

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

B886328847

FACILITY: ADM Grain Company		SRN / ID: B8863
LOCATION: 2700 N. STOCKBRIDGE RD, WEBBERVILLE		DISTRICT: Lansing
CITY: WEBBERVILLE		COUNTY: INGHAM
CONTACT: Karena Musgrave, Environmental Specialist		ACTIVITY DATE: 03/18/2015
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled inspection of facility which was last inspected by AQD in 2011.		
RESOLVED COMPLAINTS:		

On 3/18/2015, the DEQ, AQD conducted a scheduled inspection of ADM Grain's Webberville grain terminal. The term *scheduled* refers to an inspection which was committed to, at the start of the fiscal year.

Facility environmental contacts:

Karena Musgrave, Environmental Specialist, ADM Ag Services, Decatur, IL; 217-424-5817;
karena.musgrave@adm.com

Facility description:

This facility is classified as a terminal elevator.

Emission units:

Original grain dryer; Permit to Install No. 614-81

Changes to existing truck unloading station (baghouse for receiving pits and elevator legs); Permit to Install No. 766-83

Newest grain dryer; Rule 285(p)

Regulatory overview:

The following overview is excerpted from the 11/10/2011 inspection report by AQD's Brian Culham:

The elevator was built in 1981 and was called Grand River Grain Company. The original facility included the fertilizer and agriculture supply warehouse to the south. For a period of time the elevator was referred to as The Andersons. In 1989 The Andersons gave up the lease on the grain handling portion of the property and ADM Countrymark took over.

Permit #614-81 was issued for the original grain dryer and required the .094" diameter screen design. Because existing permanent grain storage was less than 2.5 million bushels at this elevator, permit #614-81 did not indicate any New Source Performance Standards (NSPS) subpart DD affected facilities. The permit also did not indicate any NSPS, PSD, LAER, or other federal requirements. In 1983, permit to install 766-83 was issued for changes made to the truck unloading station. A particulate control device was added for dust control. Because the original installation was not NSPS, and because the change did not satisfy the definition of modification, the truck unloading station was not determined to be NSPS DD subject.

Major source status was originally limited by Rule 208a registration. In February 2004 a potential to emit (PTE) demonstration for PM₁₀ was submitted to the AQD. The demonstration was completed in accordance with an EPA white paper on restricting throughput. PM₁₀ PTE was estimated at 50.01 tons per year; less than the 100 ton major source threshold. ADM Grand Ledge is expected to be a true minor source of both criteria air pollutants and hazardous air pollutants (HAPs). Because the source is not expected to be a major source of HAPs it is therefore considered an "Area Source"

The original elevator design was about 1.27 million bushels of permanent grain storage. This is less than the 2.5 million required for a "terminal elevator" designation per NSPS DD. The elevator never milled any grains, nor operated soybean oil extraction, therefore can not be considered a "grain storage elevator". In 1983 buildings were constructed over two outside temporary storage piles. A 1983 permit identified 5.1 million bushels of permanent grain storage; redefining the elevator as a "terminal elevator".

In March of 2011 an initial notification was received indicating the intent to install additional grain storage and handling equipment. In April a second letter indicated the addition of a grain dryer. It is my understanding that the dryer installation would be categorized as NSPS subpart DD affected facility "grain dryer" and installation of conveyors and legs would be identified as the affect facility "grain handling operations". The changes were exempt from Rule 201 permit requirements by Rule 285(p).

Fee status:

Because this facility is subject to the NSPS Subpart DD, it is considered a category II fee facility. The company is assessed an annual facility fee, and a per ton emission fee. The emissions are reported each year, via the Michigan Air Emission Reporting System (MAERS).

Location:

ADM Webberville is a Grain Handling and Storage Elevator located west of the town of Webberville on Stockbridge Rd., also known as M-52. The elevator is just north of the I-96 interchange. A railroad runs along the north side of the elevator. The area is rural. The Andersons, Inc. fertilizer and warehouse supply shares the main drive. The Andersons, Inc. has a separate State Registration Number (SRN), N0863.

Recent history:

AQD has never received any complaints associated with this terminal elevator. The adjacent fertilizer plant, the Andersons, was the source of a 1996 complaint, but that had no connection to ADM Grain Company.

Arrival:

I arrived at 9:01 AM at the site. Weather conditions were sunny and clear and 30 degrees F, with winds out of the northwest at 10-15 miles per hour. I observed a Bobcat with a sweeper attachment, sweeping up dust on concrete paved areas of the yard.

