

Loading Stage Volume	Control Efficiency
Initial Fill – 10% by volume	85%
Mid-hold Fill – 85% by volume	98%
Topping-off – 5% by volume	85%

Ship loading operations at the facility are also capable of loading ship holds through "cement hole" hatches. The main hatch of the ship hold remains closed during grain transfer when using cement hatches. This configuration provides almost complete enclosure, but also results in grain free falling down through the hold to the pile. The free fall causes the interior of the hold to fill with suspended dust. Aspiration of the spouts provides some negative draw on the hold headspace, but is not as effective as when the spouts are riding on top of the pile. Overall, use of cement holes during loading provides a level control equal to regular operation.

PM emissions from ship loading are calculated using emission factors from AP-42 Sec. 9.9.1 (March 2003) for ship loading and the control efficiencies discussed above.

Pollutant	Uncontrolled Emission Factor (lb/ton)	Capture Efficiency		Controlled Emission Factor (lb/ton)
PM	0.048	Mid-hold Initial fill Topping	98% 85% 85%	0.00096 0.0072 0.0072
PM_{10}	0.012	Mid-hold Initial fill Topping	98% 85% 85%	0.00024 0.0018 0.0018
$PM_{2.5}$	0.0022	Mid-hold Initial fill Topping	98% 85% 85%	0.000044 0.00033 0.00033

Paved Haul Roads/Paved Surfaces.
ID Number: 116
Facility ID: N/A

Emissions of PM from the operation of trucks on paved roads and surfaces in the facility can be estimated using equation 2 from AP-42 Section 13.2.1 (January 2011). For the purposes of these calculations, SWCAA did not subtract out the emissions from exhaust, brake wear, and tire wear since they are generally considered to be insignificant.

$$E = \left[k\,(sL)^{0.91} \cdot (W)^{1.02}\right] \cdot \left(1 - \frac{P}{4N}\right)$$

Where:
- E = pounds of pollutant per vehicle mile traveled (lb/VMT)
- k = particle size multiplier (lb/VMT); k is 0.011 lb/VMT for PM, k is 0.0022 lb/VMT for PM_{10}, and k is 5.4×10^{-4} lb/VMT for $PM_{2.5}$
- sL = road surface silt loading (g/m^2); assumed to be 0.6 g/m^2, from AP-42 §13.2 (January 2011)
- W = average vehicle weight (tons); 15 tons empty and 40 tons full (provided by EGT)
- P = average # of wet days (>0.01") in time period; 175 day/yr (average from Western Regional Climate Center based on 1931–2006 data for Longview)
- N = number of days in the averaging period; 365 days

EGT estimated the truck round trip length for screenings loadout is 2,365 ft empty and 770 ft full for a total roundtrip distance of 0.594 miles. Using the equation and the assumptions above, the following emission factors are used for determining emissions:

Pollutant	VMT (mile/yr)	Emission Factor (lb/VMT)	VMT (mile/yr)	Emission Factor (lb/VMT)
	Full Truck		*Empty Truck*	
PM	235	0.26	723	0.096
PM_{10}	235	0.052	723	0.019
$PM_{2.5}$	235	0.013	723	0.0047

Assuming the trip length and truck capacity does not change, the emission factors for a full truck and empty truck can be combined. The emissions factors then become: 0.062 lb PM/trip, 0.012 lb PM_{10}/trip, and 0.0031 lb $PM_{2.5}$/trip.

6.d. Emissions Summary. The calculation of the maximum emissions has some inherent variation due to the different emission factors for each grain, the multiple methods of receipt and shipping, and the realistic constraints of the number of railcars, barges, and ships that can be handled. Although the facility can receive many different types of grain, wheat is the most common grain received. Therefore, maximum emissions from the facility are determined using the following assumptions:

- The total throughput of the facility is 13,459,000 ton of wheat only;
- Throughput is assumed to be partitioned according to:
  - 10,512,000 ton receipt by barge; and
  - 2,947,000 ton receipt by railcar;
- 13,459,000 ton loaded to ships;
- 40,377 ton of dust and screenings loadout, assuming overall dust/screening generation to be 0.3% of total grain throughput by weight;
- 1,615 trips by truck for removal of dust and screenings; and

Source	**PM (tpy)**	**PM_{10} (tpy)**	**$PM_{2.5}$ (tpy)**
Point Sources			
Baghouses, Powered Bin Vents, and Cartridge Filters	52.99	52.99	9.01
Screenings Loadout	0.685	0.455	0.077
Fugitive Emission Sources			
Railcar Unloading	0.472	0.115	0.019
Marine Leg	15.768	3.995	0.526
South, Center, and North Storage System	2.086	1.144	0.195
East, Center, and West Ship Loader Spouts	12.759	3.190	0.585
Paved Haul Roads	0.065	0.013	0.003
Total:	**84.83**	**61.91**	**10.41**
Project Increase:	**8.22**	**8.22**	**1.39**

7. REGULATIONS AND EMISSION STANDARDS

Regulations that have been used to evaluate the acceptability of the proposed facility and establish emission limits and control requirements include, but are not limited to, the regulations, codes, or requirements listed below.

7.a. 40 CFR 60.300 *et seq.* (Subpart DD) "Standards of Performance for Grain Elevators" applies to each affected facility at any grain terminal elevator that commences construction, modification, or reconstruction after August 3, 1978. An affected facility is each truck unloading station, truck loading station, barge and ship unloading station, barge and ship loading station, railcar loading station, railcar unloading station, grain dryer, and all grain handling operations and a grain terminal elevator means any grain elevator which has a permanent storage capacity of more than 88,100 m^3 (approximately 2,500,000 bu). EGT's proposed facility will have barge unloading, ship loading, railcar unloading, and general grain handling operations and has a proposed grain storage capacity of approximately 158,366 m^3 (4,493,925 bu). This value does not include the USDA "pack factor", which can be up to 9.5%

depending upon the type of grain being stored, and adjusts for the additional storage capacity available as the grain at the bottom of the silos is compacted. The effect of the factor is that the amount of grain that can be stored at the facility is greater than the design capacity. In a March 29, 2000 letter to SWCAA, EPA made an applicability determination that the pack factor is not applicable when determining the applicability of Subpart DD. Subpart DD is applicable to all grain handling operations, the railcar unloading station, barge unloading, and ship loading.

Subpart DD §60.302(d) is applicable and contains specific operating requirements for the marine leg. However, EGT petitioned EPA on October 30, 2007 for a waiver of the requirement to apply a minimum of 40 ft^3/bu aspiration air to the marine leg. The request was granted on January 31, 2008 and the requirements have been incorporated into the ADP (see Appendix B of this TSD).

