TECHNICAL SUPPORT DOCUMENT

Air Discharge Permit  ADP 22-3535
Air Discharge Permit Application  CO-1055

Issued:  August 10, 2022

TEMCO, LLC

SWCAA ID - 711

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Air Quality Engineer
Southwest Clean Air Agency
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ABBREVIATIONS

List of Acronyms

ADP  Air Discharge Permit
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
NESHAP National Emission Standards for Hazardous Air Pollutants
NOV Notice of Violation/

List of Units and Measures

Table | Unit of Measure | Definition |
--- | --- | --- |
acfm | Actual cubic foot per minute | |
bhp | Brake horsepower | |
bu | Bushel | |
dscfm | Dry Standard cubic foot per minute | |
g/dscm | Grams per dry Standard cubic meter | |
gpm | Gallon per minute | |
gr/dscf | Grain per dry standard cubic foot | |
hp | Horsepower | |
hp-hr | Horsepower-hour | |
kW | Kilowatt | |

Table | Unit of Measure | Definition |
--- | --- | --- |
MMBtu | Million British thermal unit | Millions of British thermal units |
MMcf | Million cubic feet | |
ppmv | Parts per million by volume | |
ppmvD | Parts per million by volume, dry | |
ppmw | Parts per million by weight | |
rpm | Revolution per minute | |
scfm | Standard cubic foot per minute | |
 tph | Ton per hour | |
 tpy | Tons per year | |

List of Chemical Symbols, Formulas, and Pollutants

Table | Symbol | Definition |
--- | --- | --- |
CO | Carbon monoxide | |
CO₂ | Carbon dioxide | |
CO₂e | Carbon dioxide equivalent | |
HAP | Hazardous air pollutant listed pursuant to Section 112 of the Federal Clean Air Act | |
NOₓ | Nitrogen oxides | |
O₂ | Oxygen | |
PM | Particulate Matter with an aerodynamic diameter 100 µm or less | |

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: TEMCO, LLC
Applicant Address: 5500 Cenex Drive, Inver Grove Heights, MN 55077

Facility Name: TEMCO, LLC
Facility Address: 400 Toteff Road, Kalama, WA 98625

SWCAA Identification: 711

Contact Person: Tom Rodman, Plant Manager

Primary Process: Marine Export Grain Terminal
SIC/NAICS Code: 5153 / Wholesale Trade - Grain and Field Beans
424510 / Grain Elevators Merchant Wholesalers Grain

Facility Classification: Synthetic Minor

2. FACILITY DESCRIPTION

TEMCO, LLC (TEMCO) owns and operates a grain terminal elevator in Kalama, WA, originally built in 1962. Grain commodities handled at the facility include: corn, wheat, barley, soybeans, milo, beet pulp pellets, canola, flaxseed, and dry yellow peas. Grain commodities are stored, cleaned as needed, and loaded out into ships for delivery overseas. The facility receives grain commodities primarily by rail and barge.

All operations at the facility generate particulate matter (PM) emissions. Emissions are minimized through a combination of process enclosure, product oiling, and fabric filtration. Particulate matter smaller than 10 microns (PM$_{10}$) and particulate matter smaller than 2.5 microns (PM$_{2.5}$) are the primary pollutants of concern.

3. CURRENT PERMITTING ACTION

This permitting action is in response to Air Discharge Permit application number CO-1055 (ADP Application CO-1055) dated June 13, 2022. TEMCO submitted ADP Application CO-1055 requesting approval of the following:

- Installation of new Baghouse C for service at the Railcar Pits #1 and #2 receiving systems;
- Removal of existing Baghouses D, E, and N; and
- Removal of existing Truck Pit receiving system and associated dust/screenings storage bins.

The current permitting action approves installation of the new Baghouse C and removes obsolete equipment from active registration.

ADP 22-3535 will supersede ADP 20-3404 in its entirety.
4. PROCESS DESCRIPTION

4.a Process Flow Diagram.

4.b General Facility (modified). The TEMCO facility in Kalama is a marine export grain terminal that receives various grain products (wheat, barley, soybeans, corn, canola, beet pulp, flaxseed, dry yellow peas, soybean meal) by railcar and barge, and then loads the grain into ocean-going ships for export. A small percentage of the grain may be shipped out via trucks. The facility operates three railcar receiving pits, two truck load-out systems, bulk weighers, a laboratory, a beet pelletizer/cooler, a barge unloading system, and a ship loading terminal with two loading spouts. All conveyance equipment is enclosed from the ambient environment and serviced by dust control units.

The facility's total storage capacity is approximately 6,880,000 bu. The conversion from volume (bushels) to mass (ton) varies according to grain type, unless otherwise noted, mass and volume conversions use wheat as a basis at an assumed density of 60 lb/bushel. Maximum physical capacity of the facility is limited by the hourly throughput of the ship loading spouts. The spouts have a maximum capacity of 3,200 metric tons per hour, which equates to 28,032,000 metric tons per year assuming 8,760 hours per year of operation. Actual maximum capacity is less due to the need to move ships to and from the shipping dock.

ADP Application CO-1055. TEMCO has dismantled the truck receiving pit previously in use at the facility. Grain is now only received via railcar or barge.

4.c Mineral Oil Application (existing). Approval conditions for the facility require food grade mineral oil to be applied to all grain as necessary to reduce fugitive dust emissions. Approval conditions specify a minimum application rate of 3 qt/1,000 bu prior to shipping. The maximum allowed application rate is 0.02% (approximately 7 qt/1,000 bu) pursuant to US Department of Agriculture (USDA) regulations (21 CFR 172.878). Oil application may be suspended or reduced if the facility demonstrates reliable compliance with applicable emission limits without the
use of oil or at a reduced application rate. A protocol for formal compliance demonstrations is contained in Appendix C of the Permit.

Oil is applied with two nozzles that spray the top and bottom of the grain stream as it falls during transfer between belts. The facility has the ability to alter the location where the oil is applied. Currently the majority of the oil is applied at shipping belt (BC-550) prior to shipping. Oil can also be applied when received. When grain is received by rail oil can be applied at the rail receiving belts (DC-034 and BC-010). When grain is received by barge, mineral oil can be applied at the barge receiving belt (BC-105). Based on a literature review of documented dust suppression efficiencies for the use of mineral oil, SWCAA has assigned dust suppression efficiencies as 70% for corn\(^1\), 73% for wheat\(^2\), 60% for soybeans\(^3\), and 65% for all other grains (including milo and barley\(^4\)).

4.d Grain Receiving – Railcar (modified). Grain received by rail is delivered to the facility via unit train (typically 110 car units). The facility operates three separate rail receiving areas. The receiving areas are enclosed on all sides. Each track sits above a set of receiving hoppers with a continuous opening. The exposed pit opening is 8 ft by 42 ft for Railcar Pit 2, 11 ft by 50 ft for Railcar Pit 1, and 10 ft by 100 ft for Railcar Pit 3.

The rail receiving systems have the following rated capacities:

<table>
<thead>
<tr>
<th>Railcar Pit</th>
<th>25,000 bu/hr</th>
<th>(750 tph)</th>
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<tr>
<td>Railcar Pit 2</td>
<td>30,000 bu/hr</td>
<td>(900 tph)</td>
</tr>
<tr>
<td>Railcar Pit 3</td>
<td>60,000 bu/hr</td>
<td>(1,800 tph)</td>
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Railcar hoppers are unloaded in sequence as railcars move through the rail receiving area. When the last hopper in a railcar is empty, the first hopper in the next railcar is opened, and so on. Fugitive emissions from railcar unloading are controlled through a combination of process enclosure, choked flow, and aspiration. As grain fills the receiving pit, the free fall distance from the bottom of the hopper to the top of the pile decreases until the top of the pile reaches the bottom of the railcar, resulting in choked flow. The speed of the railcar pit conveyors is adjusted to maintain the choked flow between railcars and the grain pile in each pit.

Each railcar pit is aspirated by a dedicated baghouse (Railcar Pit 1 - Baghouse D, Railcar Pit 2 - Baghouse N, Railcar Pit 3 - Filter DS751). The aspiration air induces a face velocity of approximately 60 ft/min across open surface of each pit. Aspiration air is continuously drawn during the unloading process. A bulkweigh system (BW51) and bucket elevator (BE57) operate in conjunction with Railcar Pit 3. The bulkweigh system is rated at 60,000 bu/hr, and is totally enclosed. Dust emissions from the bulkweigh system are controlled by a dedicated bin vent filter (DS754). Dust emissions from the associated bucket elevator are controlled by a dedicated spot filter (DS757).

ADP Application CO-1055. TEMCO proposes to replace existing Baghouses D and N with a single new Baghouse C. Existing dust collection ductwork will be reconfigured to accommodate a single baghouse. No changes will be made to the receiving pits or associated conveyance equipment.

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1. Experimental design applied mineral oil at 0.02% (approximately 7 qt/1,000 bu) and achieved a dust control efficiency of 69.7% (F. S. Lai, et al., Examining The Use Of Additives To Control Grain Dust, Final Report To The National Grain And Feed Association, Washington, DC, June 1982).

2. Control efficiencies of 78% and 68% were achieved during two tests performed at two separate facilities. (Emission Factors For Grain Elevators, Final Report to National Grain and Feed Foundation, Midwest Research Institute (MRI), Kansas City, Missouri, January, 1997).

3. In the above MRI reference above, the tests performed using mineral oil on soybeans were inconclusive. However, the reference stated that "oil addition systems can typically achieve control efficiencies between 60% and 80%." Lacking any better information, SWCAA assumes that the control effectiveness of mineral oil on soybeans is a minimum of 60%.

4. In two tests performed with milo at a single facility, control efficiencies of 61% and 65% were determined at an oil application rate of 0.16 qt/minute. SWCAA and Kalama Export have agreed upon a value of 65% control efficiency for both milo and barley based upon this test (Tests Of Oil Suppression Of PM-10 At Grain Elevators, Test Report, MRI, Kansas City, MO, November 1994).
Grain Receiving – Barge (existing). Grain received by barge is delivered to the facility by Columbia River barges, and unloaded using a marine leg. The marine leg is a split casing bucket elevator attached to an arm that extends the leg into the barge hold through a central sump hatch measuring approximately 12 ft by 12 ft. The marine leg buckets dig into the grain, and the marine leg is lowered until it reaches the bottom of the hold. Once lowered, screw augers in the bottom of the barge hold feed the marine leg by moving grain towards the center of the barge hold. Disturbance of the grain by the marine leg buckets and the movement of loose grain down pile faces within the hold have the potential to create fugitive PM emissions. Fugitive emissions are controlled via hold enclosure and aspiration. Although not routinely necessary, a tarp or similar barrier can be installed to minimize the opening between the sides of the hatch and the marine leg. The marine leg is aspirated by a dedicated dust filter (DS100).

