

**DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: On-site Inspection**

N624971710

FACILITY: Wolverine Power, Vestaburg Power Plant		SRN / ID: N6249
LOCATION: 8614 Vestaburg Road NE, VESTABURG		DISTRICT: Grand Rapids
CITY: VESTABURG		COUNTY: MONTCALM
CONTACT: CORNELIUS BORNMAN , CHEIF OPERATOR		ACTIVITY DATE: 04/15/2024
STAFF: Laura Martin	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: The purpose of this inspection was to determine compliance with permit to install (PTI) Number 388-08B and other applicable air quality rules and regulations.		
RESOLVED COMPLAINTS:		

On Monday April 15, 2024, Department of Environment, Great Lakes, and Energy (EGLE) Air Quality Division (AQD) staff Laura Martin (LM) and Chris Robinson (CR) conducted an unannounced, scheduled inspection of Wolverine Power – Vestaburg Power Plant located at 8614 Vestaburg Road NE, Vestaburg Michigan. The purpose of this inspection was to determine compliance with Opt-Out permit to install (PTI) Number 388-08A and other applicable air quality rules and regulations.

Prior to arriving on site, LM observed the area for any opacity and odors; none were noted. LM and CR arrived on site around 1:30 pm and met with Mr. Kevin McCarthy accompanied LM and CR on the inspection. Mr. Cornelius Bornman, chief plant operator, was out of office that day.

Weather conditions were sunny, approximately 65°F with ESE winds at 3mph (weatherunderground.com).

Facility Description

Wolverine Power – Vestaburg Power Plant (Wolverine) is an electric power producing facility that has one (1) GE Frame 5 dual fuel simple cycle combustion turbine. While this unit is dual fuel, the unit primarily runs on natural gas, which the exception of diesel for startup.

This facility is a peaking facility, meaning it runs infrequently, running when electricity demand is high. The facility was not running any equipment at the time of the inspection. The site formerly had two (2) Worthington VEE 16 Diesel generating units that have now been decommissioned but remain onsite for potential use again in the future.

Regulatory Analysis

Wolverine currently holds one (1) permit, Opt-Out PTI No. 388-08A, and contains a synthetic minor limit for NOx. The facility is considered a minor source for all other criteria pollutants and for hazardous air pollutants. The now decommissioned Worthington engines were subject to the national emissions standards for hazardous air pollutants promulgated under 40 CFR Part 63

Subpart ZZZZ for reciprocating internal combustion engines for area sources, for which the AQD does not have delegation. If Wolverine put these back into service, this regulation would become applicable again.

Mr. McCarthy escorted LM and CR around the facility explaining the history of the site and potential opportunities for the future if it is ever decided to put the decommissioned diesel engines back in service. They walked across the road to the permitted turbine for the facility and Mr. McCarthy opened up a couple of exterior doors in order to provide a view inside as it was not operational at the time of the inspection.

Emissions from the facility are limited to 88 tons per year (tpy) based upon a 12-month rolling time period for Nitrogen oxides (NO_x). Mr. McCarthy provided the most recent records readily available, and the records indicate the facility has emitted 7.14 tons of NO_x, as of February 2024, based on the 12-month rolling time period. July 2023 had the highest monthly emissions at 1.85 tons for the month. The highest 12-month rolling was 14.36 tons in March 2023. According to Mr. McCarthy, the turbine had last run on March 19, 2024.

The diesel fuel used for startup, is Ultra Low Sulfur Diesel, which has a maximum sulfur content of 15 ppm (0.00015% sulfur in oil). The use of the Ultra-Low Sulfur Diesel fuel demonstrates compliance with the sulfur dioxide emission rate of 0.30 pounds per million BTU heat input, based upon a 24-hour period as that is equivalent to using fuel oil with a 0.03% sulfur content and a heat value of 18,000 BTUs per pound.

The stack for the turbine, while not explicitly measured, appeared to be of correct dimensions and Mr. McCarthy stated that no changes had been made since the previous inspection.

Compliance Determination

Upon his return to the office, Mr. Bornman was able to provide records from March of 2022 through March of 2024 and Wolverine is properly tracking hours of operation, fuel usage, and emissions. In 2022, the highest NO_x emissions in an individual month was 5.4 tons in December 2022, the highest 12-month rolling total was 25.45 in June 2022.

Based on the observations made during the inspection and a subsequent review of the records it appears that Wolverine Power – Vestaburg Power Plant is compliant with PTI No. 388-08A and other applicable air quality rules and regulations.

NAME 

DATE 8/7/24

SUPERVISOR 