Subpart DD is not applicable to the screenings handling, storage, or truck screenings loadout systems because the material being handled is grain dust, chaff, and other grain waste. This Subpart only applies to handling, storage or loading of grain. A determination for a similar facility was made by EPA Region 6 for the grain waste bins at an Arkansas Rice Mill. In that determination (#0000016 in EPA's Applicability Determination Index) the statement is made that "the supporting background information document for Subpart DD describes an affected facility in greater detail without suggesting that grain elevators would include anything other than whole grains."

7.b. Revised Code of Washington (RCW) 70A.15.2040 empowers any activated air pollution control authority to prepare and develop a comprehensive plan or plans for the prevention, abatement and control of air pollution within its jurisdiction. An air pollution control authority may issue such orders as may be necessary to effectuate the purposes of the Washington Clean Air Act and enforce the same by all appropriate administrative and judicial proceedings subject to the rights of appeal as provided in Chapter 62, Laws of 1970 ex. sess.

7.c. RCW 70A.15.2210 provides for the inclusion of conditions of operation as are reasonably necessary to assure the maintenance of compliance with the applicable ordinances, resolutions, rules and regulations when issuing an Air Discharge Permit for installation and establishment of an air contaminant source.

7.d. WAC 173-476 "Ambient Air Quality Standards" establishes ambient air quality standards for PM_{10}, $PM_{2.5}$, lead, sulfur dioxide, nitrogen dioxide, ozone, and carbon monoxide in the ambient air, which must not be exceeded.

7.e. SWCAA 400-040 "General Standards for Maximum Emissions" requires all new and existing sources and emission units to meet certain performance standards with respect to Reasonably Available Control Technology (RACT), visible emissions, fallout, fugitive emissions, odors, emissions detrimental to persons or property, SO_2, concealment and masking, and fugitive dust. This facility is subject to this regulation.

7.f. SWCAA 400-050 "Emission Standards for Combustion and Incineration Units" requires that all provisions of SWCAA 400-040 be met and that no person shall cause or permit the emission of PM from any combustion or incineration unit in excess of 0.23 g/Nm^3_{dry} (0.1 gr/dscf) of exhaust gas at standard conditions.

7.g. SWCAA 400-060 "Emission Standards for General Process Units" requires that all new and existing general process units not emit PM in excess of 0.23 g/Nm^3_{dry} (0.1 gr/dscf) of exhaust gas.

7.h. SWCAA 400-091 "Voluntary Limits on Emissions" allows sources to request voluntary limits on emissions and potential to emit by submittal of an ADP application as provided in SWCAA 400-109. Upon completing review of the application, if requested by the facility, SWCAA shall issue a Regulatory Order that reduces the source's potential to emit to an amount agreed upon between SWCAA and the permittee. The permittee has requested a voluntary, federally enforceable limit, which has been incorporated into the ADP. Therefore, this regulation applies.

7.i. SWCAA 400-109 "Air Discharge Permit Applications" requires that an Air Discharge Permit application be submitted for all new installations, modifications, changes, or alterations to process and emission control equipment consistent with the definition of "new source". Sources wishing to modify existing permit terms may submit an Air

Discharge Permit application to request such changes. An Air Discharge Permit must be issued, or written confirmation of exempt status must be received, before beginning any actual construction, or implementing any other modification, change, or alteration of existing equipment, processes, or permits.

7.j. SWCAA 400-110 "New Source Review" requires that SWCAA issue an Air Discharge Permit in response to an Air Discharge Permit application prior to establishment of the new source, emission unit, or modification.

7.k. SWCAA 400-113 "Requirements for New Sources in Attainment or Nonclassifiable Areas" requires that no approval to construct or alter an air contaminant source shall be granted unless it is evidenced that:

(1) The equipment or technology is designed and will be installed to operate without causing a violation of the applicable emission standards;
(2) Best Available Control Technology will be employed for all air contaminants to be emitted by the proposed equipment;
(3) The proposed equipment will not cause any ambient air quality standard to be exceeded; and
(4) If the proposed equipment or facility will emit any toxic air pollutant regulated under WAC 173-460, the proposed equipment and control measures will meet all the requirements of that Chapter.

8. RACT/BACT/BART/LAER/PSD/CAM DETERMINATIONS

The proposed equipment and control systems incorporate Best Available Control Technology (BACT) for the types and amounts of air contaminants emitted by the processes as described below:

New BACT Determinations

8.a. BACT Determination – Baghouses and Bin Vents. The use of process enclosure in combination with baghouses and bin vents to control PM emissions from material handling to 0.0020 gr/dscf or less has been determined to meet the requirements of BACT for material handling and storage operations at this facility.

Previous BACT Determinations

8.b. BACT Determination – Baghouses and Bin Vents (*ADP 19-3320*). The use of baghouses and bin vents to control PM emissions from material handling to 0.0020 gr/dscf or less meets the requirements of BACT for this facility. SWCAA finds this would be the top choice in a rigorous top-down BACT analysis for this application, therefore comparison of this control option with other (presumably less effective) control options was not required.

8.c. BACT Determination – Railcar Unloading (*ADP 09-2881*). The railcar unloading area is equipped with baghouse aspirated pits limited to a maximum emission rate of 0.0020 gr/dscf. The unloading area is generally enclosed with plastic sheeting on the ends. As the railcars unload into the receiving pits, choked flow is eventually achieved. SWCAA finds that the baghouse, the enclosed pit area, establishment of choked flow, and use of plastic sheets to reduce the openings to the building meet the definition of BACT for this application.

8.d. BACT Determination – Barge Unloading (*ADP 09-2881*). Grain is unloaded from the Columbia River barges using a marine leg aspirated to a baghouse limited to a maximum emission rate of 0.0020 gr/dscf. The opening to the barge is covered with tarps or other barrier to minimize the open area between the marine leg and the sides of the center sump cap. SWCAA finds that the use of an aspirated marine leg and partial enclosure meets the definition of BACT for this application.

8.e. BACT Determination – Ship Loading Operation (*ADP 09-2881*). The facility loads ship holds with a telescoping spout equipped with a "dead box" and bustle filter. The spout is moved within the hold, delivering grain in an even manner. The "dead box" decreases the velocity of the falling grain and reduces the quantity of entrained dust. The bustle filters are aspirated at 6,000 acfm each and are limited to a maximum emission rate of 0.0020 gr/dscf. Opacity from ship loading operations is limited to 10% during initial fill, 5% opacity during mid-hold fill, and 15%

during topping-off. SWCAA finds that use of an aspirated, telescoping spout in conjunction with the above opacity limits meets the definition of BACT for this application.

Other Determinations

8.f. Prevention of Significant Deterioration (PSD) Applicability Determination. The potential to emit of this facility is less than applicable PSD applicability thresholds. Likewise, this permitting action will not result in a potential increase in emissions equal to or greater than the PSD thresholds. Therefore, PSD review is not applicable to this action.

8.g. Compliance Assurance Monitoring (CAM) Applicability Determination. CAM is not applicable to any emission unit at this facility because it is not a major source and is not required to obtain a Part 70 permit.

