

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

B498650235

FACILITY: MICHIGAN AGRICULTURAL COMMODITIES, INC		SRN / ID: B4986
LOCATION: 7575 Monroe Rd, BRECKENRIDGE		DISTRICT: Lansing
CITY: BRECKENRIDGE		COUNTY: GRATIOT
CONTACT: Adam Geers , Manager		ACTIVITY DATE: 08/08/2019
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Unannounced, Scheduled Compliance inspection to determine compliance with PTI 628-82 and NSPS Subpart DD requirements.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow

Personnel Present: Adam Geers (ageers@michag.com), Facility Manager

Purpose:

Conduct an unannounced, scheduled compliance inspection by determining compliance with Michigan Agricultural Commodities' (MAC) Permit to Install (PTI) No. 628-82 for a Zimmerman Grain Dryer and the NSPS Subpart A and Subpart DD, Standards of Performance for Grain Elevators. Special attention was paid to whether any "affected facilities" (as defined in 40 CFR 60 Subpart DD) were installed, modified, or reconstructed since April 2013, when MAC was last inspected.

Facility Background/Regulatory Overview:

Michigan Agricultural Commodities (MAC) is a grain handling operation that receives and ships out grain via rail and truck. Commodities include corn, soybeans, wheat, oats and edible beans. During the inspection their current operations involved shipping corn via truck and receiving wheat.

MAC is subject to NSPS Subpart DD for Grain Elevators because they are a terminal grain elevator. Table 1 contains all equipment, including NSPS Subpart DD-subject "affected facilities." A grain terminal elevator is any elevator that meets or exceeds 2.5 million bushels of permanent storage capacity (according to 60.301(c)). According to a 2006 letter to the DEQ (now EGLE), MAC at 7575 Monroe became a terminal grain elevator in 1981 at 2,779,400 bushels. According to Adam Geers, Facility Manager, the current permanent storage capacity is 10 million bushels. Therefore, any affected facilities installed, modified or reconstructed after 1981 would become subject to the requirements contained within the NSPS Subpart DD.

"Affected facilities" include each truck loading and unloading station, each railcar loading and unloading station, each grain dryer, and all grain handling operations (which the NSPS Subpart DD defines as bucket elevators/legs, scale hoppers and surge bins, turn heads, scalpers, cleaners, trippers, and the headhouse). Table 1 details which equipment are affected facilities under the NSPS Subpart DD.

Table 1. MAC equipment

Equipment type	Equipment Description	Control Device	NSPS Subpart DD "affected facility?"	Installation Date	Exemption/ Permit
Two (2) HP 4500 Zimmerman Grain Dryer	Natural gas-fired Zimmerman column grain dryers	Column plate perforations less than 0.094 inches diameter	No	1983	One permitted under PTI 628-82; one exempt under Rule 285 (2)(p)
1 Zimmerman Grain Dryer	10,000 bushels/hr, 108 mmbtu/hr	Column plate perforations less than 0.094 inches diameter	Yes	9/24/12	Rule 285(2)(p)
One GSI Grain Dryer		Column plate perforations less than 0.094 inches diameter	Yes	1998	Rule 285(2)(p)
	20,000 bushel /hr	Enclosed	Yes	Sept/Oct 2012	Rule 285(2)(p)

GSI Bucket Leg					
1 Rail Unloading Station	Unenclosed unloading area, flow into pit is regulated by how wide the gate on the railcar is open (free-falling grain)	None	No	1976	Rule 285(2)(p)
1 Rail Loading Station	Loadout spout off of a silo	None	No	1976	Rule 285(2)(p)
3 Truck Receiving pits	3 Truck receiving pits are available but only 2 are in use. All are 2 sided, with the option to have the bay doors closed to create 4-sided enclosed areas	2-to 4-sided enclosure	No	1976	Rule 285(2)(p)
17 Truck loading stations	There are 17 truck loading stations (load-out spouts), but only 7 of them are used. The remaining 10 are no longer easily accessible by truck.	None	No	1976	Rule 285(2)(p)
Twenty (20) 70,000 bushel storage silos	Concrete silos	None	No	NA	Rule 285(2)(p)
One (1) 40,000 bushel storage silo	Concrete silo	None	No	NA	Rule 285(2)(p)
Seven (7) 25,000 bushel storage silos	Concrete silos	None	No	NA	Rule 285(2)(p)
Six (6) 13,000 bushel storage silos	Concrete silos	None	No	NA	Rule 285(2)(p)
Three (3) 12,000 bushel storage silos	Concrete silos	None	No	NA	Rule 285(2)(p)
Four (4) 9,000 bushel storage silos	Concrete silos	None	No	NA	Rule 285(2)(p)
Two (2) 750,000 storage silos	Steel silos	None	No	NA	Rule 285(2)(p)