The approved marine leg has a maximum rated capacity of 36,750 bu/hr (approximately 1,103 tph). Barge unloading operations could potentially handle as much as 9,680,000 tpy of grain, but TEMCO does not expect actual throughput to exceed 3,310,000 tpy. Conveyance equipment used to transfer grain from the marine leg to cleaning and storage areas is completely enclosed and vented to dedicated dust filters (DS101, DS101A).

Grain Receiving – Truck (removed). Grain received by truck is delivered by hopper/dump trucks into a single receiving hopper. The truck receiving area is enclosed by two walls and a roof, and the opening of the hopper is 12 ft by 15 ft. The truck pit is rated at a maximum of 16,667 bu/hr (500 tph). Approval conditions assume a maximum truck pit throughput of 1,300,000 bu/yr (39,000 tpy). TEMCO has proposed to receive grain at the facility only from hopper style trucks in order to minimize fugitive emissions.

The truck receiving pit is aspirated by Baghouse E. The induced flow equates to approximately 60 ft/min face velocity across the pit.

TEMCO has removed this emission unit from service.

4.e Internal Grain Handling - Cleaning (existing). The facility operates equipment to clean incoming grain. Wheat, corn, soybeans, barley, and beet pulp pellets are routinely cleaned. Other grains are not. The cleaning process removes foreign material, unwanted large/small particles, and light or low density material. Subsequent to cleaning, grain is weighed and then transferred to shipping bins. Material rejected in the cleaning and screening system is sent to the screenings storage silos using an enclosed belt conveyor.

The facility's grain cleaning system has a rated inlet and outlet capacity of 1,500 metric tph (1,654 tph). The cleaning house is configured with five sets of BM&M Model A primary aspirators (PA-311 to 315) and BM&M 5033M2 primary screeners (PS-321 to 325), two BM&M 5X12DSSS reclaim screeners (RS-346 and 348), and two BM&M indent cylinder cleaners (IC-336 and 338). The new cleaning system is totally enclosed with all associated equipment vented to a new baghouse (DS370) rated at 40,640 acfm. The cleaning house has two dedicated bucket elevators, each served by a dedicated spot filter (DS341 and DS331) rated at 470 acfm.

Internal Grain Handling – Weighing (existing). The facility operates a workhouse equipped with five sets of garner and scale bins for weighing grain. Dust may be emitted from both the scale and garner bin whenever grain is admitted. The incoming stream of grain displaces air from the bin, and the displaced air entrains dust. Mineral oil may be applied prior to the grain reaching the garner and scale bins (belt B10). The existing weighing operation is aspirated to baghouses B, J, and H.
As part of the 2014 facility reconstruction, TEMCO installed three new bulk weigh systems. The bulkweigh systems are configured with a fully enclosed upper and lower garner and a scale. Each bulkweigh system is dedicated to one of the following equipment groups: barge unloading, railcar unloading, or the shipping bins. The new barge unloading bulkweigher has a capacity of 1,103 tph, and is abated by dust filter (DS110) rated at 1,600 acfm. The new railcar unloading bulkweigher has a capacity of 1,800 tph, and is abated by a dust filter (DS751) rated at 47,500 acfm. The new shipping bins bulkweigher has a capacity of 3,528 tph, and is abated by two dust filters (DS230A, DS230B) rated at 3,200 acfm each.

**Internal Grain Handling — Conveyance (existing).** Pre-reconstruction conveyors are located within buildings or structures. Emissions from conveyor-to-conveyor transfer points and conveyor drop points are abated by aspirated air provided by associated baghouses. Conveyance equipment installed as part of the reconstruction is 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. Each conveyor and/or transfer point is served by a dust control unit. There are no significant fugitive dust emissions from conveyor operations.

4.f **Grain Storage and Transfer (existing).** The pre-reconstruction facility had 12 steel tanks and 91 concrete bins for storage, and 3 concrete bins for shipping (no longer in use for shipping). The existing structures had a nameplate capacity of 130,000 tons (approximately 6,400,000 bu). The old concrete shipping bins are equipped with bin vents, which are open during both filling and emptying of the bins. The concrete storage bins are aspirated to baghouse A. The steel tanks are aspirated to baghouses F and P.

Reconstruction of the facility added 8 new shipping bins, each with a rated capacity of up to 60,000 bu (1,600 metric tons). The current facility layout has 12 steel tanks, 94 concrete bins for storage and 8 shipping bins. The new shipping bins added approximately 480,000 bu of storage, giving the facility a total storage capacity of approximately 6,880,000 bu. Grain is delivered to the bins through several distributors that are completely enclosed. All shipping bins are vented to a dust control unit, and the only emissions associated with the delivery or removal of grain are from the dust control units.

4.g **Dust/Screenings Storage and Loadout – Truck (existing).** The facility operates two truck loadout stations. The loadout stations are configured with two permanent walls, a roof, and roll-up doors on either end. The roll-up doors are closed whenever dust or screenings are being loaded. A telescoping spout is used to convey dust/screenings to a loadout hood that is lowered over the back of the truck. Fugitive emissions are assumed to be negligible. Each loadout station has a maximum capacity of 160 metric tph (~176 tph).

Truck Loadout Station #1 conveys dust/screenings and grain. Four bins are used to store the dust/screenings and grain prior to loadout (Grain - Bins 7, 8, and 9 / Dust - DB-701). Bins 7, 8, and 9 are internally ventilated and DB-701 is vented to DS-701.

Truck Loadout Station #2 conveys dust/screenings and grain. Four bins (DB-401, SCB-402 to 404) are used to store dust/screenings and grain prior to loadout. Each bin is vented to a dedicated dust filter (DS401 to DS404).

4.h **Grain Loading – Ship (existing).** Grain is transferred from shipping bins to the ship dock via shipping conveyors (BC-550 to 552) and to the ship loading spouts via conveyors BC-560, BC-601 and BC-602. Two DCL ship loading spouts (TSP-601 – south spout, TSP-602 – north spout) are used to load grain into ship holds. Grain is distributed between the two ship loading spouts using transfer and shuttle conveyors. All conveyors are enclosed, and associated transfer points are abated by dust filters. The loading spouts have a maximum capacity of 3,200 metric tons per hour (3,528 tph) each, but total loading rates are limited by the capacity of the shipping and transfer conveyors, which is 3,200 metric tons per hour (3,528 tph) combined.
The support structure for the loading spouts is designed in such a way as to facilitate the spouts reaching all areas of a ship’s holds. Each loading spout has a set of sealed and nested tubes through which the grain flows. The loading spouts are fully extended prior to the delivery of grain. Free falling grain within the spout hits a 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 within the dead box, dust is created and aspirated to filters located on the outside of the spout. Grain then flows out of the dead box and on to the grain pile in the ship hold. The bottom of each loading spout is equipped with a skirt that conforms to the top portion of the pile to further control fugitive dust emissions.

During topping off (roughly the last 5% of ship hold volume), the grain delivery is slowed and the loading spouts are moved around the holds to facilitate the accurate placement of grain into corners and ‘bleeder’ holes at the top of the hold. Due to the reduced skirt contact with the grain pile and increased wind exposure, emission control during topping off is reduced and fugitive emissions are expected to be higher.

If necessary for dust control, mineral oil can be applied at multiple locations prior to grain being loaded onto the ship.

**Grain Loading – Railcar (existing).** The facility has a railcar loading spout located on the south end of railcar receiving building #1, just outside the railcar exit. The loading spout has been in place for several decades, but is rarely used. Maximum capacity of the loading operation is estimated to be approximately 3 railcars per hour, which roughly equates to 298 tph (~99 tons per railcar). The loading spout is not enclosed or served by active emission control equipment. The facility has the capability to apply oil to the grain prior to loading, and traditionally this is the only emission control measure used. Permit requirements do not specifically require oil application for railcar loading operations, but TEMCO has agreed to apply oil as necessary to ensure compliance with applicable emission limits.

**Grain Loading – Truck (existing).** The facility has the ability to load grain to trucks using Loadout Station #1 and Loadout Station #2. The original design was for straight single trucks to totally fit within the Loading Stations. Under this scenario, doors on both ends of the Loading Stations are required to be closed. Fugitive dust emissions from loading operations are controlled via enclosure and active filtration as described for dust/screenings loadout operations. Loadout Station #1 will be approved to load grain (not dust or screenings) into combination trucks with one of the two rollup doors open when the truck is too long to be fully enclosed within the building. When a truck is able to be loaded with the entire truck in the Loading Station, doors on both ends of the Loading Station must remain closed during loading operations.

4.i **Haul Roads (existing).** All haul roads at the facility are paved. Truck traffic entering and leaving the facility with dust/screenings and grain has a roundtrip distance of ~3,800 ft. Haul roads are swept and/or washed as necessary to minimize dust emissions.

4.j **Emergency Firewater Pump (existing).** The facility has a diesel engine driven firewater pump that is used in support of onsite fire control systems.
5. EQUIPMENT/ACTIVITY IDENTIFICATION

5.a Baghouse N (removed). Baghouse N controls emissions from the Railcar Pit 2 receiving system. Airflow is provided by a BI 100-hp belt driven fan (order #13083, serial #559, style 402).

Make / Model: Torit model 376RF6 (RFC-641, style RFC)
Airflow: 32,000 acfm
Filter Area: 2,880 s ft²
Number of Bags: 376 bags, 72” in length
Air-to-Cloth Ratio: 11 to 1
Filter Media: 15 oz Dacron felt (6” diameter)
Exhaust Stack: 52½” dia at 15 ft

ADP Application CO-1055. TEMCO proposes to remove this unit from service and replace it with the new Baghouse C.

5.b Baghouse D (removed). Baghouse D controls emissions from the Railcar Pit 1 receiving system. Airflow is provided by two fans, a Westinghouse 40-hp belt driven fan (size 426M, style SEY 7192-5) and an American Sheet metal 40-hp belt driven fan (size 80SP, serial #1166).

Make / Model: Carter Day model 144RJ72 (156, style CJN-1)
Airflow: 20,200 acfm
Filter Area: 2,300 ft²
Number of Bags: 144 bags, 72” in length
Air-to-Cloth Ratio: 8.8 to 1
Filter Media: 15 oz Dacron felt (oval 14½” by 3”)
Exhaust Stack: 54” dia at 70 ft

ADP Application CO-1055. TEMCO proposes to remove this unit from service and replace it with the new Baghouse C.

5.c Baghouse C (new). Baghouse C controls emissions from the Railcar Pit 1 and Railcar Pit 2 receiving systems. Airflow is provided by a 150-hp belt driven fan.

Make / Model: Donaldson Torit model 458 RFWH-12
Airflow: 48,500 acfm
Filter Area: 7,149 ft²
Number of Bags: 448 bags, 144” in length
Air-to-Cloth Ratio: 6.8 to 1
Filter Media: Duralife polyester felt
Exhaust Stack: 52” x 34” vertical discharge at 19’ 10” above ground

ADP Application CO-1055. TEMCO proposes to install this unit as a replacement for Baghouses D and N. The emission control ductwork at Railcar Pit 1 and Railcar Pit 2 will be reconfigured to accommodate a single discharge point. The combined discharge rate of the two systems will decrease slightly.

