

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection**

N086350237

FACILITY: The Andersons Webberville Operation		SRN / ID: N0863
LOCATION: 2690 STOCKBRIDGE RD, WEBBERVILLE		DISTRICT: Lansing
CITY: WEBBERVILLE		COUNTY: INGHAM
CONTACT: Mike Rumsey , Area Operations Manager		ACTIVITY DATE: 08/21/2019
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: scheduled, unannounced inspection of The Andersons under PTI's 758-90A and 704-84A		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Personnel Present: Mike Rumsey, Area Operations Manager (mike_rumsey@andersonsinc.com)
Les Rains, Operations Supervisor

Purpose

Conduct an unannounced, scheduled inspection to determine compliance with The Andersons Permit to Install (PTI) Nos. 758-90A and 704-84A. This facility was last inspected in April 2012.

Facility Background/Regulatory Overview

As described by Mike Rumsey, Area Operations Manager, The Andersons is a wholesale distributor of dry and liquid fertilizer in bulk, but they also create fertilizer blends that go to agriculture retailers. Their “in-season” is approximately April – June, operating 6 days per week generally between the hours of 7 a.m and 5 p.m. The “in-season” however depends largely on when the planting season starts. Off-season hours are 7 a.m. – 3:30 p.m.

An ADM terminal grain elevator shares the main drive and is situated on the property adjacent to The Andersons to the north. A railroad runs along the north side of the elevator, with the southernmost spur available to The Andersons for fertilizer unloading. The area is rural, with a small industrial park to the south. A few residences are located to the northeast at about ¼ mile.

The grain elevator was built in 1981 and was called Grand River Grain Company. For a period of time the entire complex was operated by The Andersons. The fertilizer blending and storage facilities were permitted in 1984 by the Andersons. In about 1989, The Andersons gave up the grain handling portion of the property to ADM Countrymark, keeping control of the fertilizer and agricultural supply warehouse.

A consent judgment was entered in 1998 for an accidental ammonia release from the APP process. The resolution in the judgment was the development and construction of the current closed loop APP cooling system. Permit 758-90A was issued for the process. The consent judgment was terminated in 2001.

Inspection

This was an unannounced, scheduled compliance inspection. At approximately 11:00 a.m. on August 21, 2019, I met with Mike Rumsey, The Andersons Area Operations Manager, and explained to him that I was there to conduct an inspection, since AQD hadn't conducted an inspection since 2012. I provided him with a June 2019 Permit to Install Exemptions handbook and explained that if there is any question whether a process needs an air permit, he can refer to this and speak with a district inspector to determine whether a permit is needed.

Table 1. Equipment located onsite

<u>EU</u>	<u>Description</u>	<u>PTI No/ Exemption</u>
Closed-loop process cooling equipment for ammonium polyphosphate (APP) liquid fertilizer production plant	APP process with cooling system 30,000 gallon Anhydrous Ammonia Tank Liquid Blend Fertilizer Storage and Loading Dry Blend Granular Fertilizer Storage and Loading	758-90 & 704-84A

PTI's 758-90A – APP Process/Cooling System

Historically, The Andersons produced their own ammonium polyphosphate via exothermic reaction of phosphoric acid and anhydrous ammonia. Water is added to cool the APP and to dilute it to a guaranteed analysis of 10-34-0. The 10-34-0 is sold as a product and is also used in liquid fertilizer blending.

During this inspection, M. Rumsey said that they deregistered the APP process in May 2019, and prior to this they had not operated the process in approximately 1.5 years. He also said that they have disconnected the piping that ran from the anhydrous ammonia tank to the reaction vessel, which I verified onsite that it had occurred – there are no pipes or plumbing to the tank now. The anhydrous ammonia tank's gauge also showed that the tank was 0% full, although M. Rumsey said they have not yet purged the tank to remove any residual anhydrous ammonia. A hazard awareness sign is still posted on the fence surrounding the tank. They are still deciding what to do with the tank. I consider this a unit that has been rendered permanently inoperable at this facility. I will work with The Andersons corporate EHS contact, Anne Cook, to determine the best course of action with regard to PTI 758-90A (whether to the PTI modify to remove anhydrous ammonia requirements or void the PTI altogether). The majority of the requirements are related to properly maintaining the anhydrous ammonia tank. Compliance with PTI 758-90A is unnecessary because the process is no longer operational.