9. AMBIENT IMPACT ANALYSIS

9.a. Toxic Air Pollutant Review. This facility does not emit quantifiable amounts of TAPs. Toxic air pollutant impacts are presumed to be below regulatory significance.

Conclusions

9.b. Installation of new storage silos and modification of handling equipment, as proposed in ADP Application CO-1075, will not cause the ambient air quality requirements of Title 40 Code of Federal Regulations (CFR) Part 50 "National Primary and Secondary Ambient Air Quality Standards" to be violated.

9.c. Installation of new storage silos and modification of handling equipment, as proposed in ADP Application CO-1075, will not cause the requirements of WAC 173-460 "Controls for New Sources of Toxic Air Pollutants" or WAC 173-476 "Ambient Air Quality Standards" to be violated.

9.d. Installation of new storage silos and modification of handling equipment, as proposed in ADP Application CO-1075, will not cause a violation of emission standards for sources as established under SWCAA General Regulations Sections 400-040 "General Standards for Maximum Emissions," 400-050 "Emission Standards for Combustion and Incineration Units," and 400-060 "Emission Standards for General Process Units."

10. DISCUSSION OF APPROVAL CONDITIONS

SWCAA has made a determination to issue ADP 23-3607 in response to ADP Application CO-1075. ADP 23-3607 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards as discussed below.

10.a. Supersession of Previous Permits. ADP 23-3607 supersedes ADP 19-3320 in its entirety.

10.b. General Basis. Permit requirements for equipment affected by this permitting action incorporate the operating schemes proposed by the applicant in ADP Application CO-1075. Permit requirements established by this action are intended to implement BACT, minimize emissions, and assure compliance with applicable requirements on a continuous basis. Emission limits for approved equipment are based on the maximum potential emissions calculated in Section 6 of this Technical Support Document.

10.c. Monitoring and Recordkeeping Requirements. ADP 23-3607 establishes monitoring and recordkeeping requirements sufficient to document compliance with applicable emission limits, ensure proper operation of approved equipment and provide for compliance with generally applicable requirements. Specific monitoring requirements are established for hours of operation and material throughput.

10.d. Reporting Requirements. ADP 23-3607 establishes general reporting requirements for annual air emissions, upset conditions and excess emissions. Specific reporting requirements are established for hours of operation and material throughput. Reports are to be submitted on a quarterly basis.

10.e. Emission Limits – Baghouses and Cartridge Filters. PM emissions from the baghouses and cartridge filters are limited to 0.0020 gr/dscf (1-hour average). The annual emission limit for each baghouse and cartridge filter is based on the design gas flow rate, the maximum hours of operation, and a PM emission concentration of 0.0020 gr/dscf. For regulatory and compliance purposes, SWCAA assumes that that all PM emitted from baghouses and cartridge filters is PM_{10}.

Grain handling baghouses and cartridge filters are subject to 40 CFR 60 Subpart DD, therefore a 0% opacity limit is applicable to each baghouse and cartridge filter.

10.f. Emission Limits – Ship Loading. Ship loading operations utilize process enclosure, aspirated spouts and oil application to minimize fugitive PM emissions. Performance is primarily demonstrated by compliance with applicable visible emission limits. There are three operational phases during regular ship loading - initial fill, mid-hold fill, and topping-off. Each operational phase has a corresponding opacity limit. Although 40 CFR 60 Subpart DD establishes a 20% opacity limit for ship loading, SWCAA has established a lower opacity limit for mid-hold filling. Mid-hold filling has a 10% opacity limit. All other loading modes have a 20% opacity limit.

10.g. Emission Limits – Barge Unloading. Barge unloading activities are considered to be part of the "affected facility" under 40 CFR 60 Subpart DD and are therefore subject to a grain loading limit of 0.023 g/dscm (0.01 gr/dscf) and a 0% opacity limit under §60.302(b)(2). The grain loading limit for the filters associated with barge unloading is 0.0020 gr/dscf, which was established through the application of BACT. Visible emissions from unloading is limited to 0% opacity. EGT has a waiver determination from EPA that includes enclosure of the barge sump with a physical barrier (tarp) to minimize fugitive dust. EGT has submitted a request to modify the determination to allow operation without tarp enclosure based on specified design and operating criteria, and is currently operating in compliance with the specified criteria. A formal response to the request from EPA is still forthcoming.

10.h. Emission Limits – Railcar Unloading and Internal Grain Handling. Railcar unloading and internal grain handling activities are considered to be part of the "affected facility" under 40 CFR 60 Subpart DD and are therefore subject to a grain loading limit of 0.023 g/dscm (0.01 gr/dscf) and a 0% opacity limit under §60.302(b)(2). The grain loading limit for the baghouse filters associated with railcar unloading and internal grain handling are subject to a 0.0020 gr/dscf through the application of BACT. Based upon a review of other permitting actions by SWCAA, a limit of 0% is achievable and is established in other permits. Therefore, a 0% opacity limit is established for fugitive emissions from railcar unloading and internal grain handling.

10.i. Operating Requirements – Commodity Limitation. Approval conditions limit the commodities handled at the facility to corn, soybeans, wheat, barley, rapeseed, canola, meals and DDG. Emissions from the handling of other commodities were not reviewed and may result in different emissions and emission control strategies. New Source Review may be necessary before operating the facility with other commodities.

10.j. Operating Requirements – Oil Application. ADP 19-3320 (Condition 31) and previous permits for this facility require EGT to apply oil to all loaded grain at a minimum rate of 3 qt/1,000 bushels whenever visible emissions from shiploading operations do not comply with visible emission limits. In ADP Application CO-1075, EGT has requested removal of the oiling requirement and associated recordkeeping and reporting requirements. EGT made the following arguments in support of removing the requirement:

(1) The facility has operated in compliance without the addition of oil for the past 10 years. Oil has not been applied at the facility since the final commissioning of the ship loading spouts in 2013.

(2) Prior to 2013, EGT did apply oil to control fugitive emissions from shiploading operations, and oil application was not effective in minimizing visible emissions and achieving compliance. Compliance with applicable visible emission standards was achieved by proper maintenance and operation of the ship loading spouts and aspiration system in their current configuration.

(3) Oil used in the oiling system (soybean, food grade mineral) has a limited shelf life and must be replaced every two to three months under current storage conditions. The purchase of new oil and disposal of old unused oil imposes significant costs. Ordering mineral oil on an as needed basis for one vessel alone could cost more than $35,000. Based on an average of 100 vessels per year, annual oil cost could be as much as $3.5 million. The existing shiploading system is able to operate within compliance without oil so the cost of the oil system would be better spent on maintaining and repairing the shiploading equipment.

(4) Installation and maintenance of oil storage tanks on site present operational and permitting challenges due to the potential of a large scale release along with tank inspection and maintenance requirements. The storage of oil also requires additional infrastructure to comply with the facility's SPCC and SWPPP plans.

