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

B888472493

FACILITY: Miller Energy Company II, LLC: Nolet Road Facility		**SRN / ID:** B8884
LOCATION: NOLET RD, ESSEXVILLE		**DISTRICT:** Bay City
CITY: ESSEXVILLE		**COUNTY:** BAY
CONTACT: Laura Dyke , VP of Compliance & Regulatory		**ACTIVITY DATE:** 06/27/2024
STAFF: Adam Shaffer	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** SM OPT OUT
SUBJECT: On-site inspection		
RESOLVED COMPLAINTS:		

A full compliance evaluation (FCE) was completed by Air Quality Division (AQD) staff Adam Shaffer (AS) of the Miller Energy Corporation (MEC) site located off of Nolet Road in Hampton Township, Michigan. Applicable records were requested on June 18, 2024, to verify compliance with Permit to Install (PTI) No. 272-82A. An in-person inspection to verify onsite compliance was later completed on June 27, 2024.

Facility Description

MEC is an oil and gas exploration and production company. The facility (specifically the Nolet Road site) is an opt out source for sulfur oxides (SOx) and is in operation under PTI No. 272-82A.

Offsite Compliance Review

Based on the timing of the inspection, MEC had already submitted their State and Local Emissions Inventory System (SLEIS) Report for 2023 and had appeared acceptable. Upon review, the emissions reported were not consistent with what was identified in the records provided during the inspection. It was later verified that instead of using the actual H2S value for the site, MEC used the default H2S value in SLEIS. Moving forward the company stated they would use in the next SLEIS report the actual H2S values to maintain consistency with records. This appears acceptable.

Compliance Evaluation

A request was sent to Ms. Laura Dyke, Vice President of Regulatory and Compliance, of MEC on June 18, 2024, for records required by PTI No. 272-82A. The onsite inspection was completed on June 27, 2024. AQD staff AS and Oil Gas and Minerals Division (OGMD) staff Kierstin Rose (KR) arrived at the facility at approximately 9:54am. Weather conditions at the time of the inspection were sunny skies, winds to the southeast at 10-15 mph and temperatures in the low 60's degrees Fahrenheit. For the inspection AS and KR were with company staff that included Ms. Dyke who provided a tour of the site. Site specific questions were answered by company staff at the time of the inspection and follow up questions were answered by Ms. Dyke.

As mentioned above MEC is an oil and gas exploration and production facility. During the inspection, various components pertaining to site operations were discussed at length with company staff.

PTI No. 272-82A

FGTANKS

This flexible group is for the four tanks (EUTANK1, EUTANK2, EUTANK3, and EUTANK4). The four tanks are vented to and controlled by a flare.

The four tanks were observed during the course of the inspection. One of the tanks was used for water and the other three were for oil storage. Two additional tanks were observed with one disconnected and not being used and the second being used to store miscellaneous excess material from other various site operations. Any oil in the tank, after speaking with company staff, would be minimal. This appears acceptable.

Per Special Condition (SC) 1.1, the permittee shall not operate FGTANKS unless it is vented to the flare. It was verified that the tanks are connected to the secondary flare. The flare was observed during the inspection and was lit. The shroud surrounding the flare was in good condition and the flare is operated with what appeared to be an ignition system that would continuously try to light even if the flare was operating properly. The sparking of the ignition system could not be heard so a temporary shutdown was requested to be initiated to verify the system was operating properly, which was later aborted after residual fumes from the storage tanks were causing difficulty in turning the flare off. Reviewing the ignition system, the wiring appeared to be in good condition and company staff mentioned that even if the ignition system was trying to operate properly (spark) it may not necessarily be loud enough to hear. After further review, the secondary flare appeared to be operated in a satisfactory manner.

Per SC 1.2, the permittee shall operate a continuously burning pilot flame at the flare. Pilot fuel shall be only sweet natural gas. It was verified that a Consumers Energy natural gas line is connected to the flare.

Per SC 1.3, one stack is listed as associated with this flexible group and was viewed during the course of the site inspection. Though the dimensions were not measured they appeared to be consistent with what is listed in PTI No. 272-82A.

FGFACILITY

This flexible group is for all equipment on this site which includes FGTANKS and EUHEATERTREATER.

Per SC 2.1a, this flexible group is subject to an hourly pound per hour (pph) sulfur dioxide emission limit of 62.8 pph. Records were requested and provided for select time periods. In the time periods reviewed, the highest hourly emission rate noted was 31.5 pph which is well within the permitted limit.

Per SC 2.1b, this flexible group is subject to a second sulfur dioxide emission limit of 98 tons per year (tpy) per a 12-month rolling time period. Records were requested and provided for select time periods. For the month of May 2024, 1.28 tons of sulfur dioxide emissions were reported emitted. As of May 2024, 15.0 tpy of sulfur dioxide emissions were reported per a 12-month rolling time period which is well within the permitted limit. Previous 12-month rolling time periods reviewed were also within the permitted limit.