M. Rumsey said that instead of producing their own ammonium phosphate fertilizer they buy the finished product and receive it by railcar to sell to their customers.

PTI 704-84A – Fertilizer Blending Facility

PTI 704-84A covers dry fertilizer receiving, storage, blending, and loading operations. Fertilizer products arrive by railcar and are unloaded via a covered trough conveyor. A distributor routes product through the top of the domes.

There are currently no Design/Equipment Parameters, Testing/Sampling, Reporting, or Stack/Vent Restrictions for EUFERTILIZER.

Table 2 contains all equipment permitted under this PTI for the EUFERTILIZER fertilizer blending facility.

Table 2. EUFERTILIZER equipment

Equipment	Description	PTI/Exemption
Truck loading area	2 loadout spouts used for truck loadout	704-84A
3 Storage domes	Each dome holds dry/granular fertilizer; 1 type of fertilizer per dome: -Potash (0-0-60) -Monoammonium phosphate (11-52-0) -Urea (46-0-0)	704-84A
2 storage bins	Storage bins are located between the 3 domes (1 bin connecting between 2 domes). Stores DAP (10-46-0).	704-84A
Railcar unloading	Cars are only unloaded/no loading. One hopper is unloaded at a time. Railroad tracks are leased from ADM for The Andersons use.	704-84A
Loading trucks with front end loaders	Not observed during the inspection	704-84A
Loading trucks from blending tower	A new blending tower was installed, and in addition to this installation, 2 new truck loading bays were also installed. All were installed in 2012.	704-84A

	This tower has 6 compartments that are used to house different "recipe" blends of fertilizer	
Loading blending tower feed hopper	This hopper/blending unit is located in the storage building and is used to blend micronutrients with the 3 main fertilizers (potash, MAP, and urea).	704-84A
Liquid Blend Fertilizer Storage	A series of tank farms is located adjacent to the defunct APP reactor, each surrounded with secondary containment. The tanks include 4-1,000,000 gallon tanks, 3 – 250,000 gallon tanks, and 12 – 30,000 gallon tanks. The tanks contain various aqueous solutions used to custom blend fertilizers. The tanks would all contain aqueous solutions of weak acids and inorganic salts	Rule 284(2)(h)
Liquid fertilizer loading	3 bays are present to load the liquid fertilizers. The unloading station was originally installed in 1999, but was upgraded in 2014.	Rule 284(2)(i)

Emission Limits

Visible emissions are limited to 10% opacity from the dry fertilizer truck loading area, 3 storage domes, 2 storage bins, the rail car unloading, loading trucks from a front end loader, loading trucks from the blending tower, and loading the blending tower feed hopper from the rail cars (collectively, EUFERTILIZER).

During the inspection, none of the aforementioned equipment was operating and there were no truck loadouts or railcar unloading or use of any of the conveyors or hoppers in order to verify fugitive emissions met the 10% opacity limit. M. Rumsey indicated that spring inspections would provide a better chance for inspectors to view equipment in operation. I saw no visible emissions from these processes.

Visible emissions are limited to 5% opacity from truck loaders and all truck traffic that is operated in conjunction with EUFERTILIZER operations. During the inspection I did not observe any truck traffic associated with the EUFERTILIZER operations. There was truck traffic entering and exiting ADM through the shared plant roadway, and although this is not The Anderson's responsibility, I noted that opacity from their truck traffic would have been less than 5% if a Method 9D reading had been conducted.

There should be no visible emissions from the EUFERTILIZER covered trough conveyor, blending tower, or enclosed bucket conveyor. These pieces of equipment were not operating during the inspection. I saw no visible emissions from this equipment.

Material Limits & Monitoring/Recordkeeping

The Andersons are limited to 663,000 tons of material processed through EUFERTILIZER per 12-month rolling period, as determined at the end of each calendar month. M. Rumsey provided me with August 2018 – July 2019 monthly loadouts of dry bulk blend fertilizer (attached). The 12-month total for this period was 6,144 tons, within the permit's material limit.

