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

N783454878		
FACILITY: MUSKEGON DEVELOPMENT, Otsego Lake Facility		SRN / ID: N7834
LOCATION: SW 1/4 NE 1/4 SW 1/4 SEC 6, OTSEGO LAKE		DISTRICT: Gaylord
CITY: OTSEGO LAKE		COUNTY: OTSEGO
CONTACT: MICHAEL MESBERGEN , ENGINEER		ACTIVITY DATE: 07/21/2020
STAFF: Bill Rogers	COMPLIANCE STATUS:	SOURCE CLASS: SM OPT OUT
SUBJECT: Self initiated inspection and record review		
RESOLVED COMPLAINTS:		

On July 21, 2020, I came across the Muskegon Development Otsego Lake 6 facility on the way to another inspection, and decided to inspect it also. After my inspection I requested records from Muskegon Development so that I could do a complete inspection on it. The records arrived on August 28. On September 1 I reviewed the records and my field notes to determine compliance of this facility with its Permit to Install, No. 228-07.

Permit 228-07 was issued Nobember 13, 2007. It lists two emission units and two flexible groups. The emission units are EUDEHY, a glycol dehydrator, and EUENGINE1, a natural gas fired reciprocating engine. The two flexible groups are FGMETHANOL, methanol storage equipment, and FGFACILITY, consisting of all equipment at the facility. There are no permit conditions for FGMETHANOL.

## EUDEHY

Although AQD does not have delegation to enforce the glycol dehydrator MACT (40 CFR 63, Subpart HH) conditions for the dehy are included in the permit.

Condition 1.2 allows the company to show exemption from the more stringent emission control provisions of Subpart HH by one of two methods: Either by showing that natural gas processed is less than 85,000 cubic meters (about 3 million cubic feet) per day, or by showing that benzene emissions are less than 0.90 megagrams (about one ton) per year.

Condition 1.3 requires that if the company wishes to show the exemption for less than approximately 3 million cubic feet per day, they should document the gas throughput to the dehydrator. The company did not provide me daily gas production totals (nor did I ask them to). However, the highest month production in 2019 was August, where according to throughput figures the company provided total production was 14.3 million cubic feet. It is not likely that a facility that produced that much gas in a month would produce more than 3 million cubic feet in a single day.

Condition 1.4 requires that if the company wishes to show the exemption for less than approximately 1 ton of benzene emissions per year, they should document benzene emissions. The company did not provide me with specific benzene emissions for the dehydrator. However, the emission calculations they provided claimed 0.02 tons of total VOC per 12 month rolling time period, as of March of last year (a month I picked at random). Benzene is a VOC, so total emissions of 0.02 tons VOC proves less than 1 ton benzene.

## **EUENGINE1**

Condition 2.1 limits NOx emissions from the engine to 64 tons per 12 month rolling time period. Emission information the company provided claims emissions of 40.62 tons per 12 month rolling time period, as of March 2019. This complies with the permit condition.

Condition 2.2 requires a Malfunction Abatement Plan. AQD approved the most recent MAP for this facility December 17, 2007. This complies with the permit condition.

Condition 2.3, 2.4, and 2.9 refer to engines with add on air pollution control devices. The engine at this facility does not have one. Therefore these conditions are not applicable.

Condition 2.6 requires a device to measure fuel gas to EUENGINE1 on a continuous basis. I did not find one during my inspection, but fuel records are being kept, which implies that a measuring device exists.

Condition 2.8 requires a maintenance log. The company provided a copy of a page of their maintenance log. This complies with the permit condition.

Condition 2.10 requires keeping fuel use records for the engine. The company provided monthly fuel use records to me upon request. This complies with the permit condition.

Condition 2.11 requires monthly and 12 month rolling time period NOx calculations. The company provided these to me upon request. This complies with the permit condition.

Condition 2.12 sets engine stack dimensions as a maximum diameter of 12 inches at a minimum height of 35 feet above ground level, exhausting unobstructed vertically upward. The stack appeared to comply with this permit condition.

## FGFACILITY

Condition 3.1 prohibits burning sour gas in the equipment at any concentration that would produce more than 1 pound of sulfur dioxide per hour. I did not see or smell anything at the facility that would lead me to believe there was sour gas being produced, processed, or burned on site.

### COMMENTS

This facility is on the road to B5667, the Lambda Otsego Lake 6 facility. It would be efficient to schedule inspecting both at once. It is guite a long distance south of Lake Manuka Road, the nearest paved road, but the gravel / sand / mud road going back to it was not particularly difficult.

The facility was not operating at the time of my inspection. Mr Bennett Myler of Muskegon Development reported that the facility has been shut in since December 2019. This claim is supported by the production and emission records Muskegon Development provided to me.

The facility appeared to be in good condition. It looked as if it could be restarted.

NAME

DATE \_\_\_\_\_ SUPERVISOR\_\_\_\_\_