5.d Grain Receiving – Railcar Fugitive Emissions (existing). Any PM emissions from railcar receiving operations that are not captured by the receiving buildings, aspirated pits, and associated baghouses are released as fugitive PM, PM₁₀, and PM₂.₅.
5.e **Filter DS100 (existing).** This unit controls emissions from the barge marine leg.

- **Make / Model:** Donaldson Torit model CPV-12
- **Airflow:** 5,000 acfm
- **Filter Area:** 756 ft² (12 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 18.5” x 11.4” at 120 ft

5.f **Grain Receiving – Barge Fugitive Emissions (existing).** Any PM emissions from barge receiving operations that are not captured by the aspirated marine leg and controlled by the associated baghouse are released as fugitive PM, PM$_{10}$, and PM$_{2.5}$.

5.g **Baghouse E (removed).** Baghouse E controls emissions from truck unloading and two dust/screenings bins. Air flow is provided by a Westinghouse 20-hp belt driven fan (size 421M, style SEY-7192-4) and an American Sheet Metal 25-hp belt driven fan (serial #1167, size 60SP).

- **Make / Model:** Carter Day model 72RJ60 (175, style CFRI)
- **Airflow:** 11,000 acfm
- **Filter Area:** 960 ft²
- **Number of Bags:** 72 bags, 60” in length
- **Air-to-Cloth Ratio:** 11.5 to 1
- **Filter Media:** 15 oz Dacron felt (oval 14½” by 3”)
- **Exhaust Stack:** 36” x 20.5” horizontal discharge at 45 ft

*ADP Application CO-1055. TEMCO has removed the emission units associated with this baghouse from service and is requesting it be removed from registration.*

5.h **Grain Receiving – Truck Fugitive Emissions (removed).** The truck receiving area is enclosed on two sides with a roof. Trucks unload into the receiving pit, which is aspirated to baghouse E. The receiving area is not completely enclosed and any PM emissions from receiving operations that are not contained within the receiving area are released as fugitive PM, PM$_{10}$, and PM$_{2.5}$.

*ADP Application CO-1055. TEMCO has removed the emission units associated with this baghouse from service and is requesting it be removed from registration.*

5.i **Baghouse B (existing).** Baghouse B controls emissions from the workhouse basement (System 4). Air flow is provided by a New York Blower Company Class IV SWSI fan.

- **Make / Model:** Donaldson Torit model 484 RFW-10 (s/n unknown)
- **Airflow:** 35,900 acfm
- **Filter Area:** 6,297 ft²
- **Number of Bags:** 484 bags, 120” in length (oval 6” by 3”)
- **Filter Media:** Duralife Polyester felt
- **Cleaning System:** Reverse airjet
- **Exhaust Stack:** 50” dia at 27.7 ft
5. j **Baghouse F (existing).** Baghouse F controls emissions from trippers and belt loaders for storage tanks 801-807. Airflow is provided by a 125-hp belt driven fan.

- **Make / Model:** Torit model 376RF8 (s/n unknown)
- **Airflow:** 37,000 acfm
- **Filter Area:** 3,910 ft²
- **Number of Bags:** 376 bags, 96” in length
- **Air-to-Cloth Ratio:** 9.5 to 1
- **Filter Media:** 15 oz Dacron felt (6” diameter)
- **Exhaust Stack:** 39.5” dia at 12.5 ft

5. k **Baghouse H (existing).** Baghouse H controls emissions from workhouse Mayo floor, bins and garners. Airflow is provided by two American Sheet Metal 15-hp belt driven fans (size 30SP, serial #1158) and one American Sheet Metal 60-hp belt driven fan (serial #1159, size 80SP).

- **Make / Model:** Carter Day model 144RJ120 (129, style CLGI)
- **Airflow:** 42,300 acfm
- **Filter Area:** 3,825 ft²
- **Number of Bags:** 144 bags, 10” in length
- **Air-to-Cloth Ratio:** 11 to 1
- **Filter Media:** 15 oz Dacron felt (oval 14½” by 3”)
- **Exhaust Stack:** 40” dia at 10 ft

5. l **Baghouse J (existing).** Baghouse J controls emissions from workhouse vents, and belt floor. Airflow is provided by a Twin City Blower Company 125-hp belt driven fan (size 4451, type BC SWSI, serial #81-33267-1-1).

- **Make / Model:** Carter Day model 144RJ120 (109, style CLGI)
- **Airflow:** 38,100 acfm
- **Filter Area:** 3,825 ft²
- **Number of Bags:** 144 bags, 10” in length
- **Air-to-Cloth Ratio:** 10 to 1
- **Filter Media:** 15 oz Dacron felt (oval 14½” by 3”)
- **Exhaust Stack:** 96” x 28” at 30 ft

5. m **Grain Loading – Railcar Fugitive Emissions (existing).** Grain can be loaded to railcar using a non-aspirated spout. Emissions are released as fugitive PM, PM₁₀, and PM₂.₅. Emissions are minimized through the application of oil.

5. n **Baghouse A (existing).** Baghouse A controls emissions from the concrete silo tops, silo basement belts, and shipping belts (Systems 5, 6, 7, and 23). Air flow is provided by a New York Blower Company Class IV SWSI fan.

- **Make / Model:** Donaldson Torit model 484RFW-10 (s/n unknown)
- **Airflow:** 44,000 acfm
- **Filter Media:** Duralife Polyester felt
- **Number of Bags:** 484 bags, 120” in length (oval 6” by 3”)
- **Filter Area:** 6,297 ft²
- **Cleaning System:** Reverse airjet
- **Exhaust Stack:** 50” dia at 27.7 ft
5.o **Filter DS370 (existing).** This unit controls emissions from grain cleaning operations.

Make / Model: Donaldson Torit model 484 RFW-10  
Airflow: 41,000 acfm  
Filter Area: 6,297 ft²  
Filter Media: Ultra-Web media  
Exhaust Stack: 30" x 45" at 125 ft  

5.p **Baghouse P (existing).** Baghouse P controls emissions from trippers and belt loaders for storage tanks 901-905. Airflow is provided by a BI (serial #560, style 402) 125-hp belt driven fan.

Make / Model: Torit model 376RJ8  
Serial Number: RFC-641, style RFC  
Airflow: 35,000 acfm  
Filter Area: 3,840 ft²  
Number of Bags: 376 bags, 96" in length  
Air-to-Cloth Ratio: 8.6 to 1  
Filter Media: 15 oz Dacron felt (oval 14½" by 3")  
Exhaust Stack: 54" dia at 14 ft  

5.q **Grain Loading – Ship Fugitive Emissions (existing).** Any PM emissions that are not captured by the filters on the ship loading spouts are released as fugitive PM, PM₁₀, and PM₂.₅.  

5.r **Haul Roads - Fugitive Emissions (existing).** Vehicle traffic at the site (primarily trucks removing dust/screenings) generates fugitive PM emissions from the associated haul roads. All haul roads are paved.  

5.s **Filter DS101A (existing).** This unit controls emissions from belt conveyor BC-101. It is located at the tail of the belt.

Make / Model: Donaldson Torit model CPV-6 (s/n 11794028L3)  
Airflow: 2,400 acfm  
Filter Area: 378 ft² (6 filter packs)  
Filter Media: Ultra-Web media  
Exhaust Stack: 16.25" dia at 40 ft  

5.t **Filter DS101 (existing).** This unit controls emissions from belt conveyor BC-101. It is located at the head of the belt.

Make / Model: Donaldson Torit model CPV-2  
Airflow: 800 acfm  
Filter Area: 126 ft² (2 filter packs)  
Filter Media: Ultra-Web media  
Exhaust Stack: 7" x 9" at 46 ft
5.u **Filter DS110 (existing).** This unit controls emissions from the barge receiving scales.

- **Make / Model:** Donaldson Torit model CPV-4
- **Airflow:** 1,600 acfm
- **Filter Area:** 252 ft² (4 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 8.9” x 15.1” at 69 ft

5.v **Filter DS120 (existing).** This unit controls emissions from the barge receiving bucket elevator.

- **Make / Model:** Donaldson Torit model CPV-6
- **Airflow:** 2,500 acfm
- **Filter Area:** 378 ft² (6 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9” x 9.8” at 38 ft

5.w **Filter DS121 (existing).** This unit controls emissions from the barge receiving bucket elevator drop onto belt conveyor BC-121.

- **Make / Model:** Donaldson Torit model CPV-2
- **Airflow:** 800 acfm
- **Filter Area:** 126 ft² (2 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 7” x 5.6” at 235 ft

5.x **Filter DS221 (existing).** This unit controls emissions from bucket elevator BE-221.

- **Make / Model:** Donaldson Torit model CPV-8
- **Airflow:** 3,200 acfm
- **Filter Area:** 504 ft² (8 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9” x 10.8” at 107 ft

5.y **Filter DS222 (existing).** This unit controls emissions from bucket elevator BE-222.

- **Make / Model:** Donaldson Torit model CPV-8
- **Airflow:** 3,200 acfm
- **Filter Area:** 504 ft² (8 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9” x 10.8” at 107 ft

5.z **Filter DS230A (existing).** This unit controls emissions from the shipping scales.

- **Make / Model:** Donaldson Torit model CPV-6
- **Airflow:** 3,200 acfm
- **Filter Area:** 378 ft² (6 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9” x 9.8” at 243 ft
5.aa **Filter DS230B (existing).** This unit controls emissions from the shipping scales.

- **Make / Model:** Donaldson Torit model CPV-6
- **Airflow:** 3,200 acfm
- **Filter Area:** 378 ft² (6 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9" x 9.8" at 243 ft

5.ab **Filter DS241 (existing).** This unit controls emissions from shipping bins SB-01 through SB-04 and belt conveyor BC-241.

- **Make / Model:** Donaldson Torit model CPV-6
- **Airflow:** 2,500 acfm
- **Filter Area:** 378 ft² (6 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9" x 9.8" at 161 ft

5.ac **Filter DS243 (existing).** This unit controls emissions from shipping bins SB-05 through SB-08 and belt conveyor BC-243.

- **Make / Model:** Donaldson Torit model CPV-6
- **Airflow:** 2,500 acfm
- **Filter Area:** 378 ft² (6 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9" x 9.8" at 141 ft *(horizontal exhaust)*

5.ad **Filter DS301 (existing).** This unit controls emissions from belt conveyor BC-301.

- **Make / Model:** Donaldson Torit model CPV-6
- **Airflow:** 2,500 acfm
- **Filter Area:** 378 ft² (6 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9" x 9.8" at 237 ft

5 ae **Filter DS331 (existing).** This unit controls emissions from bucket elevator BE-331.

