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

M191728038

FACILITY: Lapeer Grain - Imlay City		SRN / ID: M1917
LOCATION: 140 E SECOND ST, IMLAY CITY		DISTRICT: Lansing
CITY: IMLAY CITY		COUNTY: LAPEER
CONTACT: Todd Butterfield , Plant Manager		ACTIVITY DATE: 12/15/2014
STAFF: Daniel McGeen	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Inspection of grain elevator mistakenly identified as Lapeer Grain East, in earlier AQD activity reports. (Lapeer Grain East is actually in the City of Lapeer.)		
RESOLVED COMPLAINTS:		

On 12/15/2014, the DEQ, AQD conducted an unannounced, scheduled inspection of Lapeer Grain - Imlay City, a facility which has been mistakenly referred to by prior AQD inspectors as Lapeer Grain East.

Facility contact:

Todd Butterfield, Plant Manager; 810-724-4915; fax: 810-724-0683

Emission units:

Quantity	Emission unit description	Relevant exemption rule	Applicable federal regulations	Operating status, at time of inspection
1	Horizontal grain dryer	285(p)	NA	Compliance
1	Grain receiving pit	285(p)	NA	Compliance/not operating
2	North pair of vertical storage bins, 43,000 bushels each	285(p)	NA	Compliance
2	South pair of vertical storage bins, 49,000 bushels each	285(p)	NA	Compliance
2	Overhead grain bins, 3,000 bushels each	285(p)	NA	Compliance
1	Truck loading bin, 3,000 bushels	285(p)	NA	Compliance
1	Rail car loading process	285(p)	NA	Compliance/not operating
1	Feed mill	285(p)	NA	Compliance
1	Vertical storage bin for feed mill, 32,000 bushels	285(p)	NA	Compliance

Regulatory overview:

This facility is classified as a minor source for criteria air pollutants in general, although no specific criteria pollutant, was identified in the Regulatory Summary screen in the Michigan Air Compliance Enforcement System (MACES) database. Given the size of this grain elevator (see discussion on Subpart DD, below), it does not likely have the Potential to Emit (PTE) to be a major source for particulate matter smaller than 10 microns in diameter (PM-10), or particulate matter smaller than 2.5 microns in diameter (PM2.5). I have therefore flagged it as a true minor for particulate matter (PM) in MACES. It is also classified as an area source, rather than a major source, for Hazardous Air Pollutants.

This facility is not considered subject to 40 CFR Part 60, Subpart DD, the Standards for Performance for Grain Elevators. As indicated in a 1/13/2010 inspection activity report by AQD's Kenneth Terry, total permanent storage capacity is approximately 210,000 bushels. A grain elevator with a total permanent storage capacity of 2.5 million bushels would be classified as a *grain terminal elevator*, subject to DD. The U.S. Environmental Protection Agency Jim Seitz memo of 11/14/1995, *Calculating Potential to Emit for Grain Handling Facilities*, uses a 14 million bushel throughput facility as an example, and estimates a PTE of 50 TPY for PM-10. It is therefore very unlikely that a 210,000 bushel facility would have a large enough PTE for PM-10 to be a major source.

The facility is not considered subject to 40 CFR Part 63, Subpart DDDDDDD, the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for Area Sources: Prepared Feeds Manufacturing, as will be discussed later in the course of this activity report.

There are no air use permits currently associated with this facility. Rule 285(p) exempts from the requirement to obtain a permit to install:

(p) Commercial equipment used for grain unloading, handling, cleaning, storing, loading, or drying in a column dryer that has a column plate perforation of not more than 0.094 inch or a rack dryer in which exhaust gases pass through a screen filter no coarser than 50 mesh.

Rule 310 of the Michigan Air Pollution Control Rules limits visible emissions from air emissions sources to 20% opacity, averaged over a 6-minute average, except for one 6-minute average per hour not to exceed 27% opacity. The 20% opacity limit is applicable to the Rule 285(p) exempt processes at the site.

Fee status:

This facility is not considered fee-subject, for the following reasons. Because it is not a major source for criteria pollutants, it is not classified as Category I. Additionally, because it is not a major source for Hazardous Air Pollutants (HAPs), and is not subject to federal New Source Performance Standards, it is not classified as Category II. Finally, because it is not subject to federal Maximum Achievable Control Technology standards, it is not classified as Category III. The facility is not required to submit an annual air emissions report via the Michigan Air Emissions Reporting System (MAERS).