After reviewing EGT's request, SWCAA concurs that the oiling requirement is not essential for complying with applicable limits and maintenance of the oiling system has the potential to impose significant costs to the facility. Therefore, SWCAA has agreed to remove the oiling requirement from ADP 23-3607.

10.k. Requirements for Unmodified Emission Units. Permit requirements for existing emission units not affected by ADP Application CO-1075 are carried forward unchanged from ADP 19-3320.

11. START-UP AND SHUTDOWN/ALTERNATIVE OPERATING SCENARIOS/POLLUTION PREVENTION

11.a. Start-up and Shutdown Provisions. Pursuant to SWCAA 400-081 "Start-up and Shutdown", technology based emission standards and control technology determinations shall take into consideration the physical and operational ability of a source to comply with the applicable standards during start-up or shutdown. Where it is determined that a source is not capable of achieving continuous compliance with an emission standard during start-up or shutdown, SWCAA shall include appropriate emission limitations, operating parameters, or other criteria to regulate performance of the source during start-up or shutdown.

The applicant did not identify any start-up and shutdown periods during which affected equipment is not capable of achieving continuous compliance with applicable technology determinations or approval conditions. To SWCAA's knowledge, this facility can comply with all applicable standards during startup and shutdown.

11.b. Alternate Operating Scenarios. SWCAA conducted a review of alternate operating scenarios applicable to equipment affected by this permitting action. The permittee did not propose or identify any applicable alternate operating scenarios. Therefore, none were included in the permit requirements.

11.c. Pollution Prevention Measures. SWCAA conducted a review of possible pollution prevention measures for the facility. No pollution prevention measures were identified by either the permittee or SWCAA separate or in addition to those measures required under BACT considerations. Therefore, none were included in the permit requirements.

12. EMISSION MONITORING AND TESTING

12.a. Emission Testing Requirements – Baghouses and Powered Cartridge Filters (*existing*). Approval conditions for baghouses and cartridge filters at this facility require the permittee to conduct initial and periodic emission testing of the affected units. Where affected units are subject to 40 CFR 60 Subpart DD, initial testing requirements are consistent with the provisions of that regulation.

Affected baghouses and filters will be initially tested according to the schedule contained in ADP 19-3320, Appendix A. Subsequent periodic testing will be performed annually on selected units so that each unit is routinely tested once every ten (10) years. All testing must be conducted in accordance with the testing provisions of ADP 23-3607, Appendix A. Additional requirements when performing Method 5 have been established to improve the data collection during the test since related emission limits are very small. This includes the use of borosilicate glass filters reinforced with PTFE and the use of low residue solvents.

EPA approved a representative testing scheme for new units subject to 40 CFR 60 Subpart DD via a letter to EGT, dated October 20, 2010. Pursuant to EPA's waiver, representative testing of at least one baghouse for each make and model of baghouse will meet the initial testing requirement under 40 CFR 60.7. The units required to be initially tested, as specified by EPA are:

- CPV-12 with 6,000 acfm airflow (NSPS units):
  - One unit associated with a 120,000 bph conveyor;
  - One unit associated with a 66,600 bph conveyor;
  - One unit associated with a 60,000 bph conveyor; and
  - One unit associated with a 40,000 bph;
- CPV-12 with 5,000 acfm airflow (NSPS units):
  - One unit associated with a of 120,000 bph conveyor;
  - One unit associated with a 60,000 bph conveyor;
  - One unit associated with a 40,000 bph marine leg; and
  - One unit associated with an aspirating scale garner fed by a 120,000 bph conveyor;
- CPV-8 with 4,000 acfm (NSPS units):
  - One unit associated with a 133,200 bph conveyor;
  - One unit associated with a 120,000 bph conveyor;
  - One unit associated with a 66,600 bph conveyor; and
  - One unit associated with a 60,000 bph conveyor;
- CPV-6 with 2,500 acfm (NSPS units):
  - One unit associated with an aspirating scale garner fed by a conveyor of 60,000 bph;
- CPV-4 with 2,000 acfm (NSPS unit):
  - One unit associated with a 40,000 bph conveyor;
- CPV-12 with 5,000 acfm airflow (non-NSPS units)
  - One unit associated with a grain storage/shipping bin;
- CPV-3 with 1,500 acfm (non-NSPS unit):
  - One unit associated with a screenings loadout hood fed by a 7,000 bph conveyor;
- CPV-2 with 700 acfm (non-NSPS unit):
  - One unit associated with a 4000 bph screenings bucket elevator; and
- CPV-2 with 700 cfm (non-NSPS units):
  - No non-powered units associated with a screenings bin fed by a 5,000 bph conveyor.

The requirements of 40 CFR 60 Subpart DD (emission limits and testing requirements) only apply to those processes that handle grain. The definition of "grain" is generally limited to corn, wheat, sorghum, rice, rye, oats, barley, and soybeans. At this facility, SWCAA has made a determination to extend the definition of "grain" to also include rapeseed, canola, meals, and DDG. However, the definition of "grain" does not include screenings and/or dust. Therefore, baghouses and powered cartridge filters used to control PM emissions from these materials (such as the salad bar filters and the screenings transfer system) are not subject to the provisions of 40 CFR 60 Subpart DD and should not have been included in the EPA waiver letter. These units are subject to emission limits and testing requirements authorized under SWCAA's general authority. SWCAA has not applied PM testing requirements to the roof vents for the screenings loadout building because the emissions are a combination of both fugitive and controlled (via the salad bar filters) emissions.

12.b. Emission Testing – Ship Loading Spout Bustle Filter Baghouses (*existing*). As originally proposed and approved, the bustle filter baghouses on the ship loading spouts (F6130, F6230, F6330) could not be safely accessed for testing. EPA granted a waiver for the initial Method 5 testing of these baghouses, and allowed performance of Method 9 testing only when the filters are above the edge of the ship's hold. Likewise, SWCAA waived Method 5 testing, and specified Method 9 testing consistent with EPA's waiver. Periodic emission testing is required every sixty (60) months after the initial source test. All testing must be conducted in accordance with the testing provisions of ADP 23-3607, Appendix A.

12.c. Emission Testing – Ship Loader Conveyor Filters (*modified*). As originally proposed and approved, the filter units on the Ship Loader Conveyors (F6110, F6115, F6210, F6215, F6310, F6315) were subject to initial and periodic Method 5 testing. Due to safety concerns, Method 5 testing of these units has been waived. Periodic Method 9 testing is required annually in lieu of Method 5 testing. All testing must be conducted in accordance with the testing provisions of ADP 23-3607, Appendix A.

ADP Application CO-1075. EGT requests that SWCAA waive Method 5 testing requirements for filters associated with the Ship Loader Conveyors (BC61, BC62, BC63) due to difficulties in safely performing the tests. EGT proposes to conduct Method 9 testing in lieu of Method 5 testing. SWCAA has reviewed the configuration of the affected units and concurs there are legitimate safety concerns regarding performance of Method 5 testing. Method 5 testing requirements will be waived, and Method 9 testing will be incorporated as a compliance assurance measure.

