

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

N618260957

FACILITY: VCP Michigan - CHESTER 22/27 CPF		SRN / ID: N6182
LOCATION: T30N R2W SEC 22 CHESTER TWP, CHESTER TWP		DISTRICT: Cadillac
CITY: CHESTER TWP		COUNTY: OTSEGO
CONTACT: Thomas Darden , President		ACTIVITY DATE: 11/09/2021
STAFF: Rob Dickman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT
SUBJECT: Scheduled inspection of this opt out source.		
RESOLVED COMPLAINTS:		

The VCP Michigan, LLC, Chester 22, is a natural gas central processing facility (CPF) located in North Chester Township, Otsego County. At this facility, sweet natural gas from low-pressure Antrim formation wells flow to the facility via buried flowlines. Upon reaching the facility, the gas is compressed and directed through a triethylene glycol dehydrator for moisture removal. Following dehydration, natural gas is directed to a sales pipeline.

I performed an inspection on this source with respect to Permit to Install (PTI) 163-20. The facility swapped out an exempt engine for a non-exempt engine and received this PTI in January of 2021. This is the first inspection for this PTI. The inspection consists of an onsite inspection of equipment and a review of records required by the PTI. The onsite inspection was performed on November 9, 2021. Required records for the facility were requested on November 1, 2021 and received on November 24, 2021. The period of time requested for these records was September 2020 through August of 2021. However, the facility did not begin operation until February of 2021. Following are findings of this inspection:

Upon arrival on site, no odors were noted downwind and no visible emissions from any point were noted. The facility appeared in full operation. An inventory of pertinent equipment at the facility was as follows:

Engine

- Caterpillar model G3408 NA engine with no catalytic emission control
 - Unit Number – 302246
 - RPM – 1460
 - Oil Pressure – 64 psi
 - Water temperature – 190 F

Other

- Glycol dehydrator, this unit is exempt from permitting per R 336.1288(2)(b)(ii)

Nitrogen Oxides (NOx) emissions from the engine are limited to 63.2 tons per year based on a 12-month rolling time period as determined at the end of each calendar month. Compliance with these limits is through recordkeeping and emissions calculations. Records provided by the facility indicate NOx emissions were 24.90 tons as of August 2021.

The engine is only equipped to burn natural gas. Also, as required, it is equipped with a device to measure the amount of natural gas being used for fuel. Records of fuel usage provided by the facility indicate 1.497 million cu. ft. were used in the month of August 2021 and 9.9 million cubic feet had been used since the engine began operating.

VCP is required to develop and implement a Malfunction Abatement Plan (MAP) for the engine. This plan was submitted in March of 2021 and approved in April of 2021.

Operation of the engine while bypassing the catalytic control is limited to 200 hours per year based on a 12-month rolling time period. This engine does not have catalytic control, therefore, this condition of their permit is not applicable

No stack testing has been required to be performed at this facility in the last 12 months and is currently not recommended. Calculated emissions are well below emission limitations.

Records of maintenance activities at this facility are being kept. A sample of these records was received and is attached to this report.

VCP is allowed to swap out this engine for a equal or lesser emitting engine. The facility must notify the agency if the engine has been swapped out. No such notification has been received. The engine appears to be the engine described in the current PTI.

The exhaust stack for the engine is to have a maximum diameter of 8 inches and a minimum height above ground of at least 45 feet. Upon inspection, stack parameters appear to meet these criteria.

The engine is to comply with the provisions of 40 CFR 63, Subpart ZZZZ. By complying with the provisions listed in the PTI, the engine is in compliance with the MACT.

At the time of this inspection, this facility was in compliance with their air permitting.

NAME *Ral S. Dickman*

DATE _____

SUPERVISOR _____