Six (6) 500,000 bushel storage silos	Steel silos	None	No	NA	Rule 285(2)(p)
Four (4) 470,000 bushel storage silos	Steel silos	None	No	NA	Rule 285(2)(p)

Inspection:

At approximately 12:15 p.m. on August 8, 2019 I arrived MAC – Eastman located at located at 216 Eastman Street, Breckenridge, where Adam Geers office is located. I explained to him that I was there to check on the NSPS Subpart DD status of the Monroe Rd facility, and provided him with a June 2019 Permit to Install Exemptions Handbook. We drove separately over to the Monroe Rd facility (7575 Monroe Rd) to conduct the inspection. MAC shares a driveway with Nutrien fertilizers (formally Crop Production Services, CPS) off of Ransom Road.

A. Geers proceeded to show me around the facility on-foot. I did not observe any grain loading or unloading of any kind during the inspection. The facility appeared to be well-maintained. There were no signs of beeswings throughout the property.

PTI No. 628-82 – Zimmerman Grain Dryer

Special Conditions:

10) Visible emissions are limited to 5% opacity. The grain dryers were not operating during the inspection, therefore there were no visible emissions from the grain dryer.

11) The grain dryer is required to have colum plate perforations less than or equal to 0.094 inches, which all MAC grain dryers currently have.

12) There is no collection of air contaminants onsite, therefore special condition 12 is satisfied.

13) This Zimmerman Dryer is natural gas-fired, and has been always used. Special condition 13 is satisfied.

NSPS Subpart DD

According to P. Thebo and D. Marr, on September 24, 2012 the installation of the Zimmerman Dryer with a rated capacity of 10,000 bushels/hr and 108 MMBTU/hr was completed. In September/October 2012 the GSI 20,000 bushel/hr bucket leg was also installed. Because MAC is a terminal grain elevator, notification of any installations of "affected facilities" after becoming a terminal grain elevator must be submitted to the AQD (per NSPS Subpart A, section 60.7(a)(1)). A violation notice was sent April 29, 2013, and the response for the violation (notification of the installations) was received April 29, 2013 via email. Method 9 testing of the leg was conducted on December 3, 2013 and shown to be in compliance with the 0% opacity NSPS Subpart DD limit.

A. Geers said that all other "grain handling operations" (as defined by the NSPS Subpart DD) are all original – there have been no removals or replacements of this equipment, and they were all installed in 1976, thus installed prior to the NSPS Subpart DD enactment date of August 3, 1978.

Source Category/MAERS

MAC is determined to be a minor source of PM-10. According to P. Thebo through the 2018 MAERS submittal, the throughput for calendar year 2018 was 234,747 tons through the grain receiving equipment. The annual throughput is therefore 6,573 bushels (2000 lbs/ton, 56 lbs/bushel conversions). According to the white paper "Calculating Potential to Emit (PTE) and Other Guidance for Grain Handling Facilities" dated 11/14/95 from John Seitz, Director of the Office of Air Quality Planning and Standards, truck or rail receiving/truck or rail shipping (which is used at MAC) has an associated PTE of 50 tons/year of PM-10 emissions for a throughput of 14 million bushels. Assuming a linear relationship between the number of bushels and PM-10 emissions, the PTE PM-10 emissions for MAC for less than 10.4 million bushels, thus less than 37 tons/year; therefore, MAC has not reached the 100 ton/year PM-10 threshold to be considered a major source of PM.

MAC is required to report to MAERS because they are NSPS-subject.

Compliance Statement: MAC appears to be in compliance with all applicable permit conditions, applicable state conditions, and NSPS Subpart DD regulations at this time.

NAME Murray Lyons DATE 9/25/19 SUPERVISOR B.M.