- **Make / Model:** Donaldson Torit model CPV-1
- **Airflow:** 470 acfm
- **Filter Area:** 63 ft² (1 filter pack)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 2" x 10.8" at 134 ft

5 af **Filter DS341 (existing).** This unit controls emissions from bucket elevator BE-341.

- **Make / Model:** Donaldson Torit model CPV-1
- **Airflow:** 470 acfm
- **Filter Area:** 63 ft² (1 filter pack)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 2" x 10.8" at 134 ft
5.ag **Filter DS358 (existing).** This unit controls emissions from bucket elevator BE-358.

- **Make / Model:** Donaldson Torit model CPV-8
- **Airflow:** 3,200 acfm
- **Filter Area:** 504 ft² (8 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9" x 10.8" at 155 ft

5.ah **Filter DS401 (existing).** This unit controls emissions from dust bin DB-401.

- **Make / Model:** Donaldson Torit model CPV-2
- **Airflow:** 800 acfm
- **Filter Area:** 126 ft² (1 filter pack)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 7" x 5.6" at 117 ft

5.ai **Filter DS402 (existing).** This unit controls emissions from screenings bin SB-402.

- **Make / Model:** Donaldson Torit model CPV-2
- **Airflow:** 800 acfm
- **Filter Area:** 126 ft² (2 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 7" x 5.6" at 117 ft

5.aj **Filter DS403 (existing).** This unit controls emissions from screenings bin SB-403.

- **Make / Model:** Donaldson Torit model CPV-2
- **Airflow:** 800 acfm
- **Filter Area:** 126 ft² (2 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 7" x 5.6" at 117 ft

5.ak **Filter DS404 (existing).** This unit controls emissions from screenings bin SB-404.

- **Make / Model:** Donaldson Torit model CPV-2
- **Airflow:** 800 acfm
- **Filter Area:** 126 ft² (2 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 7" x 5.6" at 117 ft

5.al **Loadout Station #2 (existing).** The dust filters listed below control emissions from truck loading operations at Loadout Station #2. The units are installed on the loadout hood, and exhaust to atmosphere through a common stack.

- **Common Exhaust Stack:** 20" dia at 72 ft

**Filter DS415A**
- **Make / Model:** Donaldson Torit model CPV-3
- **Airflow:** 1,500 acfm
- **Filter Area:** 189 ft² (3 filter packs)
- **Filter Media:** Ultra-Web media
<table>
<thead>
<tr>
<th>Filter</th>
<th>Make / Model</th>
<th>Airflow</th>
<th>Filter Area</th>
<th>Filter Media</th>
<th>Exhaust Stack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filter DS415B</td>
<td>Donaldson Torit model CPV-3</td>
<td>1,500 acfm</td>
<td>189 ft² (3 packs)</td>
<td>Ultra-Web media</td>
<td></td>
</tr>
<tr>
<td>Filter DS415C</td>
<td>Donaldson Torit model CPV-3</td>
<td>1,500 acfm</td>
<td>189 ft² (3 packs)</td>
<td>Ultra-Web media</td>
<td></td>
</tr>
<tr>
<td>5.am Filter DS552 (existing)</td>
<td>Donaldson Torit model CPV-6</td>
<td>2,500 acfm</td>
<td>378 ft² (6 packs)</td>
<td>Ultra-Web media</td>
<td>16.9&quot; x 9.8&quot; at 121 ft</td>
</tr>
<tr>
<td>5.an Filter DS560 (existing)</td>
<td>Donaldson Torit model CPV-6</td>
<td>2,500 acfm</td>
<td>378 ft² (6 packs)</td>
<td>Ultra-Web media</td>
<td>16.9&quot; x 9.8&quot; at 98 ft</td>
</tr>
<tr>
<td>5.ao Filter DS601B (existing)</td>
<td>Donaldson Torit model CPV-6</td>
<td>2,500 acfm</td>
<td>378 ft² (6 packs)</td>
<td>Ultra-Web media</td>
<td>16.9&quot; x 9.8&quot; at 79 ft</td>
</tr>
<tr>
<td>5.ap Filter DS601A (existing)</td>
<td>Donaldson Torit model CPV-6</td>
<td>2,500 acfm</td>
<td>378 ft² (6 packs)</td>
<td>Ultra-Web media</td>
<td>16.9&quot; x 9.8&quot; at 89 ft</td>
</tr>
<tr>
<td>5.aq Filter DS602B (existing)</td>
<td>Donaldson Torit model CPV-6</td>
<td>2,500 acfm</td>
<td>378 ft² (6 packs)</td>
<td>Ultra-Web media</td>
<td>16.9&quot; x 9.8&quot; at 79 ft</td>
</tr>
</tbody>
</table>
5.ar **Filter DS602A (existing).** This unit controls emissions from the north ship spout shuttle conveyor BC-602.

- **Make / Model:** Donaldson Torit model CPV-6
- **Airflow:** 2,500 acfm
- **Filter Area:** 375 ft² (6 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.9" x 9.8" at 89 ft

5.as **Loadout Station #1 (existing).** The dust filters listed below control emissions from truck loading operations at Loadout Station #1. The units are installed on the loadout hood, and exhaust to atmosphere through a common stack.

- **Common Exhaust Stack:** 16" dia at 55 ft

  - **Filter DS715A**
    - **Make / Model:** Donaldson Torit model CPV-3
    - **Airflow:** 1,500 acfm
    - **Filter Area:** 189 ft² (3 filter packs)
    - **Filter Media:** Ultra-Web media

  - **Filter DS715B**
    - **Make / Model:** Donaldson Torit model CPV-3
    - **Airflow:** 1,500 acfm
    - **Filter Area:** 189 ft² (3 filter packs)
    - **Filter Media:** Ultra-Web media

  - **Filter DS715C**
    - **Make / Model:** Donaldson Torit model CPV-3
    - **Airflow:** 1,500 acfm
    - **Filter Area:** 189 ft² (3 filter packs)
    - **Filter Media:** Ultra-Web media

5.at **Filter DS751 (existing).** This unit controls emissions from the Railcar Pit 3 receiving system.

- **Make / Model:** Donaldson Torit model 484 RFW-10
- **Airflow:** 47,500 acfm
- **Filter Area:** 6,297 ft²
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 30" x 50" at 17 ft

5.au **Filter DS754 (existing).** This unit controls emissions from bulk weigh systems associated with railcar receiving operations.

- **Make / Model:** Donaldson Torit model CPV-6
- **Airflow:** 3,200 acfm
- **Filter Area:** 378 ft² (6 filter packs)
- **Filter Media:** Ultra-Web media
- **Exhaust Stack:** 16.5" x 9.4" at 123 ft
5.av Filter DS757 (existing). This unit controls emissions from the BE57 transfer leg used to transfer grain from the Railcar Pit 3 receiving system to the workhouse.

Make / Model: Donaldson Torit model CPV-8
Airflow: 3,200 acfm
Filter Area: 504 ft² (8 filter packs)
Filter Media: Ultra-Web media
Exhaust Stack: 16.9" x 10.8" at 104 ft

5.aw Filter DS202 (existing). This unit controls emissions from belt conveyor BC-202.

Make / Model: Donaldson Torit model CPV-6
Airflow: 2,500 acfm
Filter Area: 378 ft² (6 filter packs)
Filter Media: Ultra-Web media
Exhaust Stack: 16.9" x 9.8" at 134 ft

5.ax Filter DS701 (existing). This unit controls emissions from Dust Bin 701.

Make / Model: Donaldson Torit model CPV-8
Airflow: 3,200 acfm
Filter Area: 504 ft² (8 filter packs)
Filter Media: Ultra-Web media
Exhaust Stack: 16.9" x 10.8" at 94 ft

5.ay Diesel Engine - Emergency Firewater Pump (existing). This unit powers an emergency firewater pump in support of onsite fire control systems.

Engine Make / Model: Cummins QSK23-NR2 (s/n 00323619)
Engine Power Rating: 1,220 bhp
Engine Fuel Consumption: 46.8 gal/hr
Engine Mfg Date: October 25, 2011
Engine Certification: EPA Tier II
NSPS/MACT Applicable: Yes
Stack Description: 8" dia vertical exhaust at 14' above grade

5.az Other Equipment. The following pieces of facility equipment have been determined to have minor emissions, and are not registered as emission units:

- Mineral Oil Storage Tank
- Diesel Fueling Station – Onsite Vehicles
  One aboveground, double-walled storage tank with a capacity of 500 gallons. The tank is divided into two 250-gallon compartments. The tank is used to store and dispense diesel to facility vehicles. Maximum throughput is ~1,000 gal/yr.
5.ba  **Equipment/Activity Summary.**

