

## DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

**ACTIVITY REPORT: Self Initiated Inspection** 

B870424794

FACILITY: Michigan Turkey Producers Co-Op Inc.		SRN / ID: B8704
LOCATION: 2140 CHICAGO DR, WYOMING		DISTRICT: Grand Rapids
CITY: WYOMING		COUNTY: KENT
CONTACT: Steve Young , Facilities/Maintenance Manager		<b>ACTIVITY DATE:</b> 03/31/2014
STAFF: April Lazzaro	COMPLIANCE STATUS: Non Compliance	SOURCE CLASS: Minor
SUBJECT: Unannounced, uns	cheduled inspection.	
RESOLVED COMPLAINTS:		

Staff, April Lazzaro arrived at the facility for an unannounced, unscheduled inspection and met with Mike Hart, Maintenance and Engineering Manager. He contacted Steve Young, Facilities and Maintenance Manager and Christi Overbeek, Security/Facility Manager PSM Coordinator to assist with the inspection. Staff presented the DEQ Environmental Inspections: Rights and Responsibilities brochure and its contents were discussed.

The last inspection by AQD was in 2009 where it was reported that the existing permitted boiler had been removed and replaced with an exempt boiler. The facility has conducted an expansion since then, and this inspection was conducted to determine if any regulated equipment had been installed. This facility is a turkey slaughter and piecing operation. The turkeys come in and are processed for sale in pieces. Much of the turkey processed here goes to the Michigan Turkey Producers facility located at 1100 Hall Street SW, Grand Rapids, MI.

It was discovered that in 2002 or 2003, the facility installed four used Caterpillar co-generation, peak shaving, natural gas fired, spark ignition, 4-stroke rich burn reciprocating internal combustion engines and associated generators which were not identified during the 2009 inspection. Two of the units are 500 KW or 671 HP engine/generator sets, one is a 350 KW or 469 HP engine/generator set and one is a 300 KW or 402 HP engine/generator set. No serial numbers have been identified, the approximate age of them is estimated to be 1970's. These engines as installed have an AQD calculated Potential to Emit (PTE) for NOx of 165.5 tons and CO of 264.4. The PTE is above major source significance thresholds as defined in Rule 336.1119(e). However while the specifics of actual emissions are unknown, they are expected to be below major source levels based on the current use of the equipment. A Violation Notice (VN) will be sent for Rule 336.1201. In the VN, the company will be required to submit a PTE demonstration. If this PTE indicates the facility potential emissions above major source thresholds, an additional VN will be sent for Rule 336.1210.

These engine/generator sets are area sources of Hazardous Air Pollutants (HAP) and are therefore subject to the Reciprocating Internal Combustion Engine Area Source NESHAP. The AQD does not have delegation of the Area Source RICE regulation and so while the company may have requirements for reporting to the EPA, Michigan will not evaluate this for compliance.

The facility has a Cummins 150 KW or 201 HP natural gas fired emergency spark ignition engine manufactured in January 2012 and installed in January 2013. This engine is subject to the New Source Performance Standard (NSPS) JJJJ for Stationary Spark Ignition Internal Combustion engines. A copy of this regulation has been provided to the company for review. Staff has been told that it is a certified engine, though documentation has not yet been provided. The regulation requires a certificate of conformity that complies with the emission standards and requirements as applicable. Staff has requested documentation on engine certification be submitted by April 10, 2014. Staff was provided with a document during the April 1, 2014 inspection at the Hall St. facility that is dated 2009 and does not meet the criteria as a certificate of conformity. A compliance determination will be made following receipt of additional information. Staff will hold off on issuing a VN until after this information is received and compliance with the NSPS has been determined.

The facility also has a small boiler that was previously determined to be exempt per Rule 282. Two 175,000 Kemco natural gas fired hot water heaters are utilized. These water heaters also appear to be exempt per Rule 282.

Due to the gas burning equipment on site, staff has also requested a Greenhouse Gas (GHG) evaluation be conducted. Ms. Overbeek will work on this and supply information to the AQD.

This facility also utilizes CO2 in a 40 ton tank as well as CO2 pellets. These emissions need to be included in a Greenhouse Gas Potential to Emit (GHG PTE) calculation exercise that has been requested from the company. Unfortunately, AQD staff was unable to find information on emissions from the CO2 flakes. It is recommended that the supplier or other industry connections be consulted.

Staff was able to inform MTP that they will likely receive a VN with regard to the co-generation engine/generator sets. Additionally, e-mails with information on the RICE NESHAP, NSPS JJJJ, PTE and GHG have been sent to the facility contacts.

DATES-HH SUPERVISOR

The facility was in non-compliance at the time of the inspection.