Location:

This facility is located in downtown Imlay City, immediately south of the central commercial district. A parking lot separates the facility from the businesses to the north, by about 200 feet. There are residential neighborhoods about 400 feet to the southwest of the site, and about 400 feet to the south. Aboout 200 feet east of the site are other industries.

Recent history:

AQD has not received any complaints about this facility since 2007. In 2009, however, the city government contacted AQD to report that they were receiving complaints, and AQD's Kenneth Terry (now retired) subsequently visited the site. The company explained what steps they were taking to deal with fugitive dust concerns. An anhydrous ammonia tank was removed from the plant in 2009, and the Permit to Install, No. 411-94, was voided at that time. The most recent AQD visit to the site was K. Terry's 1/13/2010 inspection, during which no compliance issues were found.

Arrival:

I drove through the city parking lot north of the facility, upon entering Imlay City. I observed steam from the grain dryer, which is on the north side of the property. Winds were out of the south, and I could smell a light scent of grain drying. I did not judge the scent to be a problem. I arrived at the office at 12:40 PM. I learned that Mr. Ray Graham, the former plant manager, has retired. Mr. Todd Butterfield is the current plant manager. I provided a copy of the DEQ brochure *Environmental Inspections: Rights and Responsibilities*, per AQD procedure.

Inspection:

The overall housekeeping of the site was very good, as shown in the first two of the three attached photos. These images show a truck loading bin with a sock on the downspout, and two large storage bins to the immediate north. There were only a few tiny spots of spilled corn at the site, and the amount of beeswings and other grain dust was generally minimal, to miniscule.

Horizontal grain dryer; Rule 285(p):

Rule 285(p) exempts grain dryers in a column dryer that has a column plate perforation of not more than 0.094 inch or a rack dryer in which exhaust gases pass through a screen filter no coarser than 50 mesh.

K. Terry's 1/13/2010 inspection report indicated that this dryer has hole size less than 0.094 inches, thereby meeting the exemption criteria.

The only location onsite where there was a moderate amount of beeswings was on the pavement underneath the grain dryer, or close by. I did not find these particulates to be excessive, at this time. The dryer was drying corn, and the only visible emissions were steam (please see third photo), except for 2 or 3 individual beeswings over a time period of roughly 5 minutes. This unit performed considerably better than the dryers I have seen at other grain elevators. The scent of drying grain was fairly light, and was not unreasonable.

The end of the season for receiving grain will be about one week from now, Mr. Butterfield estimated. He explained that the season started and will end about a week later than normal, as the wet spring got planting crops off to a late start this year.

Grain receiving pit; Rule 285(p):

They have a truck receiving pit within a corrugated metal building. The east and west ends of the building were open, but have overhead doors that are closed at night. The door at the east end of the structure is closed on windy days, when trucks are unloading grain into the pit, to prevent fugitive dust. The west door cannot be closed during the unloading process, as that would not allow room for the trucks themselves. No trucks were unloading, at this time. I was informed that the pit does not have a dust collection system. There was some fine dust on the pavement around the doors of the metal building, but it did not appear to be excessive.

Truck loading bin; Rule 285(p):

The truck loading bin, with a sock on the downspout, is pictured in the third photo. This bin is 3,000 bushels in size.

Rail car loading process; Rule 285(p)

They have not loaded any rail cars yet this year, Mr. Butterfield said. Railcar traffic has greatly declined over the years.

Feed mill; Rule 285(p):

There were no emissions of dust from the feed mill. They mix feed for cattle, horses, and hogs. I asked if they add any chromium or manganese to their mixtures, as this could subject them to 40 CFR Part 63, Subpart DDDDDDD, the NESHAP for Area Sources: Prepared Feeds Manufacturing. Mr. Butterfield indicated that they do not add these materials. He explained they do not add any medicated materials to their feeds, as they are not licensed to do so.

Vertical storage bin for feed mill; 32,000 bushels; Rule 285(p):

There is a large storage bin immediately east of the feed mill (shown in the second attached photo), which stores grain for the feed mill. It was currently storing corn. There were no emissions of dust from the storage bin.