<table>
<thead>
<tr>
<th>ID No.</th>
<th>Generating Equipment/Activity</th>
<th>Control Equipment/Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grain Receiving – Railcar Pit 1 and Railcar Pit 2</td>
<td>Process Enclosure, Baghouse C</td>
</tr>
<tr>
<td>2</td>
<td>Grain Receiving – Railcar Fugitive Emissions</td>
<td>Process Enclosure</td>
</tr>
<tr>
<td>3</td>
<td>Grain Receiving – Barge Marine Leg</td>
<td>Partial Enclosure, Filter DS100</td>
</tr>
<tr>
<td>4</td>
<td>Grain Receiving – Barge Fugitive Emissions</td>
<td>Process Enclosure</td>
</tr>
<tr>
<td>5</td>
<td>Workhouse Basement (System 4)</td>
<td>Process Enclosure, Baghouse B</td>
</tr>
<tr>
<td>6</td>
<td>Tanks 801-807, Tripper and Belt Loaders</td>
<td>Process Enclosure, Baghouse F</td>
</tr>
<tr>
<td>7</td>
<td>Workhouse Mayo Floor, Bins, and Garners</td>
<td>Process Enclosure, Baghouse H</td>
</tr>
<tr>
<td>8</td>
<td>Work House Vents and Belt Floor</td>
<td>Process Enclosure, Baghouse J</td>
</tr>
<tr>
<td>9</td>
<td>Grain Loading – Railcar Fugitive Emissions</td>
<td>Oil Application</td>
</tr>
<tr>
<td>10</td>
<td>Silo Basement Belts, Concrete Silo Tops (Systems 5, 6, 7 &amp; 23)</td>
<td>Process Enclosure, Baghouse A</td>
</tr>
<tr>
<td>11</td>
<td>Grain Cleaning Operations</td>
<td>Process Enclosure, Filter DS370</td>
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<tr>
<td>12</td>
<td>Tanks 901-905, Tripper and Belt Loaders</td>
<td>Process Enclosure, Baghouse P</td>
</tr>
<tr>
<td>13</td>
<td>Grain Loading – Ship Fugitive Emissions</td>
<td>Oil Application</td>
</tr>
<tr>
<td>14</td>
<td>Haul Roads – Fugitive Emissions</td>
<td>Sweeping, Washing</td>
</tr>
<tr>
<td>15</td>
<td>Belt Conveyor BC-101</td>
<td>Process Enclosure, Filter DS101A</td>
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<td>16</td>
<td>Belt Conveyor BC-101</td>
<td>Process Enclosure, Filter DS101</td>
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<tr>
<td>17</td>
<td>Barge Receiving Scales</td>
<td>Process Enclosure, Filter DS110</td>
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<tr>
<td>18</td>
<td>Barge Receiving Bucket Elevator</td>
<td>Process Enclosure, Filter DS120</td>
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<td>19</td>
<td>Belt Conveyor BC-121</td>
<td>Process Enclosure, Filter DS121</td>
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<tr>
<td>20</td>
<td>Bucket Elevator BE-221</td>
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<tr>
<td>21</td>
<td>Bucket Elevator BE-222</td>
<td>Process Enclosure, Filter DS222</td>
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<tr>
<td>22</td>
<td>Shipping Scales</td>
<td>Process Enclosure, Filter DS230A</td>
</tr>
<tr>
<td>23</td>
<td>Shipping Scales</td>
<td>Process Enclosure, Filter DS230B</td>
</tr>
<tr>
<td>24</td>
<td>Shipping Bins SB-01 to SB-04, Belt Conveyor BC-241</td>
<td>Process Enclosure, Filter DS241</td>
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<tr>
<td>25</td>
<td>Shipping Bins SB-05 to SB-08, Belt Conveyor BC-243</td>
<td>Process Enclosure, Filter DS243</td>
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<tr>
<td>26</td>
<td>Belt Conveyor BC-301</td>
<td>Process Enclosure, Filter DS301</td>
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<tr>
<td>27</td>
<td>Bucket Elevator BE-331</td>
<td>Process Enclosure, Filter DS331</td>
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<tr>
<td>28</td>
<td>Bucket Elevator BE-341</td>
<td>Process Enclosure, Filter DS341</td>
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<tr>
<td>29</td>
<td>Bucket Elevator BE-358</td>
<td>Process Enclosure, Filter DS358</td>
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<tr>
<td>30</td>
<td>Dust Bin DB-401</td>
<td>Process Enclosure, Filter DS401</td>
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<tr>
<td>31</td>
<td>Screenings Bin SCB-402</td>
<td>Process Enclosure, Filter DS402</td>
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<tr>
<td>32</td>
<td>Screenings Bin SCB-403</td>
<td>Process Enclosure, Filter DS403</td>
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<td>Control Equipment/Measure</td>
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<tr>
<td>33</td>
<td>Screenings Bin SCB-404</td>
<td>Process Enclosure, Filter DS404</td>
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<tr>
<td>34</td>
<td>Loadout Station #2</td>
<td>Process Enclosure, Filter DS415A Filter DS415B, Filter DS415C</td>
</tr>
<tr>
<td>35</td>
<td>Ship Conveyor BC-552</td>
<td>Process Enclosure, Filter DS552</td>
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<tr>
<td>36</td>
<td>Ship Transfer Conveyor BC-560</td>
<td>Process Enclosure, Filter DS560</td>
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<tr>
<td>37</td>
<td>Grain Loading – Ship South Spout (TS-601)</td>
<td>Aspirated Spout, Filter DS601B</td>
</tr>
<tr>
<td>38</td>
<td>Grain Loading – Ship South Spout Shuttle Conveyor (BC-601)</td>
<td>Process Enclosure, Filter DS601A</td>
</tr>
<tr>
<td>39</td>
<td>Grain Loading – North Ship Spout (TS-602)</td>
<td>Aspirated Spout, Filter DS602B</td>
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<td>40</td>
<td>Grain Loading – Ship North Spout Shuttle Conveyor (BC-602)</td>
<td>Process Enclosure, Filter DS602A</td>
</tr>
<tr>
<td>41</td>
<td>Loadout Station #1</td>
<td>Process Enclosure, Filter DS715A, Filter DS715B, Filter DS715C</td>
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<td>42</td>
<td>Grain Receiving – Railcar Pit 3</td>
<td>Process Enclosure, Filter DS751</td>
</tr>
<tr>
<td>43</td>
<td>Bulk Weigh Systems</td>
<td>Process Enclosure, Filter DS754</td>
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<tr>
<td>44</td>
<td>Bucket Elevator BE-757</td>
<td>Process Enclosure, Filter DS757</td>
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<td>45</td>
<td>Belt Conveyor BC-202</td>
<td>Process Enclosure, Filter DS202</td>
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<tr>
<td>46</td>
<td>Dust Bin 701</td>
<td>Process Enclosure, Filter DS701</td>
</tr>
<tr>
<td>47</td>
<td>Emergency Firewater Pump Engine</td>
<td>EPA Tier Certified, Ultra-low Sulfur Diesel</td>
</tr>
</tbody>
</table>

6. EMISSIONS DETERMINATION

Emissions to the ambient atmosphere from the grain terminal operations proposed in ADP Application CO-1055 consist of nitrogen oxides (NOx), carbon monoxide (CO), volatile organic compounds (VOC), particulate matter (PM) and sulfur dioxide (SO2).

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 and Filter Emissions (modified). The facility’s baghouses and dust control filters are point sources of particulate matter emissions. Potential emissions are calculated based on 8,760 hr/yr of operation, maximum allowable PM emission concentration, and the nominal flowrate of each unit. Baghouses in place prior to the 2014 reconstruction project have a maximum PM concentration limit of 0.0035 gr/dscf. Newer dust collectors have a maximum PM concentration limit of 0.002 gr/dscf. All PM emissions are assumed to be PM$_{10}$. PM$_{2.5}$ emissions are assumed to be 17% of the PM$_{10}$ emissions, consistent with information from EPA AP-42, Table 9.9.1-1 (3/03)
<table>
<thead>
<tr>
<th>Unit</th>
<th>Discharge Rate (acfm)</th>
<th>Operation (hr/yr)</th>
<th>PM/PM₁₀ Emission Conc. (gr/dscf)</th>
<th>PM/PM₁₀ Emission Rate (lb/hr)</th>
<th>PM₂.₅ Emission Rate (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baghouse C</td>
<td>48,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.83</td>
<td>0.14</td>
</tr>
<tr>
<td>Baghouse B</td>
<td>35,900</td>
<td>8,760</td>
<td>0.002</td>
<td>0.62</td>
<td>0.11</td>
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<tr>
<td>Baghouse F</td>
<td>37,000</td>
<td>8,760</td>
<td>0.0035</td>
<td>1.11</td>
<td>0.19</td>
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<tr>
<td>Baghouse H</td>
<td>42,300</td>
<td>8,760</td>
<td>0.0035</td>
<td>1.27</td>
<td>0.22</td>
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<tr>
<td>Baghouse J</td>
<td>38,100</td>
<td>8,760</td>
<td>0.0035</td>
<td>1.14</td>
<td>0.19</td>
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<tr>
<td>Baghouse A</td>
<td>44,000</td>
<td>8,760</td>
<td>0.002</td>
<td>0.75</td>
<td>0.13</td>
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<td>Baghouse P</td>
<td>35,000</td>
<td>8,760</td>
<td>0.0035</td>
<td>1.05</td>
<td>0.18</td>
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<tr>
<td>Filter DS100</td>
<td>5,000</td>
<td>8,760</td>
<td>0.002</td>
<td>0.086</td>
<td>0.015</td>
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<tr>
<td>Filter DS101A</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
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<tr>
<td>Filter DS101</td>
<td>800</td>
<td>8,760</td>
<td>0.002</td>
<td>0.014</td>
<td>0.002</td>
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<tr>
<td>Filter DS110</td>
<td>1,600</td>
<td>8,760</td>
<td>0.002</td>
<td>0.027</td>
<td>0.005</td>
</tr>
<tr>
<td>Filter DS120</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS121</td>
<td>800</td>
<td>8,760</td>
<td>0.002</td>
<td>0.014</td>
<td>0.002</td>
</tr>
<tr>
<td>Filter DS221</td>
<td>3,200</td>
<td>8,760</td>
<td>0.002</td>
<td>0.055</td>
<td>0.009</td>
</tr>
<tr>
<td>Filter DS222</td>
<td>3,200</td>
<td>8,760</td>
<td>0.002</td>
<td>0.055</td>
<td>0.009</td>
</tr>
<tr>
<td>Filter DS230A</td>
<td>3,200</td>
<td>8,760</td>
<td>0.002</td>
<td>0.055</td>
<td>0.009</td>
</tr>
<tr>
<td>Filter DS230B</td>
<td>3,200</td>
<td>8,760</td>
<td>0.002</td>
<td>0.055</td>
<td>0.009</td>
</tr>
<tr>
<td>Filter DS241</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS243</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS301</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS331</td>
<td>470</td>
<td>8,760</td>
<td>0.002</td>
<td>0.008</td>
<td>0.001</td>
</tr>
<tr>
<td>Filter DS341</td>
<td>470</td>
<td>8,760</td>
<td>0.002</td>
<td>0.008</td>
<td>0.001</td>
</tr>
<tr>
<td>Filter DS358</td>
<td>3,200</td>
<td>8,760</td>
<td>0.002</td>
<td>0.055</td>
<td>0.009</td>
</tr>
<tr>
<td>Filter DS370</td>
<td>41,000</td>
<td>8,760</td>
<td>0.002</td>
<td>0.70</td>
<td>0.12</td>
</tr>
<tr>
<td>Filter DS401</td>
<td>800</td>
<td>8,760</td>
<td>0.002</td>
<td>0.014</td>
<td>0.002</td>
</tr>
<tr>
<td>Filter DS402</td>
<td>800</td>
<td>8,760</td>
<td>0.002</td>
<td>0.014</td>
<td>0.002</td>
</tr>
<tr>
<td>Filter DS403</td>
<td>800</td>
<td>8,760</td>
<td>0.002</td>
<td>0.014</td>
<td>0.002</td>
</tr>
<tr>
<td>Filter DS404</td>
<td>800</td>
<td>8,760</td>
<td>0.002</td>
<td>0.014</td>
<td>0.002</td>
</tr>
<tr>
<td>Filter DS415A</td>
<td>1,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.026</td>
<td>0.004</td>
</tr>
<tr>
<td>Filter DS415B</td>
<td>1,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.026</td>
<td>0.004</td>
</tr>
<tr>
<td>Filter DS415C</td>
<td>1,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.026</td>
<td>0.004</td>
</tr>
<tr>
<td>Filter DS552</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS560</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS601A</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS601B</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS602A</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS602B</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS715A</td>
<td>1,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.026</td>
<td>0.004</td>
</tr>
<tr>
<td>Unit</td>
<td>Discharge Rate (acfm)</td>
<td>Operation (hr/yr)</td>
<td>PM/PM&lt;sub&gt;10&lt;/sub&gt; Emission Conc. (gr/dscf)</td>
<td>PM/PM&lt;sub&gt;10&lt;/sub&gt; Emission Rate (lb/hr)</td>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt; Emission Rate (lb/hr)</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------------------</td>
<td>-------------------</td>
<td>---------------------------------------------</td>
<td>------------------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>Filter DS715B</td>
<td>1,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.026</td>
<td>0.004</td>
</tr>
<tr>
<td>Filter DS715C</td>
<td>1,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.026</td>
<td>0.004</td>
</tr>
<tr>
<td>Filter DS751</td>
<td>47,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.81</td>
<td>0.14</td>
</tr>
<tr>
<td>Filter DS754</td>
<td>3,200</td>
<td>8,760</td>
<td>0.002</td>
<td>0.055</td>
<td>0.009</td>
</tr>
<tr>
<td>Filter DS757</td>
<td>3,200</td>
<td>8,760</td>
<td>0.002</td>
<td>0.055</td>
<td>0.009</td>
</tr>
<tr>
<td>Filter DS202</td>
<td>2,500</td>
<td>8,760</td>
<td>0.002</td>
<td>0.043</td>
<td>0.008</td>
</tr>
<tr>
<td>Filter DS701</td>
<td>3,200</td>
<td>8,760</td>
<td>0.002</td>
<td>0.055</td>
<td>0.009</td>
</tr>
</tbody>
</table>

**ADP Application CO-1055.** As proposed by TEMCO, Baghouses D, E, and N have been removed from the emission inventory. Baghouse C has been added.