Process/Operational Restrictions

The freefall drop distances into the load trucks and off of the rail receiving cars is required to be no more than 2 feet and The Andersons is require to take the necessary actions to minimize the freefall drop distance when loading fertilizer into a truck, the blending tower feed hopper and front end loaders. I was not able to observe railcar unloading, but typically the distance between the bottom of the railcar and the ground-level loading system is less than 2 feet. Future inspections will have to occur to verify this.

M. Rumsey showed me the truck load-out area. One loadout chute is a plastic corrugated drop spout. The Andersons used to have a metal telescopic chute but found that they only lasted 6 months before the need to replace them due to the fertilizers acidity corroding the metal. The other loadout chute has a cloth sock. While I was not able to observe truck loadout of the dry fertilizers, M. Rumsey explained that the truck height is high enough to clear the chutes, so the drop distance between the

chute and the top of the truck is minimal and likely less than 2 feet from the top of the truck. During the 2012 inspection, Brian Culham observed a semi truck and trailer being loaded inside the load out structure. The truck was nearly full and opacity was near 10% at the trailer top; however, the opacity did not extend beyond the dimensions of the trailer. He did not see any opacity exit the structure to the ambient air, nor opacity discharged from any other point on the blending tower equipment.

Future inspections will have to be conducted to verify that the non-telescoping chutes that are currently installed in the truck loadout area are sufficient for minimizing fugitive dust; especially since without telescoping chutes available the ability to minimize free fall distance within the truck bed, below the top of the truck, is hindered. M. Rumsey said that urea is the dustiest of the dry blend fertilizers.

Fugitive Dust Program

Fugitive dust is required to be managed as specified in Appendix A of PTI 704-84A:

The Program requires that vehicles travelling on plant roads shall not exceed 8 mph and signs displaying this 8 mph speed limit must be posted at the entrance and exit of the plant yard.

Upon entering the site, I saw a speed limit sign posted for 12 mph. I made M. Rumsey aware of this requirement and he explained that corporate had sent these signs out to their facilities to regulate truck speed. I gave the option of requesting a modification to the permit, or modifying the speed limit signs throughout the sign from 12 mph to 8 mph. M. Rumsey said he word order number stickers to change the posted speed limit from 12 mph to 8 mph. In follow-up he sent me a photo of one of the updated speed limit signs – The Andersons has changed their speed limit sign from 12 mph to 5 mph, to match the 5 mph truck speed requirement on the truck scale (see attached photo).

The interior road surfaces are requirement to be maintained to prevent fugitive dust, and this includes, but is not limited to patching of cement and asphalt roads, maintaining sufficient gravel on roads and regrading roads to prevent dust build-up, and using dust suppressants on roadways as required.

I observed that half of the plant yard is paved and that there are a few gravel surfaces throughout, particularly near the liquid fertilizer storage and the truck loading areas. M. Rumsey said that the gravel roads around the fertilizer blending operations had just been regraded. He also said that The Anderson chloride the gravel. Their first dust application this year was in May/June, in between the bouts of rain that this area has experienced all spring and early summer. He said that they call in MBH, a local company who comes in and chlorides the gravel roads at The Andersons request. Although there was no truck traffic to determine if opacity limits were being met and that the fugitive dust control measures were adequate, the paved roads appeared well maintained (little to no dust on them) and the gravel roads also appeared to be well-maintained.

The paved truck loadout area is also required to be swept clean daily to prevent dust build-up. I saw no signs of dust on the paved truck loadout areas. All areas appeared to be well-maintained.

All vehicles that are filled with fertilizer leaving the plant shall be loaded so as to prevent their contents from dropping, sifting, leaking, blowing off, or otherwise escaping. They shall be loaded so that no part of the load is less than 6" from the top of the truck, unless the load is covered firmly with canvas or a similar type covering.

I did not observe any loaded trucks leaving the site during the inspection to verify this required practice was taking place. M. Rumsey said The Andersons staff make sure the loads are tarped. He said that prior to exiting the plant, after leaving the dry blend load-out area, they will tarp their loads.

Compliance Statement: The Andersons appears to be in compliance with all requirements under PTI's 704-84A and 758-90A at this time.



Image 1(Speed Limit) : Changed speed limit from 12 mph to 5 mph

NAME Michael Lopez

DATE 9/26/19

SUPERVISOR [Signature]