Conclusion:

I found no instances of noncompliance. I did not see any dust emissions, only 2 or 3 single beeswings in the air near the grain dryer. Opacity for all emission units at the site was 0%, instantaneously. The facility was clean and neat, and overall housekeeping practices were very good. I did not find any areas of concern. Mr. Butterfield was very professional. I left the site at 1:22 PM.

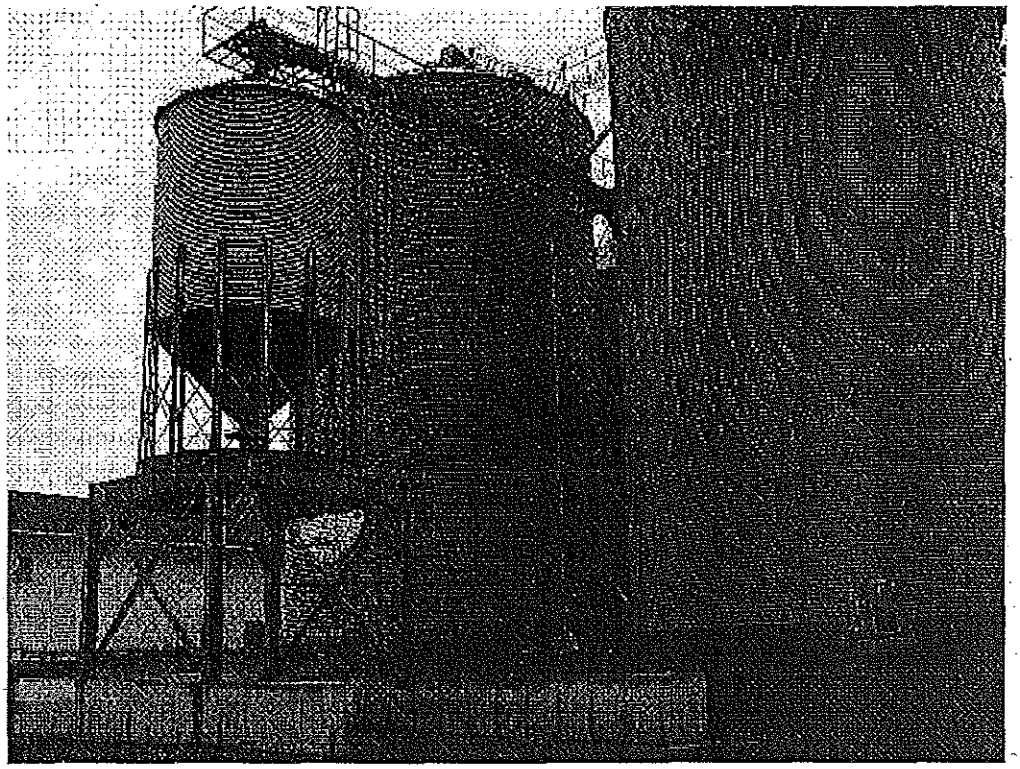

Image 1(Truck loading bin) : Note sock on downspout, and cleanliness of the area.