12.d. Emission Testing – Fugitive Emission Sources (*existing*). Approval conditions for affected fugitive sources requires the permittee to provide initial testing or an initial emission compliance determination within sixty (60) days of achieving maximum operation, but no later than one hundred eighty (180) days of initial startup, for the purposes of demonstrating initial compliance with applicable emission limits. Periodic emission testing of the affected sources is required every sixty (60) months after the initial source test, no later than the end of the month in which the initial source test was performed. All emission testing must be conducted in accordance with the provisions of ADP 19-3320, Appendix B.

13. FACILITY HISTORY

13.a. Previous Permitting Actions. SWCAA has previously issued the following Permits for this facility:

Permit Number	Application Number	Date	Purpose
19-3320	CO-1006	2/28/2019	Installation and operation of an additional dust collection system consisting of a Donaldson Torit CPC-8 (F8715), 780 acfm, for the collection of dust from the grain cleaning system and dust transfer leg.
11-2978R1	CO-920	9/24/2013	Removal of gasoline storage tank. Modification of Annex North/South Shuttle Conveyors. Modification of rail receiving requirements, emission testing timelines and ship loading requirements. Superseded by ADP 19-3320.
11-2978	CO-906	7/6/2011	Modification of the number and placement of control equipment filters. Action included both addition and removal of filters. Addition of new spout to screenings system. Superseded by ADP 11-2978R1.
09-2881	CO-876	9/30/2009	Modification of emission units and control equipment due to facility redesign. Superseded by ADP 11-2978.

Permit Number	Application Number	Date	Purpose
07-2727	CO-832	7/26/2007	Initial permitting action to establish grain export facility. Superseded by ADP 09-2881.

13.b. Compliance History. A search of source records on file at SWCAA did not identify any outstanding compliance issues at this facility.

14. PUBLIC INVOLVEMENT OPPORTUNITY

14.a. Public Notice for ADP Application CO-1075. Public notice for ADP Application CO-1075 was published on the SWCAA internet website for a minimum of (15) days beginning on June 13, 2023.

14.b. Public/Applicant Comment for ADP Application CO-1075. A (30) day public comment period was provided for this permitting action pursuant to SWCAA 400-171(3) beginning on October 12, 2023. SWCAA did not receive any comment from the applicant or the public during the public comment period for this permitting action.

14.c. State Environmental Policy Act. EGT has submitted a SEPA checklist for this project to Cowlitz County. Cowlitz County issued SEPA Determination of Non-Significance 23-10-5022 for this project on October 19, 2023.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OCT 20 2010

Mr. Jerry Gibson
Vice President of Operations,
EGT Development, LLC
101 South Main Street, Suite 1800
Portland, Oregon 97204

Re: Waiver of Initial Performance Test for Identical Filter Units

Dear Mr. Gibson:

This is in response to a request to the U.S. Environmental Protection Agency (EPA) dated March 31, 2009, and supplemented with information on September 7, 2010, from Bunge North America, Inc. (Bunge) regarding the EGT Development, LLC (EGT) Export Elevator facility located at the Port of Longview. EGT has requests related to two issues. The first issue involves the testing of the ship loading Bustle filters. The second request is related to testing of numerous bin vent filters.

Ship Loader Bustle Filter Test Waiver

EGT plans to install three Midwest International, Inc. Vacupac™ Ship Loader Bustle Filters (bustle filters) and they question weather testing can be conducted within the constraints of the applicable methods. EPA has determined that the method 5 reading required under the initial performance is waived and a portion of the required Method 9 readings are waived, as described further below, for the three Bustle Filters, because it has been demonstrated by other means to the EPA's satisfaction that the source is in compliance with the standard and because of the significant margin of compliance that is anticipated, as described further below.

Bin Vent CPV Filter Test Waiver

EGT also plans to install numerous Donaldson bin vent CPV design PowerCore® Filters (CPV filters) on affected and unaffected units. EPA has determined in a previous letter dated February 5, 2008, that 40 C.F.R. Part 60, Subpart DD, Standards of Performance for Grain Elevators (Subpart DD) applies to the bin vent filters on affected facilities under Subpart DD. Because of the number of affected facility units and the time constraints to conduct the initial performance testing, EGT requests to have the initial performance test waived for certain CPV filters when they are in a group of identical units. Compliance with the standards for the units that are waived will be demonstrated by units that are identical in design, operation, and maintenance. Each unit that would be tested represents a group of units that are identical in design, operation, and maintenance and all but one unit in each group would have the performance testing waived. The grouping of the units and which units will have testing waived is described further below.

Based on the units being identical in operation and design and on the margin of compliance expected to be achieved by the CPV units, EPA has determined that a waiver of the initial performance test is warranted for identical units as described further below.

Facility Background

EGT is constructing a grain elevator and related grain handling and unloading facilities at the Port of Longview in south west Washington. South West Clean Air Agency (SWCAA), the local air pollution control authority, issued an Air Discharge Permit 09-2881 dated September 30, 2009. Subpart DD limits both process particulate matter (PM) emissions (40 C.F.R. § 60.302(b)) and fugitive PM emissions (40 C.F.R. § 60.302(c)) from affected facilities. Limits are verified with source testing as provided in 40 C.F.R. §§ 60.8 and 60.303.

Waivers of Performance Testing Background

Waivers of performance testing are authorized under certain circumstances according to 40 C.F.R. § 60.8(b)(4), as well as EPA's National Stack Testing Guidance, issued on September 30, 2005 (National Stack Testing Guidance), which addresses the application of 40 C.F.R. § 60.8(b)(4).

Sections 60.8(a) and 60.303 require that any affected facility subject to a Subpart DD standard must conduct an initial performance test within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, and must also conduct performance tests at such other times as required by EPA. Section 60.8(b)(4) states that the performance tests must be conducted and the data reduced in accordance with the test methods and procedures in the applicable New Source Performance Standard (NSPS) subpart unless EPA or the delegated agency "waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the [decision maker's] satisfaction that the source is in compliance with the standard." The National Stack Testing Guidance recognizes that it may be appropriate, on a case-by-case basis, to waive the performance testing requirements under 40 C.F.R. § 60.8(b)(4) for some emission units when the testing of other emission units at the same facility provide representative data, and identifies the following criteria as appropriate for consideration when acting on such a request:

1. The units are located at the same facility;
2. The units are produced by the same manufacture, have the same model number or other manufactures designations in common, and have the same rated capacity and operating specifications;
3. The units are operated and maintained in a similar manner;
4. The delegated agency, based on documentation submitted by the facility,
    a. Determines that the margin of compliance for the identical units tested is significant and can be maintained on an on-going basis; or
    b. Determines based on a review of sufficient emissions data that, though the margin of compliance is not substantial, other factors allow for the determination that the variability of emissions for identical tested units is low enough for confidence that the untested unit will be in compliance. These factors may include, but are not

limited to, the following:

i. Historical records at the tested unit showing consistent/invariant load;
ii. Fuel characteristics yielding low variability (e.g., oil) and therefore assurance that emissions will be consistent and below allowable levels;
iii. Statistical analysis of a robust emissions data set demonstrate sufficiently low variability to convey assurance that the margin of compliance, though small, is reliable.