6.b. Fugitive Emissions (modified).

**Receiving Grain from Railcar**

TEMCO employs three-sided building enclosures, choked flow grain delivery, and aspirated receiving pits to control fugitive emissions from railcar receiving operations. SWCAA believes that the combination of control technologies will achieve a minimum of 99% capture/control efficiency. Aspiration air is assumed to be continuously applied during the entire unloading process.

Emission factors for PM, PM<sub>10</sub>, and PM<sub>2.5</sub> are based on uncontrolled emission factors from EPA AP-42, Section 9.9.1 (3/03) for railcar unloading and a capture efficiency of 99%. Emissions calculation assumes a maximum grain throughput of 15,432,439 tons per year.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Uncontrolled EF (lb/ton)</th>
<th>Capture Efficiency</th>
<th>Controlled EF (lb/ton)</th>
<th>Emissions (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.032</td>
<td>99%</td>
<td>3.2×10&lt;sup&gt;-4&lt;/sup&gt;</td>
<td>4,938</td>
</tr>
<tr>
<td>PM&lt;sub&gt;10&lt;/sub&gt;</td>
<td>0.0078</td>
<td>99%</td>
<td>7.8×10&lt;sup&gt;-5&lt;/sup&gt;</td>
<td>1,204</td>
</tr>
<tr>
<td>PM&lt;sub&gt;2.5&lt;/sub&gt;</td>
<td>0.0013</td>
<td>99%</td>
<td>1.3×10&lt;sup&gt;-5&lt;/sup&gt;</td>
<td>201</td>
</tr>
</tbody>
</table>

**Receiving Grain from Barge**

TEMCO will keep the barge doors/lids closed and use active aspiration to control fugitive emissions from barge receiving operations. SWCAA believes that the physical barrier in conjunction with the aspirated leg is sufficient to capture at least 99% of the fugitive PM emissions. The maximum marine leg receipt rate is specified as 36,750 bu/hr (~1,103 tph) of grain.

Emission factors for PM, PM<sub>10</sub>, and PM<sub>2.5</sub> are based on uncontrolled emission factors from EPA AP-42, Section 9.9.1 (3/03) for barge unloading and a capture efficiency of 99%. Emissions calculation assumes a maximum grain throughput of 3,306,951 tons per year.
TEMCO, LLC

Receiving Grain from Barge - Fugitive Emission Factors

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Uncontrolled EF (lb/ton)</th>
<th>Capture Efficiency</th>
<th>Controlled EF (lb/ton)</th>
<th>Emissions (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.15</td>
<td>99%</td>
<td>0.0015</td>
<td>4,960</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.038</td>
<td>99%</td>
<td>3.8×10$^{-4}$</td>
<td>1,257</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>0.005</td>
<td>99%</td>
<td>5.0×10$^{-5}$</td>
<td>165</td>
</tr>
</tbody>
</table>

Internal Handling
TEMCO has completely enclosed all conveyances, internal handling, and grain cleaning operations. The enclosed operations are vented to various dust collectors and baghouses as described above. SWCAAA assumes that the process enclosure is sufficient to limit direct fugitive emissions to a de minimis level.

Grain Storage and Transfer (Storage and Shipping Bin Vents)
TEMCO has completely enclosed all storage silos and shipping bins. Silo and bin headspaces will be vented through vent filters of various dust collectors. SWCAAA assumes that the process enclosure is sufficient to limit direct fugitive emissions to a de minimis level.

Dust/Screenings Loadout to Truck
TEMCO operates two Dust/Screenings loadout stations where dust filter catch and unwanted material from grain cleaning operations will be stored and loaded into trucks for shipment offsite. The loadout stations are configured with aspirated loading hoods and complete building enclosure (two walls, fixed roof, roll-up doors at both ends). Each building enclosure is vented to a baghouse. Fugitive dust emissions are assumed to be negligible.

Loading Grain to Ship
TEMCO loads grain into ships using one of two new ship loading spouts. The loading spouts are aspirated and include both a dead box and spout skirting. Each spout will be vented to a dedicated dust collector. SWCAAA has applied a capture efficiency of 98% to similar ship loading spouts when in regular use (initial and mid-hold fill). In the last stage of ship loading (topping-off), the spout configuration is not as efficient, and the hold provides less enclosure. Therefore, SWCAAA has reduced the assumed capture efficiency to 85% during topping-off. Emissions calculations assume the following load volume apportionments and control efficiencies for each of the above described loading modes:

<table>
<thead>
<tr>
<th>Loading Mode</th>
<th>Loading Stage Volume</th>
<th>Control Efficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Hold</td>
<td>Regular Fill –</td>
<td>98%</td>
</tr>
<tr>
<td></td>
<td>Topping-off –</td>
<td>85%</td>
</tr>
</tbody>
</table>

Emission factors for PM, PM$_{10}$, and PM$_{2.5}$ are based on uncontrolled emission factors from EPA AP-42, Section 9.9.1 (3/03) for ship loading and an overall capture efficiency of 97.35% (0.95*98% + 0.05*85%). Emissions calculation assumes a maximum grain throughput of 18,657,900 tons per year.

Ship Loading - Fugitive Emission Factors

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Uncontrolled EF (lb/ton)</th>
<th>Effective Capture Efficiency</th>
<th>Controlled EF (lb/ton)</th>
<th>Emissions (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.048</td>
<td>97.35%</td>
<td>0.0013</td>
<td>24,255</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.012</td>
<td>97.35%</td>
<td>3.2×10$^{-4}$</td>
<td>5,971</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>0.0022</td>
<td>97.35%</td>
<td>5.8×10$^{-5}$</td>
<td>1,082</td>
</tr>
</tbody>
</table>
**Loading Grain to Trucks**

TEMCO ships grain via truck using one of the Dust/Screenings loadout stations. At Loadout Station 2 the loadout stations is configured with aspirated loading hoods and complete building enclosure (two walls, fixed roof, roll-up doors at both ends). At Loadout Station 1 combination trucks may be loaded that do not fully fit within the building; therefore one of the two rollup doors must be open during loading. Each building enclosure is vented to three filter units mounted on the truck loading loadout hood. Fugitive dust emissions are assumed to be negligible from Loadout Station 2 because it is fully enclosed. Based on observations of loadout events, Loadout Station 1 is expected to provide at least 90% capture of dust when one rollup door is open.

Emission factors for PM, PM$_{10}$, and PM$_{2.5}$ are based on uncontrolled emission factors from EPA AP-42, Section 9.9.1 (3/03) for truck loading. Potential emissions from loading grain in Loadout Station 1 with one door open were based on loading a maximum of 10 trucks (350 tons) per day, 35 tons per truck, and 2,080 trucks per year (72,800 tons per year).

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Uncontrolled EF (lb/ton)</th>
<th>Effective Capture Efficiency</th>
<th>Controlled EF (lb/ton)</th>
<th>Emissions (lb/day)</th>
<th>Emissions (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.086</td>
<td>90%</td>
<td>0.0086</td>
<td>3.01</td>
<td>626</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.029</td>
<td>90%</td>
<td>0.0029</td>
<td>1.02</td>
<td>211</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>0.0049</td>
<td>90%</td>
<td>0.00049</td>
<td>0.17</td>
<td>36</td>
</tr>
</tbody>
</table>

**Loading Grain to Railcar**

TEMCO retains the ability to ship small quantities of grain via railcar using an existing loading station. The loading station does not have any active controls or significant process enclosure. Although there are no permit requirements for oiling grain when shipping via railcar, the majority of grain at the facility has traditionally been oiled. Consequently, it is assumed that oil will continue to be applied in future shipments. (See page 3 of TEMCO letter dated 10/26/12) SWCAA has applied a capture efficiency of 73% to reflect oil application. The railcar loading station has a maximum specified throughput rate of ~298 tph.

Emission factors for PM, PM$_{10}$, and PM$_{2.5}$ are based on uncontrolled emission factors from EPA AP-42, Section 9.9.1 (3/03) for truck unloading and a capture efficiency of 73%. Emissions calculation assumes a maximum grain throughput of 16,535 tons per year.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Uncontrolled EF (lb/ton)</th>
<th>Capture Efficiency</th>
<th>Controlled EF (lb/ton)</th>
<th>Emissions (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.027</td>
<td>73%</td>
<td>0.0073</td>
<td>121</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>0.0022</td>
<td>73%</td>
<td>5.9×10$^{-4}$</td>
<td>10</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>0.00037</td>
<td>73%</td>
<td>1.0×10$^{-4}$</td>
<td>2</td>
</tr>
</tbody>
</table>

**Paved Haul Roads.**

Travel within the facility by truck occurs on paved haul roads. Truck traffic is primarily due to the loadout of screening and dust to trucks, and to a lesser extent due to the receipt and loadout of grain by trucks. Emission factors for paved and unpaved road traffic from EPA AP-42, Section 13.2.1 (1/11) are discussed below with two emission calculations presented; one for Dust/Screenings loadout and one for grain receiving/shipping. Trucks are assumed to have an empty weight of 15 tons and a loaded weight of 25 tons (provided by TEMCO).
Emissions of PM from the operation of trucks on paved roads at the facility can be estimated using equation 2 from AP-42 Section 13.2.1 (1/11). 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.

