

DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Self Initiated Inspection

B871232537

FACILITY: Cassel Farms Grain System		SRN / ID: B8712
LOCATION: 254 Main Street, SUNFIELD		DISTRICT: Lansing
CITY: SUNFIELD		COUNTY: EATON
CONTACT: Jim VanHeyninen , Manager		ACTIVITY DATE: 11/20/2015
STAFF: Michelle Luplow	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Self-initiated compliance inspection to determine compliance with an active permit and verify that the facility was still in operation.		
RESOLVED COMPLAINTS:		

Inspected by: Michelle Luplow (author) and Nathan Hude (AQD Lansing District)

Personnel Present: Jim VanHeyninen, manager (yogijv@yahoo.com)

Other Relevant Personnel: Dave Cassel, owner (casselfarms@yahoo.com)

Purpose: Conduct an unannounced, self-initiated compliance inspection by determining if Cassel Farms is subject to the NSPS Subparts A and DD, Standards of Performance (NSPS) for Grain Elevators, as well as their compliance status with Permit to Install (PTI) No. 366-81 for a modified grain receiving pit and handling system, 2 new grain storage silos, railroad car loadout, and truck loadout. There are currently no records in MACES that this facility has ever been inspected. There are no records of any complaints from this facility.

Facility Background/Regulatory Overview: Cassel Farms used to be Smith Brothers, Velte & Co before Crop Production Services owned the site and then owned by Cassel Farms. J. VanHeyninen said Cassel Farms took possession of the grain elevator on September 10, 2010. They process and store soybeans and corn and J. VanHeyninen considers the facility a private farm, as 90% of what they process is for private farmers.

Inspection: This was an unannounced self-initiated compliance inspection. At approximately 8:40 a.m. on November 20, 2015 N. Hude and I met with Jim VanHeyninen who gave us a tour of the facility. I explained to him that the main reason we were there was to determine if the facility was still open, determine if the equipment listed in the permit was still present, and determine NSPS DD applicability. I provided him with a DEQ "Environmental Inspections: Rights and Responsibilities" brochure, as well as an exemption handbook and my business card.

There are currently 21 silos, 3 column grain dryers, 2 truck loadout areas, 1 rail loadout, 1 unenclosed dump pit with a vacuum system for control of dust, 1 enclosed dump pit, and another dump pit with cyclone dust control. There are also 2 additional dump pits that have not been used in quite some time, which are currently used for storage of farm equipment and are part of the original elevator. See attached map for elevator layout.

NSPS DD

J. VanHeyninen said the 21 silos store a total of 775,000 bushels, where 10% of this capacity is leased to 2 farmers for their storage. Based on this permanent storage capacity, the Cassel Farms elevator is not considered a "terminal grain elevator" and therefore is not subject to 40 CFR 60, New Source Performance Standard DD (NSPS Subpart DD). In order to trigger NSPS DD, a grain elevator must have greater than 2.5 million bushels of permanent storage capacity. If Cassel Farms ever exceeded 2.5 million bushels of permanent storage capacity, they would become subject to NSPS DD and automatically have to report to MAERS.

Exemption Rule 1285(p)

All 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 inches are exempt from obtaining a permit to install.

J. VanHeyninen said that the newest dryer was installed in August 2003 and that the other two grain dryers were installed around 1980 (plus or minus a few years). He said the screen openings on all of the dryers are 3/32 of an inch (0.094 inches) and they are therefore exempt from obtaining a permit to install. All other equipment located at this site is also exempt from a permit to install. I informed J. VanHeyninen that if Cassel Farms wanted they could void their PTI 366-81 because all equipment permitted in the permit is now exempt.

PTI No. 366-81

Visible emissions shall not exceed 20% opacity from grain handling, storage, receiving and load out equipment. There were no visible emissions during the inspection from any of the aforementioned equipment; however, the plant was not operating during the inspection to verify emissions during operation.

Loading out via rail and truck, the loading spout is required to be below the level of the top of the rail car or truck. J. VanHeyninen said that the spout reaches about 1" above the top of the rail car or truck. This condition is predominantly established to prevent opacity exceedences when grain is loaded into one of these two vessels. Future inspections during load-out will have to occur in order to determine if the loadout spout is in the correct position during load out.

Cassel Farms is also required to dispose of collected air contaminants (beeswings/grain dust) in a manner that minimizes the introduction of air contaminants to the outer air. J. VanHeyninen said that the collected beeswings and grain dust is trucked to Cassel Farms' fields and chisel-plowed into the field. Without observing this process it is uncertain whether or not reintroduction into the air could occur when the beeswings and grain dust are applied to the farm fields. If they were only applying to the surface of the field, without plowing, it may be some cause for concern, but because it is being plowed into the field, it is my understanding that this would not be reintroduced in the air and therefore Cassel Farms would be in compliance with this condition.

MAERS

J. VanHeyninen said that the 2014 throughput was 600,000 bushels and the 2015 throughput, as of the inspection, was 700,000 bushels. 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 Cassel Farms) 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 PM-10 emissions from Cassel Farms for approximately 850,000 bushels would be approximately 2.5 tons PM10/year for 2015. Cassel Farms would have to be emitting 15 tons of PM-10 per year in order to be required to report to MAERS.

Cassel Farms is in compliance with all applicable state and federal regulations at this time.

NAME M. M. Light DATE 12-15-15 SUPERVISOR B. M.