National Stack Testing Guidance, at page 8.

Ship Loading Bustle Filter Request

Improvements have been made in the design of ship loading spouts. EGT states that by totally enclosing the conveyor and conveyor discharge to the loading spout, by adequately aspirating the enclosure of the conveyor discharging to the loading spout and adequately aspirating the loading spout just above the discharge of the choke discharge nozzle, the conventional shroud around the loading spout is no longer required. Eliminating the shroud reduces several thousand pounds of loader weight. These improvements have lead to the relocation of the loading spout dust control system from above the feed conveyor discharge to the bottom of the ship loader spout.

There are technical difficulties that arise when considering how to perform a Method 5 test with the new design, where the loading spout dust control system has been moved to the bottom of the ship loader spout. Also, there are issues with conducting a Method 9 opacity reading while the loading spout is within the hold of the ship loading grain. These issues combined with the anticipated significant margin of compliance, the testing of other units with identical filter media at the same facility, and the opacity readings that can be performed are the reasons for EPA waiving the initial Method 5 performance test for the three bustle filters, as required by 60.302(b)(1), and for EPA waiving the Method 9 opacity reading, as required by 60.302(b)(2) only while the loading spout is within the hold of the ship and an accurate reading can not be reasonable performed.

The PM limit for the ship loading bustle filters according to Subpart DD is 0.01 gr/dscf. (see 40 CFR 60.302(b)(1)). The same filter media, Donaldson Ultra-Web®filter media, that is used throughout the facility is also used in the bustle filters. The manufacture guaranteed predicted exhaust loading is 0.002 grains/scf exhaust air, this is an order of magnitude below the NSPS limit of 0.01 gr/dscf. This exhaust loading is used to develop a permit limit, along with the exhaust volume of 6000 cfm for each filter (3000 cfm for each of the two fans), and fan discharge dimensions of approximately 8.5 inches by 17 inches. This resulted in a permitted emission rate, in terms of pound per hour, for each of the three loader filters, of 0.05 lb/hr of PM/PM10. So the Permit limit is based on an exhaust loading standard that is an order of magnitude below the NSPS standard.

There are many other filter units at this facility which use the same filter media as the bustle filters and a number of them will conduct an initial performance test. Furthermore the local agency, Southwest Clean Air Agency, will require on going testing of all of the units at the

facility, in a time frame that is achievable by EGT, so there will be continual verification of the performance for this type of filter media. Method 9 opacity readings will not be able to be conducted while the loading spout is with in the hold of the ship because of the significant emissions generated by the grain hitting the pile in the ship hold. The ship loading dust collection system on the loading spout is subject to a an opacity limit of 0% (40 CFR 60.302(b)(2)) while fugitive emissions from the hold of the ship while loading are subject to an opacity limit of 20% (40 CFR 60.302(c)). However there is some amount of time when the ship is almost full where the end of the spout will be visible and a Method 9 can be performed. That will give an indication if there has been a failure of the ship loading dust control system.

This determination is specific to this facility and the current understanding of testing capabilities related to this new bustle filter technology. If at a later date it is determined that there is a reasonable way to perform a Method 5 test on this type of bustle filter, this determination in no way precludes EPA from requiring an initial performance test be conduced at another facility.

Bin vent CPV filter Request

EGT plans to install over 100 bin vent CPV filters throughout the facility and EPA requires that the initial performance test be conducted within 180 days. The number of filter units that need to be tested would create difficulty in meeting that deadline. That combined with the anticipated significant margin of compliance, the testing of other units with identical filter media at the same facility, and the opacity readings that can be performed is the reason for EPA waiving the initial Method 5 performance test for certain CPV filters as described below.

The following is a list of all planned CPV filter units.

- **CPV -12 with 6000 cfm, 42 NSPS units:** 11 aspirating conveyors of 120,000 bushels per hour (bph), 6 of 66,600 bph, 22 of 60,000 bph & 3 of 40,000 bph.
- **CPV -12 with 5000 cfm, 10 NSPS units:** 6 aspirating a conveyor of 120,000 bph; 2 aspirating a conveyor of 60,000 bph, 1 aspirating a 40,000 bph marine leg, 1 aspirating scale garners fed by a 120,000 bph conveyor.
- **CPV-12 with 5000 cfm, 6 non-NSPS units:** 6 aspirating a grain storage/shipping bin.
- **CPV-8 with 4000 cfm, 35 NSPS units:** 2 aspirating a conveyor of 133,200 bph; 23 of 120,000 bph, 8 of 66,600 bph & 2 of 60,000 bph.
- **CPV-6 with 2500 cfm, 2 NSPS units:** 2 aspirating scale garners fed by a 60,000 bph conveyor.
- **CPV-4 with 2000 cfm, 1 NSPS unit:** aspirating scale garners fed by a 40,000 bph conveyor.
- **CPV-3 with 1500 cfm, 3 non-NSPS units:** all aspirating a 7000 bph screenings loadout hood fed by a 7000 bph conveyor.
- **CPV-2 with 700 cfm, 1 non-NSPS unit:** aspirating a 4000 bph screenings bucket elevator.
- **CPV-2 with 700 cfm, 4 non-NSPS un-powered units:** each for a screenings bin fed by a 5000 bph conveyor.

Evaluation of National Stack Testing Guidance for EGT's Waiver Requests

To address the National Stack Testing Guidance the following is provided:

1. All units in question are to be located at the proposed export grain elevator.
2. All units use the Donaldson Ultra-Web®filter media.
3. All units will be operated and maintained in a very similar manner.
4. a. The NSPS limit these process emissions are subject to is 0.01 grains/dscf (see 60.302(b)(1)). The manufacturer has a guarantee of 0.001 grains/dscf and that is the basis for EGT's emissions estimations of 0.002 grains/dscf that they have used in their permit applications. EGT has provided information from the manufacturer, Donaldson Torit, that documents independent lab test results on the Ultra-Web®filter media (Ultra Web), using ASTM 6830-02 per EPA PM 2.5 performance verification from the Environmental Technology Verification (ETV) Program, of an emission rate of 0.000009 grains/dscf. This is three orders of magnitude lower than the manufacturer's guarantee (0.001 grains/dscf) and four orders of magnitude lower than the 0.01 grains/dscf NSPS limit. The reason the ASTM test method results in a lower emission rate as compared to the measurements of a Method 5 in the field, and what the manufacture will therefore guarantee, is likely that the ASTM method has very little if any leakage around the fabric (most of the leakage being through the fabric), whereas actual bag house filters do have some leakage between the filter bag unit and the tube sheet which supports the bags.