Upon signing in at the office, I presented my identification/credentials, per AQD procedure, and provided a copy of the DEQ brochure *Environmental Inspections: Rights and Responsibilities*, also per AQD procedure. I met with 7 ADM personnel, including Ms. Karena Musgrave, Environmental Specialist, ADM Ag Services, from their Decatur, IL offices, Mr. Nick Boyce, Superintendent of ADM Grain's Webberville facility (who has since left the company), Mr. Thomas Butcher, Manager of ADM Grain's Webberville facility, Mr. Chad Dunkel, Superintendent of ADM Grain's Grand Ledge facility, Libby, an ADM trainee, Jason Boyer, Regional Operations Manager from Toledo, and Rick Ramthun, Regional Grain Manager from Toledo.

A number of ADM's Michigan facilities appear to qualify for the Rule 285(p) exemption for grain dryers meeting specific criteria, and grain handling and a storage. The question was raised by Ms. Musgrave as to what air requirements are applicable for facilities that are exempt from needing an air use permit. We discussed Rule 301, regarding opacity limits, Rule 901, regarding nuisance situations, Rule 910, regarding proper installation, operation, and maintenance of control equipment, and Rule 912, regarding reporting of emissions in excess of a standard.

We discussed the possibility of this facility handling canola meal pellets. It appears, from a recent discussion I had with AQD's B. Culham, that the potential storage and handling of canola pellets should fall under the Rule 285(p) exemption for grain unloading, handling, cleaning, storing, loading, or drying in a grain dryer with column plate perforation of not more than 0.094 inch. The NSPS Subpart DD does

not specifically acknowledge canola under its definition of *grain*, but it also does not acknowledge other common grains in Michigan, such as dry beans. We discussed the possibility of ADM providing AQD with a list of possible dry materials they might consider handling at some point, even if not in the immediate future, to determine if they would fall under the Rule 285(p) exemption.

Inspection:

I was informed that current storage capacity is 6.1 or possibly 6.3 million bushels of dry grain storage.

Original grain dryer; PTI No. 614-81:

The original grain dryer was not running, at this moment. I measured the opening on the perforated plates of the unit, and observed that they are less than 0.094 inches, or 3/32 of an inch, in diameter. This appears to satisfy both the NSPS, and the Michigan Rule 285(p) exemption for grain dryers. This dryer has a capacity of about 5,000 bushels, I was informed.

Newest grain dryer; Rule 285(p):

The newest grain dryer was installed in 2011. Today, it was partially disassembled, for yearly maintenance work. It has a capacity of about 7,000 bushels, I was informed. The 11/20/2011 inspection report by B. Culham indicates his understanding that this unit is the only NSPS-subject grain dryer at the site.

Changes to existing truck unloading station (baghouse for receiving pits and elevator legs); Permit to Install No. 766-83:

The truck unloading station has two grain receiving pits, controlled by a baghouse. I observed the baghouse in operation, when a truck dumped a load of soybeans into one of the pits. There were no visible emissions from the baghouse exhaust. There is a sight glass on a line leading to the baghouse, so any plugging in the line is visible. Collected grain dust is mixed back into the grain. I was informed that they close the west door of the truck unloading building, when truck trailers are short enough to allow it. This tandem trailer truck was so long, that it was not possible to close the west door.

The unloading station is not subject to Subpart DD, so it is not subject to the 5% opacity limit in the NSPS. It is subject to the 20% opacity limit in PTI No. 766-83, and in Michigan Air Pollution Control Rule 301. When the soybean truck mentioned above dumped the first of its two trailers, for a matter of seconds there was a small cloud of fugitive dust which left the truck unloading area. The opacity was 5-10% instantaneously, but over a 6-minute averaging period, it would have been well below the 20% limit.

Grain handling and storage equipment; Rule 285(p):

There is equipment for loading rail cars and trucks. I did not observe any grain being loaded, during the inspection.

Conveyors and elevator legs are completely enclosed, except for one uncovered conveyor, which leads to one of the two flat storage buildings. As our group came around a silo and was positioned downwind of this overhead conveyor, it suddenly started up. Accumulated grain dust came off the conveyor belt, in a fugitive dust cloud that reached 80-100% opacity. ADM staff called one of their operators immediately, and advised them to stop this conveyor, for now. I was informed that this conveyor had not been used in several months, and grain dust and snow had built up on it, meanwhile. I inquired if this level of dust was typical of this conveyor belt, and I was assured that typically there is little to no dust, and that often an observer would not even know the belt is running, because opacity is 0%. Because this was a startup situation, after a long period of non-operation, I did not consider this to be a compliance problem.

They have been applying calcium chloride to unpaved parts of the site which are used by truck traffic, I was informed. An unpaved roadway and a large, unpaved yard area at the east of the site were being

readied for concrete to be poured. This is expected to cut down emissions of fugitive dust from the site. This is a completely voluntary action by ADM Grain.

Conclusion:

I did not identify any instances of noncompliance. The overall appearance of the facility was clean and neat. Facility staff were very knowledgeable and professional. I left the site at 11:45 AM.

NAME [Signature] DATE 5/14/2015 SUPERVISOR B.M.