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

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 \( 5.4 \times 10^{-4} \) 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/40 tons full
- \( P = \) 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

Using the equation above and assuming the travel distances below, the following emission factors are used for determining emissions:

### Trucks - Dust/Screenings Shipping

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>E.F. – Empty (lb/VMT)</th>
<th>E.F. – Full (lb/VMT)</th>
<th>Emissions (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.096</td>
<td>0.26</td>
<td>198</td>
</tr>
<tr>
<td>PM(_{10})</td>
<td>0.019</td>
<td>0.052</td>
<td>40</td>
</tr>
<tr>
<td>PM(_{2.5})</td>
<td>0.0047</td>
<td>0.013</td>
<td>11</td>
</tr>
</tbody>
</table>

### Trucks - Grain Shipping

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>E.F. – Empty (lb/VMT)</th>
<th>E.F. – Full (lb/VMT)</th>
<th>Emissions (lb/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>0.096</td>
<td>0.26</td>
<td>466</td>
</tr>
<tr>
<td>PM(_{10})</td>
<td>0.019</td>
<td>0.052</td>
<td>92</td>
</tr>
<tr>
<td>PM(_{2.5})</td>
<td>0.0047</td>
<td>0.013</td>
<td>24</td>
</tr>
</tbody>
</table>

**Application CO-1055.** As proposed by TEMCO, emission calculations for fugitive emissions from grain receiving from trucks have been removed from the emission inventory.

**6.c Diesel Engine – Emergency Firewater Pump (existing).** Potential emissions from this emission unit are calculated below. Emergency operation is unrestricted. Operation for purposes of testing, maintenance and emergency service is typically less than 200 hr/yr. Annual emissions will be calculated from actual hours of operation using the emission factors identified below.
Hours of Operation = 200 hours
Power Output = 1,220 horsepower
Diesel Density = 7.206 pounds per gallon
Fuel Sulfur Content = 0.0015 \% by weight
Fuel Consumption Rate = 46.8 gallons per hour

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>EF (lb/hp-hr)</th>
<th>Emissions (lb/hr)</th>
<th>EF (tons)</th>
<th>EF Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO\textsubscript{X}</td>
<td>1.25E-02</td>
<td>15.25</td>
<td>1.53</td>
<td>EPA Tier Testing</td>
</tr>
<tr>
<td>CO</td>
<td>8.50E-04</td>
<td>1.04</td>
<td>0.10</td>
<td>EPA Tier Testing</td>
</tr>
<tr>
<td>VOC</td>
<td>8.84E-04</td>
<td>1.08</td>
<td>0.11</td>
<td>EPA Tier Testing</td>
</tr>
<tr>
<td>SO\textsubscript{X} as SO\textsubscript{2}</td>
<td>--</td>
<td>0.01</td>
<td>0.001</td>
<td>Mass Balance</td>
</tr>
<tr>
<td>PM/PM\textsubscript{10}/PM\textsubscript{2.5}</td>
<td>2.07E-04</td>
<td>0.25</td>
<td>0.03</td>
<td>EPA Tier Testing</td>
</tr>
</tbody>
</table>

6.d Facility-wide Potential Emissions (PTE) Summary. Facility-wide potential to emit as calculated in the sections above is summarized below.

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Annual Emissions (tpy)</th>
<th>Project Increase (tpy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen oxides</td>
<td>1.53</td>
<td>-</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>0.10</td>
<td>-</td>
</tr>
<tr>
<td>Volatile organic compounds</td>
<td>0.11</td>
<td>-</td>
</tr>
<tr>
<td>Sulfur oxides as sulfur dioxide</td>
<td>0.001</td>
<td>-</td>
</tr>
<tr>
<td>Particulate matter</td>
<td>59.90</td>
<td>-4.86</td>
</tr>
<tr>
<td>PM\textsubscript{10}</td>
<td>46.49</td>
<td>-4.70</td>
</tr>
<tr>
<td>PM\textsubscript{2.5}</td>
<td>7.92</td>
<td>-0.80</td>
</tr>
<tr>
<td>Toxic Air Pollutants</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Hazardous Air Pollutants</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>CO\textsubscript{2}</td>
<td>106</td>
<td>-</td>
</tr>
</tbody>
</table>

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 Subpart DD (§60.300 et seq.) "Standards of Performance for Grain Elevators" applies to each affected facility (e.g. railcar unloading station, truck loading station, or ship loading operations) at any grain terminal elevator, defined to be any grain elevator with permanent storage capacity of more than 2.5 million bu, 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.

The facility as originally constructed was large enough to be subject to the regulation (total storage of 3,034,000 bu), but construction (circa 1962) pre-dated the promulgation of Subpart DD on August 2, 1978. New equipment and/or modifications constructed prior to 1978 are also not subject to Subpart DD. All affected facilities installed or modified since August 2, 1978 are considered subject. The following table summarizes Subpart DD applicability for the facility:
### Equipment/Activity Not Subject to Subpart DD

<table>
<thead>
<tr>
<th>Equipment/Activity</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grain Receiving – Railcar Pit 2, Fugitive Emissions</td>
<td>Pre-dates Subpart, no subsequent modifications</td>
</tr>
<tr>
<td>Grain Loading – Railcar Fugitive Emissions</td>
<td>Pre-dates Subpart, no subsequent modifications</td>
</tr>
<tr>
<td>DS401 – Dust Bin DB-401</td>
<td>Dust and grain waste are not grain under Subpart DD</td>
</tr>
<tr>
<td>DS402 – Screenings Bin SCB-402</td>
<td>Dust and grain waste are not grain under Subpart DD</td>
</tr>
<tr>
<td>DS403 – Screenings Bin SCB-403</td>
<td>Dust and grain waste are not grain under Subpart DD</td>
</tr>
<tr>
<td>DS404 – Screenings Bin SCB-404</td>
<td>Dust and grain waste are not grain under Subpart DD</td>
</tr>
<tr>
<td>DS701 – Dust Bin 701</td>
<td>Dust and grain waste are not grain under Subpart DD</td>
</tr>
</tbody>
</table>

### Equipment/Activity Subject to Subpart DD

<table>
<thead>
<tr>
<th>Equipment/Activity</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baghouse C - Railcar Pits 1 and 2</td>
<td>Installed in 2022</td>
</tr>
<tr>
<td>Baghouse B - Workhouse Basement</td>
<td>Installed 2017</td>
</tr>
<tr>
<td>Baghouse H - Workhouse floor, Bins, and Garners</td>
<td>Modified in 2014-15 Reconstruction Project</td>
</tr>
<tr>
<td>Baghouse J - Workhouse Vents, etc.</td>
<td>Modified in 2014-15 Reconstruction Project</td>
</tr>
<tr>
<td>Baghouse A – Silo Basement Belts and Concrete Silos</td>
<td>Installed 2017</td>
</tr>
<tr>
<td>Baghouse F - Tanks 801-807</td>
<td>Installed post-1978</td>
</tr>
<tr>
<td>Baghouse P - Tanks 901-905</td>
<td>Installed post-1978</td>
</tr>
<tr>
<td>Grain Receiving – Railcar Pit 1, Fugitive Emissions</td>
<td>Installed post-1978</td>
</tr>
<tr>
<td>Grain Receiving – Railcar Pit 3, Fugitive Emissions</td>
<td>Installed in 2014-15 Reconstruction Project</td>
</tr>
<tr>
<td>Grain Receiving – Barge Fugitive Emissions</td>
<td>Installed in 2014-15 Reconstruction Project</td>
</tr>
<tr>
<td>Grain Loading – Ship Fugitive Emissions</td>
<td>Installed in 2014-15 Reconstruction Project</td>
</tr>
<tr>
<td>Loadout Station #1</td>
<td>Installed in 2014-15 Reconstruction Project</td>
</tr>
<tr>
<td>Loadout Station #2</td>
<td>Installed in 2014-15 Reconstruction Project</td>
</tr>
<tr>
<td>New filters proposed in ADP Application CO-919</td>
<td>Installed in 2014-15 Reconstruction Project</td>
</tr>
<tr>
<td>New filters proposed in ADP Application CO-948</td>
<td>Installed in 2014-15 Reconstruction Project</td>
</tr>
<tr>
<td>New filter proposed in ADP Application CO-1001</td>
<td>Installed in 2017</td>
</tr>
</tbody>
</table>

Note: Subpart DD is not applicable to the dust and screenings handling, storage, or loadout systems because the material being handled is not considered to be grain (grain dust, chaff, or other grain waste). See applicability determination by EPA Region 6 for grain waste bins at an Arkansas rice mill (#0000016 in EPA’s Applicability Determination Index).

7.b 40 CFR 60.4200 et seq. (Subpart IIII) "Standards of Performance for Stationary Compression Ignition Internal Combustion Engines" applies to each compression ignition (CI) internal combustion engine (ICE) that commences construction after July 11, 2005 and is manufactured after April 1, 2006, or that is modified or reconstructed after July 11, 2005. This regulation is applicable to the Emergency Firewater Pump's diesel engine.

7.c 40 CFR 63 Subpart ZZZZ (63.6580 et seq.) "National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines" establishes national emission limitations and operating limitations for HAP emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. The Emergency Firewater Pump's diesel engine is classified as a new stationary CI RICE and complies with this regulation by complying with 40 CFR 60 Subpart III.

7.d 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.e 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.f WAC 173-401 "Operating Permit Regulation" requires all major sources and other sources as defined in WAC 173-401-300 to obtain an operating permit. This includes sources with a potential to emit "regulated pollutants" above 100 tpy. Under an April 26, 1993 EPA memo by Lydia N. Wegman, Deputy Director, entitled "Definition of Regulated Air Pollutant for Purposes of Title V", EPA stated that for the purposes of air operating permit determinations, PM$_{10}$, not PM, was the regulated pollutant. Based upon emission calculations, under maximum belt capacity, maximum hours of operation, and an operating scenario resulting in maximum emissions, this facility's potential to emit is less than 100 tpy of PM$_{10}$; therefore, this regulation does not apply to this facility.

7.g 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 shall not be exceeded.

7.h 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, sulfur dioxide, concealment and masking, and fugitive dust.

7.i 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 particulate matter from any combustion or incineration unit in excess of 0.23 grams per dry cubic meter (0.1 grains per dry standard cubic foot) of exhaust gas at standard conditions.

7.j SWCAA 400-060 "Emission Standards for General Process Units" prohibits particulate matter emissions from all new and existing process units in excess of 0.1 grains per dry standard cubic foot of exhaust gas.

7.k 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.l 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.m SWCAA 400-114 "Requirements for Replacement or Substantial Alteration of Emission Control Technology at an Existing Stationary Source" requires that no approval to replace or substantially alter emission control technology at an existing source shall be granted unless it is evidenced that Reasonably Available Control Technology (RACT) will be employed for all air contaminants to be emitted by the proposed equipment.
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

This permitting action is limited to removal of previously approved equipment and replacement of existing emission control equipment. Therefore, no BACT determination is required.