4. b. Actual Method 5 tests were conducted on six NSPS baghouse units at a Bunge grain export elevator in 2001 and 2002. All baghouses were using Duraplex filter media. This media is made by the same manufacture, Donaldson Torit. Duraplex is an earlier developed technology which has a higher manufacture rated emission rate of 0.002 grains/dscf than the Ultra Web filter media, which has a manufacture rated emission rate that is half of that, at 0.001 grains/dscf. Information provided by the manufacturer documents independent lab test results on the Duraplex filter media, using ASTM 6830-02 per EPA PM 2.5 performance verification from the ETV Program, of an emission rate of 0.00002 grains/dscf. Compared this to documents from independent lab test results on the Ultra-Web filter media, using the same ASTM test, of an emission rate of 0.000009 grains/dscf. Ultra-Web ASTM test results are an order of magnitude less than what the results were for Duraplex. NSPS emission test results when the Duraplex filter media was used showed maximum emissions result of 0.00071 grains/dscf. This is an order of magnitude lower than the manufacturer's guarantee (0.002 grains/dscf), and two orders of magnitude lower than the 0.01 grains/dscf NSPS limit.

Based on the information provided, EPA has determined that there is no reason to suspect that the use of Ultra-Web filter media in affected facilities will have emissions that come near to the NSPS limits. Furthermore, in the future the air permitting authority, SWCAA, will require additional testing on a reasonable schedule and there will be a rotation of testing within a group, so that a different unit in the group is tested each time for any future performance tests.

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EGT has reported to EPA through phone and email communication that the numbers of filters in some of the groups might change to a small degree but the specific details of the groups will not change and no other groups will be added. All filters within a group will be identical in design, operation, and maintenance. If other filters or groups of filters were to be added to affected facilities this determination would not apply to them. If an affected facility is not in a group that is not described below it would not have the testing waived.

EPA has determined that the following units, for the groups described below, can serve as representative test filters for required Method 5 testing and other units in these groups will have the required Method 5 testing waived provided that all conditions remain the same for the group.

- **CPV-12 with 6000 cfm:** Test 1, aspirating conveyors of 120,000 bph, test 1 aspirating a conveyor of 66,600 bph, test 1 aspirating a conveyor of 60,000 bph & test 1 aspirating a conveyor of 40,000 bph.
- **CPV-12 with 5000 cfm, 10 NSPS units :** Test 1 aspirating a conveyor of 120,000 bph; test 1 aspirating a conveyor of 60,000 bph, test 1 aspirating a 40,000 bph marine leg, test 1 aspirating scale garners fed by a 120,000 bph conveyor.
- **CPV-12 with 5000 cfm, 6 non-NSPS units:** Test 1 aspirating a grain storage/shipping bin
- **CPV-8 with 4000 cfm, 35 NSPS units:** Test 1 aspirating a conveyor of 133,200 bph; test 1 aspirating a conveyor of 120,000 bph, test 1 aspirating a conveyor of 66,600 bph & test 1 aspirating a conveyor of 60,000bph.
- **CPV-6 with 2500 cfm, 2 NSPS units:** Test 1 aspirating scale garners fed by a conveyor of 60,000 bph.
- **CPV-4 with 2000 cfm, 1 NSPS unit:** Test 1 aspirating a conveyor of 40,000 bph.
- **CPV-3 with 1500 cfm, 3non-NSPS units:** Test 1 aspirating a screenings loadout hood fed by a 7000 bph conveyor.
- **CPV-2 with 700 cfm, 1 non-NSPS unit:** Test 1 aspirating a 4000 bph screenings bucket elevator
- **CPV-2 with 700 cfm, 4 non-NSPS unit:** Test 0 non-powered units each for a screenings bin fed by a 5000 bph conveyor.

A total of 14 CPV units are proposed as NSPS test units, 3 CPV units as non-NSPS test units. Each of these units is unique, has a unique air volume and aspirates a conveyor or facility with a unique conveying capacity. No unpowered CPV units are proposed for testing as the air flow for these units is expected to vary to such an extent that isokinetic sampling requirements can not be met. However, all of these unpowered CPV units are non-NSPS because they are placed on storage bins and, while the capacity of storage bins are used to determine applicability, bins used for storage only are not affected grain handling operations under the rule.

EGT plans to test representative units for the other units reported as non-NSPS. Because EGT plans to test representative units for these facilities that may or may not be subject, and has not requested an applicability analysis of those units, EPA has not evaluated whether or not the standards apply to the other units EGT reports as not subject.

If you have any further questions or concerns, please contact Heather Valdez of the Region 10 Office of Air, Waste and Toxics at (206) 553-6220.

Sincerely,

Nancy Helm, Manager
Federal and Delegated Air Programs Unit

cc: John St. Clair, Southwest Clean Air Agency
Robert L. Henricks, Bunge North America, Inc.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
RESEARCH TRIANGLE PARK, NC 27711

OFFICE OF
AIR QUALITY PLANNING
AND STANDARDS

January 31,2008

Mr. Robert L. Henricks
EGT Development, LLC
1 SW Columbia St, Suite 740
Portland, Oregon 97258

Dear Mr. Henricks:

This is in response to your request made to EPA Region 10 for an equivalency determination under 40 C.F.R. § 60.302(d)(3) for a barge unloading station at the Port of Longview, Washington. In a letter dated October 30, 2007, the Region forwarded your request to our office for review and action as they have not been delegated authority to approve equivalency determinations.

Under Subpart DD, the owner or operator of any barge or ship unloading stations is required to meet sections 60.302(d) (1) and (2), which state that "the unloading leg shall be enclosed from the top (including the receiving hopper) to the center line of the bottom pulley and ventilation to a control device shall be maintained on both sides of the leg and the receiving hopper", and "the total rate of ventilation air shall be at least 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 ft^3/bu)." If the owner or operator cannot meet these requirements, "the owner or operator may use other methods of emission control if it is demonstrated to the Administrator's satisfaction that they would reduce emissions of particulate matter to the same level or less."

Based on a review of your submission and several conversations with you, it is our understanding that the following are the proposed operating conditions for the barge unloading facility at the Port of Longview, Washington:

1. The marine leg is enclosed from the boot pulley centerline to the top of the leg.
2. The spouting to the totally enclosed belt conveyor is hard flanged and totally enclosed.
3. A tarp(s) will be hung from the marine leg during all barge unloading that will totally cover the sump opening.
4. A minimum of 5,000 actual cubic feet per minute aspiration will be provided to the marine leg during all barge unloading.
5. The marine leg and enclosed barge opening will not discharge into the atmosphere visible emissions greater than 0% opacity.