Per SC 2.2, this flexible group is subject to a material usage limit of not more than 104,125 lbs of hydrogen sulfide shall be burned per a 12-month rolling time period. Records were requested and provided for select time periods. For the month of May 2024, 1,356.1 lbs of hydrogen sulfide were burned. As of May 2024, 15,881.8 lbs of hydrogen sulfide were

burned per a 12-month rolling time period which is well within the permitted limit. Previous records reviewed also appeared to show that limit is being met.

Per SC 2.3, the permittee shall not use FGFACILITY to process wells other than those specified further in this special condition. It was verified by company staff as well as upon records reviewed that the four wells listed (Vermeesch 2-21, Wiedyk 1-22, Kryszak 2-22, and Hugo 1-21) are the only four wells connected for this site.

Per SC 2.4, the permittee shall not operate FGFACILITY unless all gases separated from liquids in EUHEATERTREATER are vented to the incinerator. It was verified during the course of the inspection that the EUHEATERTREATER is vented to the incinerator.

Per SC 2.5, the permittee shall operate a continuously burning pilot flame at the incinerator. In the event that the pilot flame is extinguished, a control valve located at the inlet to FGFACILITY shall automatically close immediately and isolate FGFACILITY from the wells. Furthermore, the wells feeding FGFACILITY shall shut-in before the pressure reaches 220 psig. Operation of FGFACILITY shall not be restarted unless the pilot flame is re-ignited and maintained. Pilot fuel shall be only sweet natural gas.

The main incinerator that controls emissions for the EUHEATERTREATER was observed in operation at the time of the inspection. The shroud on the incinerator was in good condition and the flare was lit. A control panel for the primary flare showed the flare temperature at 980°F. The main flare is operated with what appeared to be an ignition system that would continuously try to light even if the flare was operating properly. The ignition system could be heard sparking for the flare. After further review this appears acceptable. Additionally, the flare is connected to a Consumers Energy line which provides a constant source of sweet natural gas. It was concluded EUHEATERTREATER and the primary flare were being operated in a satisfactory manner.

A control valve was noted at the inlet of the site that staff had explained would shut off flow to the site if there was an issue at the wellheads or flare. This appeared acceptable.

The four wells noted for this site were observed during the course of the inspection. MEC staff stated each wellhead has a murphy switch. The wellheads operate in pairs and between the four wells operate five days / 40 hours a week. Additional information noted for each well is described further below.

Vermeesch 2-21 – This wellhead was not running at the time of the inspection.

Wiedyk 1-22 – This wellhead was on and pumping at the time of the inspection. The high pressure setpoint on the murphy switch read 220 psig. A temporary shutdown of the wellhead was completed by lowering the pressure setpoint. The well was briefly noted to begin shutting down when the pressure setpoint was lowered before returning the unit to normal operation. The observations made at the wellhead appeared to show satisfactory operation of the murphy switch.

Kryszak 2-22 – This wellhead was on and pumping at the time of the inspection. The high pressure setpoint on the murphy switch read 220 psig. A temporary shutdown of the wellhead was completed by lowering the pressure setpoint. The well had initially appeared to start shutting down, however, returned to operating normally indicating that the high pressure setpoint was not working on the murphy switch. MEC staff immediately contacted other staff to address the improperly operating murphy switch. Following up with company

staff, a new gauge had been installed a couple hours following the June 27, 2024, inspection. Electrical work had been completed for the wellhead on June 12, 2024, so it appears the murphy switch would have stopped working properly sometime within the previous 15 days from the June 27, 2024, inspection. Additionally, company staff have implemented in their daily checklist by company staff a verification check of proper psig for the murphy switches at wellheads. It was concluded that based on the follow up completed, no violation notice will be issued for the improperly working murphy switch.

Hugo 1-21 – This wellhead was not running at the time of the inspection.

Per SC 2.6, the permittee shall install and maintain fencing, warning signs, and / or other measures as necessary to prevent unauthorized individuals from entering the plant property and buildings. Based on observations made at the time of the inspection, appropriate items were noted with regards to this condition.

Per SC 2.7, the permittee shall monitor the following parameters for frequencies that are further described in this condition: concentration of hydrogen sulfide generated by each set of two wells, as operated, in the gas stream leaving EUHEATERTREATER; volumetric flow rate of the gas stream leaving EUHEATERTREATER; actual hours that fluid is flowing to EUHEATERTREATER; pounds of hydrogen sulfide coming from EUHEATERTREATER, burned and exhausted through SVINCINERATOR; pounds of sulfur dioxide emitted per operating hour, assuming stoichiometric conversion of all hydrogen sulfide and based on the total actual operating hours; and monthly / 12-month rolling time period sulfur dioxide emissions.

Records were requested and provided for select time periods. Based on the records reviewed, MEC appears to be keeping track of the required items per the applicable time period.

Per SC 2.8, one stack is listed as associated with the permit and was observed during the course of the site inspection. Though the dimensions were not measured they appeared to be consistent with what is listed in PTI No. 272-82A.

Additional Observations

Speaking with company staff, it appears that company staff check on the site several times a day seven days a week to make sure there are no issues occurring.

Conclusion

Based on the observations made and records reviewed, MEC appears to be in compliance with PTI No. 272-82A and applicable air pollution control rules.

NAME Adam F. Fuller DATE 07/11/24 SUPERVISOR Nina L. McCann