Previous BACT Determinations

8.a BACT Determination – Grain Loading of Combination Trucks from Loadout Station 1 (ADP 20-3404). Loading combination trucks requires one rollup door to be open during loading because the enclosure is not long enough to fit the entire combination truck. Based on onsite observations of this activity visual emissions can be limited to 0% opacity and worst-case potential annual emissions of PM$_{10}$ and PM$_{2.5}$ are 211 and 36 pounds per year respectively. The applicant proposed that expanding the structure to fully encompass a combination truck must be eliminated from BACT consideration because the project would not be cost-effective. SWCAA concurs. The proposed use of the existing "salad bar" filtration unit with one rollup door closed during loading, and limitation of loading to 350 tons per day and 72,800 tons per year has been determined to meet the requirements of BACT for this activity at this facility.

8.b BACT Determination – Dust Collectors (ADP 20-3404). The proposed use of filtration units capable of limiting PM emissions to a concentration of 0.002 gr/dscf or less and limit visible emissions to 0% opacity has been determined to meet the requirements of BACT for dust filtration units at this facility.

8.c BACT Determination – Emergency Engine (ADP 20-3404). The proposed use of limited hours of operation (testing, maintenance, and emergency use only), EPA Tier certification and ultra-low sulfur distillate fuel (less than 0.0015% sulfur by weight) has been determined to meet the requirements of BACT for the emergency firewater pumps at this facility.

Other Determinations

8.d 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.e 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 The equipment modifications proposed in ADP Application CO-1055 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 The equipment modifications proposed in ADP Application CO-1055 will not cause the requirements of WAC 173-460 "Controls for New Sources of Toxic Air Pollutants" (as in effect 8/21/98) or WAC 173-476 "Ambient Air Quality Standards" to be violated.

9.d The equipment modifications proposed in ADP Application CO-1055 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 22-3535 in response to ADP Application CO-1055. ADP 22-3535 contains approval requirements deemed necessary to assure compliance with applicable regulations and emission standards as discussed below.

10.a Supersession of Previous Permits. ADP 22-3535 supersedes ADP 20-3404 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-1055. 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 22-3535 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 22-3535 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 semi-annual basis.

10.e Emission Limits. Facility-wide emission limits were revised to reflect the equipment changes proposed in ADP Application CO-1055.

A 0% visible emission standard has been established for all baghouses and dust filters at the facility consistent with proper maintenance and operation of the equipment. PM emissions from new dust collectors have been limited to 0.002 gr/dscf emission limit, which is considered BACT for this type of facility.

10.f Operating Requirements – Barge Unloading. The barge unloading station at TEMCO’s Kalama facility was completely replaced as part of the 2014 reconstruction project. ADP 13-3072 established operating requirements for barge unloading that require the use of an aspirated marine leg and sump tarping to control fugitive dust emissions. Subsequent to issuance of ADP 13-3072, TEMCO and a nearby grain export terminal both demonstrated that barge unloading operations can reliably comply with applicable visible emission standards without the use of a sump tarping. A second equivalency determination without sump tarping has been submitted to EPA for approval. It is currently under review. Based on demonstrated compliance and the pending revision of the equivalency determination, the permit does not require sump tarping during barge unloading.
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.

Emergency Firewater Pump. Visible emissions from the diesel engine power unit are limited to 5% opacity or less during normal operation. However, the engine is not capable of reliably limiting visible emissions to less than 5% opacity until the engine achieves normal operating temperature. Therefore, the 5% opacity limit shall not apply to the generator exhaust during start-up periods.

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 – Dust Collectors. Dust collectors subject to 40 CFR 60, Subpart DD are required to have an initial test that includes three 1-hr test runs for PM and for visible emissions (EPA Method 9). Those units that have already performed the initial test or are not subject to Subpart DD are required to perform periodic testing that includes three 1-hr test runs for PM and a minimum of three 6-minute test runs for visible emissions. If visible emissions are in excess of the opacity standard, then additional testing is required, up to 1-hr test runs. Periodic testing of each dust collector is required every ten (10) years thereafter.

All of the dust collectors in operation at the facility are subject to 40 CFR 60, Subpart DD except for grain dust/screenings handling equipment.

Dust collectors DS601B and DS602B are subject to testing under 40 CFR 60, Subpart DD, but the testing requirement has been waived due to inaccessibility and safety concerns. (see 9/1/15 Schultz email)

12.b Emission Testing Requirements – Fugitive Sources. Fugitive emission sources subject to 40 CFR 60, Subpart DD are required to have an initial test that includes three 1-hr test runs for visible emissions (EPA Method 9). Those units that have already performed the initial test or are not subject to 40 CFR 60, Subpart DD are required to perform periodic testing that includes a minimum of three 6-minute test runs for visible emissions (SWCAA Method 9). If visible emissions are in excess of the opacity standard, then additional testing is required, up to 1-hr test runs. Periodic tests of each fugitive source are required every sixty (60) months by the end of October.

The following fugitive sources are subject to 40 CFR 60, Subpart DD:
- Grain Receiving – Railcar Pit 1
- Grain Loading – Ship

The following fugitive sources are not subject 40 CFR 60, Subpart DD:
- Grain Receiving – Railcar Pit 2
- Grain Receiving – Truck
- Grain Loading – Railcar
13. FACILITY HISTORY

13.a General History. This facility was originally constructed in 1962. The facility had a total storage capacity of approximately 3,034,000 bu. Additional storage capacity was added in 1967, bringing the total storage capacity to 3,782,000 bu. The original facility used cyclones for control of particulate matter from processes, all of which were replaced by baghouses in May 1974. Baghouses A, B, C, D, E, F, G, H, J, K, and L were installed at this time. Citing concerns over the facility's ability to meet local and state standards for opacity, SWCAA issued an Order of Consent in 1978, whereby the facility constructed a system to control fugitive emissions from ship loading that included "hatch tents" and aspirated pickups. Baghouse M was installed in October 1979 in support of the ship loading system. The facility installed an additional 7 storage silos in February 1980, bringing the total facility storage capacity to 6,400,000 bu. The 1980 expansion included the addition of a railcar receiving station with an associated baghouse (baghouse N), new storage tanks (baghouse P), and the replacement of baghouses C and G with larger units.

The facility was originally owned by North Pacific Grain Grower's Inc. The facility was purchased by Harvest States Cooperatives in 1989, and operated under the name United Harvest, LLC. Facility operations were taken over by TEMCO, LLC in 2012.

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

<table>
<thead>
<tr>
<th>Date</th>
<th>Application Number</th>
<th>Permit Number</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/28/2020</td>
<td>CO-1025</td>
<td>20-3404</td>
<td>Revision of permit conditions to allow loadout of grain in Loading Station 1 to combination trucks without both building doors being fully closed.</td>
</tr>
<tr>
<td>12/9/2019</td>
<td>N/A</td>
<td>19-3370</td>
<td>Consent Order allowing loading of grain into combination trucks in Loadout Station #1.</td>
</tr>
<tr>
<td>9/20/2018</td>
<td>CO-1001</td>
<td>18-3305</td>
<td>Approval of an existing onsite diesel refueling station, operation of an existing diesel engine powered emergency firewater pump, and replacement of existing dust collection unit DS-101A.</td>
</tr>
<tr>
<td>9/24/2015</td>
<td>CO-948</td>
<td>13-3072R1</td>
<td>Revision of ADP 13-3072 to reflect as-built conditions subsequent to facility reconstruction. Dust collectors F-10310, F-11020, F-24202, F-24203, F-24204, F-24406, F-24407, and F-24408 removed from permit. Dust collectors DS202 and DS701 added to permit. Flowrates on selected existing baghouse revised to reflect actual operating conditions.</td>
</tr>
<tr>
<td>10/23/2013</td>
<td>CO-919</td>
<td>13-3072</td>
<td>Facility Reconstruction – Installation of new shipping bins, loadout conveyors, barge unloading conveyors, multiple baghouses, new ship loading superstructure and loading spouts</td>
</tr>
<tr>
<td>7/21/2011</td>
<td>CO-889</td>
<td>11-2983</td>
<td>Modification of existing emission factors. Increase in existing emission limits for PM$_{10}$.</td>
</tr>
<tr>
<td>5/9/2001</td>
<td>CO-671</td>
<td>01-2353</td>
<td>Installation of replacement Baghouse F.</td>
</tr>
<tr>
<td>10/24/1997</td>
<td>CO-561</td>
<td>97-2055</td>
<td>Alteration of ship loading emission controls. Establishment of federally enforceable emission limit for the purpose of avoiding Title V applicability.</td>
</tr>
</tbody>
</table>
1/8/1981      CO-267  80-570   Installation of dust control equipment for grain operations.
               CO-255  
               CO-254  
5/21/1980     CO-253  80-516   Modification of airflows for Baghouse C and Baghouse G.
               CO-252  Installation of new rail receiving system with Baghouse N.
               CO-251  Installation of new steel tank storage and handling system with Baghouse P.
1/30/1979      --      79-433  Consent Order to immediately abate emissions from grain export facility.
12/7/1978     CO-235  78-421   Installation of ship loading hatch cover and filtration system.
4/26/1978      --      78-334  Order on Consent to install a system to control fugitive emissions from ship loading that included "hatch tents" and aspirated pickups.
1/24/1974      --      74-33   Order of Violation for failure to install required control systems and installation of unapproved equipment.
1/29/1973     CO-75    73-0129LET3 Phase II – Installation of Carter Day baghouses

13.c Compliance History. A search of source records on file at SWCAA identified the following compliance issues during the past five (5) years.

<table>
<thead>
<tr>
<th>Date</th>
<th>NOV Number</th>
<th>Violation</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/11/2019</td>
<td>10251</td>
<td>Penalty assessed for excess PM emissions from Baghouse D measured during September 11, 2019 source test.</td>
</tr>
<tr>
<td>11/19-21/2018</td>
<td>10077</td>
<td>Notice of correction without penalty assessed for exceedance of the PM emission limits for DS241 and DS221 measured during November 19-21, 2018 source test.</td>
</tr>
</tbody>
</table>

14. PUBLIC INVOLVEMENT OPPORTUNITY

14.a Public Notice for ADP Application CO-1055. Public notice for ADP Application CO-1055 was published on the SWCAA internet website for a minimum of (15) days beginning on June 24, 2022.

14.b Public/Applicant Comment for ADP Application CO-1055. SWCAA did not receive specific comments, a comment period request or any other inquiry from the public regarding this ADP application. Therefore no public comment period was provided for this permitting action.

14.c State Environmental Policy Act. This permitting action is limited to replacement of existing emission control equipment and is exempt from SEPA pursuant to WAC 197-11-800(3). SWCAA issued a Determination of SEPA Exempt (SWCAA 22-023) concurrent with issuance of ADP 22-3535.