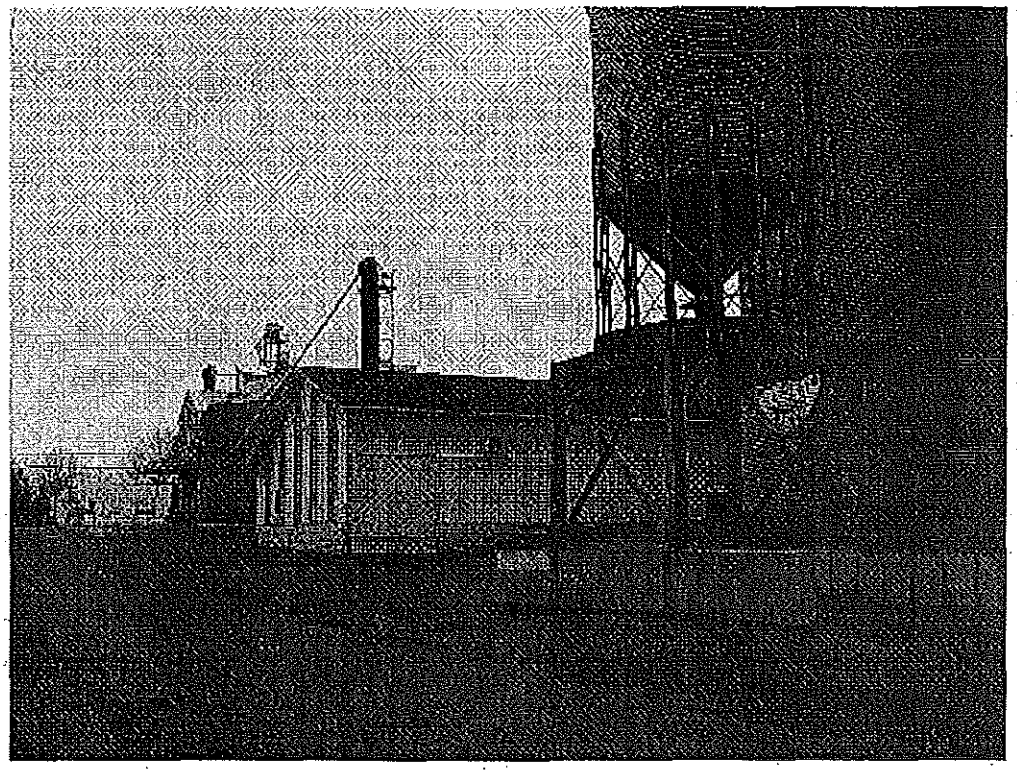

Image 2(NW portion of site) : Looking NW, towards distant feed mill and its single large storage bin.

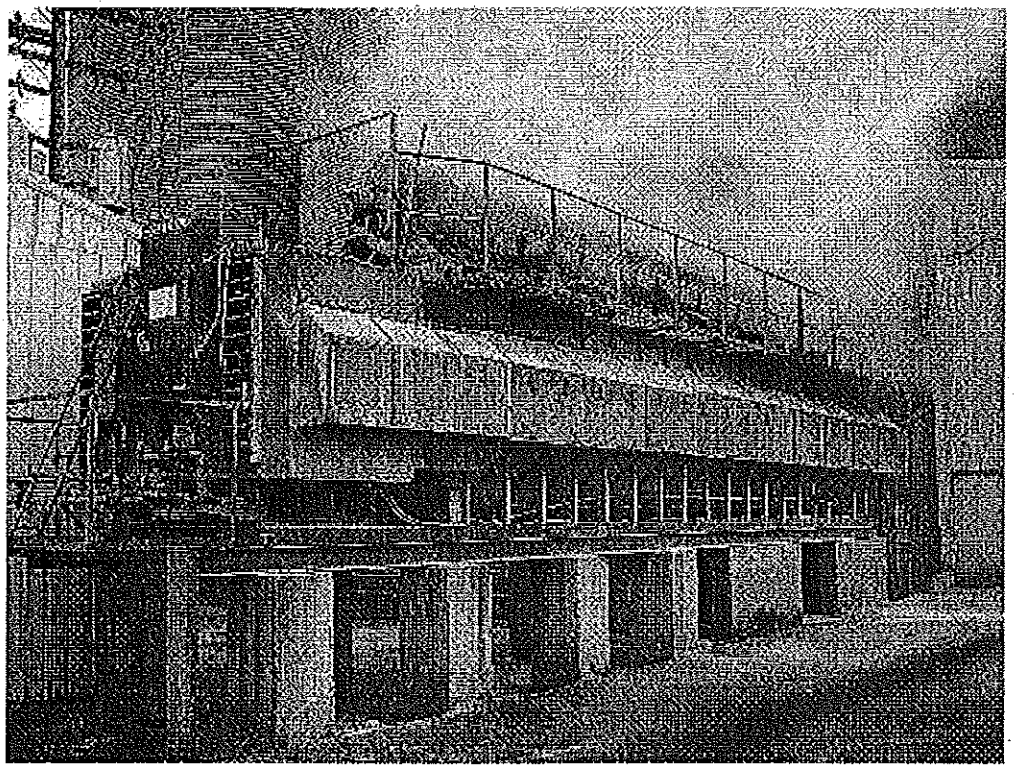

Image 3(Grain dryer) : Horizontal grain dryer, currently drying corn.

NAME _____ DATE 1/5/2015 SUPERVISOR B.M.