We have determined that your proposed alternative is equivalent with the following additional operating conditions:

1. The tarp covers will be maintained as prescribed by the manufacturer and inspected for holes, rips and any other sign of wear prior to each unloading operation. The tarps shall be repaired/replaced as necessary to maintain a negative pressure during unloading.
2. EPA Reference Method 9 and procedures in 40 CFR 60.11 shall be used to determine opacity.

If you have any questions, please contact Mr. William Schrock of my staff at (919) 541-5032.

Sincerely,

for Peter Tsirigotis
Director
Sector Policies and Programs Division

cc: Heather Valdez, EPA Region 10
Scott Throwe, OECA
Bill Schrock, NRCG/SPPD
Robin Dunkins, NRCG/SPPD

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May 30, 2013

Madonna Narvaez
USEPA Region 10, AWT-107
1200 Sixth Avenue
Seattle, WA 98101

EGT, LLC
Export Grain Elevator
150 E Mill Road
Longview, Washington
SWCAA APD 11-2978

Dear Ms. Narvaez:

The request for revision of a prior applicability determination and equivalency in this letter is submitted in response to the inability to comply with all provisions of the prior applicability determination issued to EGT Development, LLC. As documented in the enclosed letter.

Issue: 40 CFR 60.302(d)(2) Equivalency

The EGT barge unloading station is an affected facility under the NSPS at 40 CFR 60, Subpart DD, Standards of Performance for New Stationary Sources – Grain Elevators. The station complies with the equipment specifications of subparagraph 40 CFR 60.302(d)(1) concerning the enclosure and ventilation of the unloading leg. Subparagraph 40 CFR 60.302(d)(3) enables an equivalent method of control to the minimum aspiration requirement of 40 CFR 60.302(d)(2).

The minimum aspiration requirement specified at 40 CFR 60.302(d)(2) is 32.1 actual cubic meters per cubic meter of grain handling capacity (ca. 40 cubic feet per bushel). Based on the grain handling capacity of the leg the NSPS requirement is 20,000 cfm of aspiration air for the marine leg. Based on an evaluation of the support document for Subpart DD (EPA 450/2-77-001a, Standards Support and Environmental Impact Statement Volume 1: Proposed Standards of Performance for Grain Elevator Industry) the equipment specification was a result of testing of the barge unloading facilities at Continental Grain Co., Westwego, LA in October 1972 and Bunge Corp., Destrehan, La in October 1973.

Barges being unloaded at the Westwego and Destrehan Louisiana facilities were of the Mississippi River design. The testing was conducted without the intrinsic enclosure of Columbia River grain barges. To unload a Mississippi River barge requires the barge top (160 to 188 feet long) or a top section (15 to 21 feet long) or two to be removed, exposing the entire 28 feet width of the barge grain storage area to area breezes. Columbia River grain barges have only a center sump cover that is opened to enable grain unloading. The Columbia River grain barge sump openings vary in size but do not exceed 17 feet by 12 feet, to enable insertion of the barge unloading leg. This small sump opening, a part of which is occupied during unloading by the marine leg, and the raised top of the Columbia barge design, which is not removed but is a part of the barge, minimizes area breezes carrying off dust created during unloading.

To initiate unloading, the cover is moved from over the sump and the marine leg is inserted into the sump opening. [The marine leg is enclosed from the boot pulley centerline to the top of the leg and the leg discharge to the spout is hard flanged and totally enclosed and the spout sleeved sections discharging to the totally enclosed belt conveyor are gasketed. This leg, leg discharge and spout (receiving hopper) enclosure is required by the equipment standard of subparagraph 40 CFR 60.302(d)(1)]. EGT attempted to utilize a tarp hung from the marine leg to cover the sump opening not occupied by the marine leg. The tarp was fastened to the leg casing above the boot, supported by a frame and tied to the barge. Various shapes and weights and tie-down strap locations for the tarps were used. No combination was able to keep ambient winds from getting under the tarp. The initial result was that the wind aspirated dust from the sump, creating visible emissions. Following this the winds tore even the heavier tarps. No effective means was found to seal the tarp from ambient winds. The loose tarp became a safety hazard for the barge unloader operator, who must remain at the edge of the sump to observe unloading and determine when the leg must be inserted deeper into the sump. No tarp would last beyond one barge before being torn. The 5,000 acfm aspiration provided the marine leg (See enclosed USEPA letter dated January 31, 2008) eliminated visible emissions (0% opacity) except during the initial unloading time taken to insert the lower half of the boot into the grain. This period varies from 1 ½ to 3 minutes of the nominal 6 hours required to unload a 3600 ton Columbia River barge. During this initial unloading time visible emissions averaged about 20% opacity. The operator lowers the leg as rapidly as possible to minimize the time dust is emitted and the time he potentially is affected by the dust. The dead weight of the leg and the digging of the leg buckets determine the lowering rate. (The leg is supported/suspended by cables.) EGT does not believe that increasing the leg aspiration would materially affect fugitive emission control during the time required to bury the lower half of the leg boot. With the existing equipment enclosure and aspiration, the rapid insertion of the marine leg and the limited size of the Columbia River barge sump an equivalent particulate matter control is affected to that resulting from aspirating a marine leg in accordance with the requirements of 40 CFR 60.302(d)(2).

The support document documents the visible emissions observed with the NSPS system of control on page 4-12 with the following statement: "Due to the high level of visible emissions obtained, an equipment standard has been proposed." EGT requests a combination of an equipment standard and an operations standard. Enclosed with this letter are several prints of pictures taken by Wess Safford, the SWCAA engineer who observed barge unloading on May 24, 2013.

EGT requests the January 31, 2008 equivalency determination be revised to read as follows:

1. The marine leg is enclosed from the boot pulley centerline to the top of the leg.
2. The discharge of the marine leg to the telescoping spout discharging to the belt conveyor is hard flanged and totally enclosed.
3. The sections of the telescoping spout to the totally enclosed belt conveyor are gasketed.
4. A minimum of 5,000 actual cubic feet per minute aspiration will be provided to the marine leg during all barge unloading.
5. The marine leg, marine leg discharge, telescoping spouting and spouting discharge to the enclosed belt conveyor will not discharge to the atmosphere

visible emissions greater than 0% opacity as determined by EPA reference Method 9 and procedures in 40 CFR 60.11.

6. The emissions of the barge unloading sump shall not exceed 20% opacity during the first 3 minutes of unloading and shall not exceed 0% opacity thereafter during unloading as determined by EPA reference Method 9 and procedures in 40 CFR 60.11.

SWCAA is currently developing a revised air permit for EGT and wishes to include appropriate conditions for the barge unloading operation in the revised permit. If you have any questions concerning this request, please contact me at your convenience, phone 360-747-5013 or email jerry.gibson@egt-llc.com.

Sincerely,

Jerry Gibson
Facility Manager

Enclosures: EPA equivalency determination letter January 31, 2008, barge pictures (3)

Pc: Wess Safford – SWCAA (wess@swcleanair.org); Bill Schrock – USEPA (Schrock.Bill@epa.gov), R. Henricks - Bunge