

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

B722259643

FACILITY: JAGUAR ENERGY, FREDERIC 15 GAS PLANT		SRN / ID: B7222
LOCATION: 9038 Deward Road, FREDERIC		DISTRICT: Cadillac
CITY: FREDERIC		COUNTY: CRAWFORD
CONTACT: John Ward , Plant Superintendent		ACTIVITY DATE: 07/27/2021
STAFF: Jodi Lindgren	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR
SUBJECT: On-site facility inspection and records review		
RESOLVED COMPLAINTS:		

FACILITY DESCRIPTION

On Tuesday July 27, 2021, Jodi Lindgren of the Department of Environmental, Great Lakes, and Energy (EGLE) – Air Quality Division (AQD) conducted an unannounced field inspection of Jaguar Energy, LLC (Jaguar) – Frederic 15 Gas Processing Facility (B7222) with the address of 9038 Deward Road, Frederic, Michigan, 49733. The facility is located east of Deward Road. The driveway entry is approximately 1.15 miles north of the intersection of Cameron Bridge Road and Deward Road in section 15, T28N-R4W, Frederic Township, Crawford County, Michigan, 49733. The facility was unmanned at the time of inspection.

The Frederic 15 Gas Processing Facility is a Title V facility with MI-ROP-B7222-2018 issued on July 17, 2018. The ROP will expire on July 17, 2023. The facility is a sweetening facility that processes natural gas, condensate, crude oil, and production brine from wells located in the area. The facility utilizes an amine process to remove hydrogen sulfide from the natural gas. The hydrogen sulfide removed from the gas stream is consumed in an incinerator resulting in sulfur dioxide emissions. Should the incinerator fail, the hydrogen sulfide is routed to a backup flare. This flare is equipped with a continuous pilot flame fueled by sweetened natural gas. Should the pilot flame fail, the facility is equipped with an automated shut down mechanism. Other process equipment includes a compressor, a compressor engine, a glycol dehydrator glycol dehydration unit, process heaters, and process separators. The sweetened natural gas is routed to a sales pipeline. The condensate, crude oil, and production brine separated from the natural gas stream is stored at the facility and trucked off site as needed. The facility was not operational during the inspection. The facility has not operated since August 2017.

The facility is subject to 40 CFR Part 63 Subpart ZZZZ and 40 CFR Part 63 Subpart HH which EGLE-AQD is not delegated to enforce.

COMPLIANCE EVALUATION

A. SOURCEWIDE – Sourcewide terms and conditions that apply to this stationary source. There are currently no sourcewide terms and conditions contained in the ROP; therefore, this section is not applicable.

B. EUSWEETENING – An amine gas sweetening process to remove hydrogen sulfide from natural gas. The sweetening process is equipped with an incinerator to control sulfur emissions. The hydrogen sulfide is burned in the incinerator to form sulfur dioxide. The sweetening process is also equipment with an emergency flare to control sulfur emissions in the event the incinerator fails.

1. Emission Limits – Sulfur dioxide emissions are limited to a 24-hour average of 1332 lbs/day and 55.5 lbs/hr. The facility has not operated since 2017 so there were no emissions to report during the inspection timeframe.

2. Material Limits - There are no material limits associated with this emission unit; therefore, this section is not applicable.

3. Process/Operational Restrictions – The facility’s process and operational restrictions could not be evaluated due to the suspension of operations since 2017.

4. Design/Equipment Parameters – The facility’s design and equipment parameters could not be evaluated due to the suspension of operations since 2017.

5. Testing/Sampling – The facility’s testing and sampling requirements could not be evaluated due to the suspension of operations since 2017.

6. Monitoring/Recordkeeping – Records required by the ROP appropriate reflect the facility being nonoperational.

7. Reporting – All reports submitted pursuant to the ROP were timely, properly signed by the responsible official, and indicated no deviations.

8. Stack/Vent Restrictions – The ROP requires the incinerator to be equipped with a stack having a maximum diameter of ten inches and a minimum height above ground level of 100 feet. The incinerator stack appeared to meet these requirements during the inspection.

9. Other Requirements – Fencing, warning signs, and/or other measures necessary to prevent unauthorized individuals from entering the plant property and buildings as well as hydrogen sulfide warning signs were present during the inspection.

C. EUGLYCOLDEHYDRAT – A glycol dehydration system (dehy) to remove water for the natural gas. The dehy is subject to 40 CFR Part 63, Subpart HH (NESHAP HH), which the State of Michigan is not delegated to enforce.

1. Emission Limits – There are no emission limits established in the ROP for this emission unit; therefore, this section is not applicable.

2. Material Limits – There are no material limits established in the ROP for this emission unit; therefore, this section is not applicable.

3. Process/Operational Restrictions – The ROP requires the dehy to vent to the incinerator or emergency flare. An incinerator and flare were on site during the inspection, but the functionality could not be assessed since the facility was not operating.

4. Design/Equipment Parameters – There are no design or equipment parameters established in the ROP for this emission unit; therefore, this section is not applicable.

5. Testing/Sampling – There are no testing or sampling requirements established in the ROP for this emission unit; therefore, this section is not applicable.

6. Monitoring/Recordkeeping – There are no monitoring or recordkeeping requirements established in the ROP for this emission unit; therefore, this section is not applicable.

7. Reporting – – All reports submitted pursuant to the ROP were timely, properly signed by the responsible official, and indicated no deviations.

8. Stack/Vent Restrictions – There are no stack or vent restrictions established in the ROP for this emission unit; therefore, this section is not applicable.

9. Other Requirements – The facility has a Preventative Maintenance Plan and Malfunction Abatement Plan (PM/MAP), but compliance with the plans could not be evaluated.

D. EUNATGASENGINE – A 60 hp Ajax DP-60 spark ignited reciprocating internal combustion engine with no add-on pollution control equipment.

1. Emission Limits – There are no emission limits established in the ROP for this emission unit; therefore, this section is not applicable.

2. Material Limits – There are no material limits established in the ROP for this emission unit; therefore, this section is not applicable.

3. Process/Operational Restrictions – The ROP required maintenance and operational practices could not be evaluated as the engine has not run since 2017.

4. Design/Equipment Parameters – There are no design or equipment parameters associated with this emission unit; therefore, this section is not applicable.

5. Testing/Sampling – There has been no maintenance or oil testing program completed for the engine since it has not run since 2017.

6. Monitoring/Recordkeeping – There were no maintenance records to review due the engine being nonoperational.

7. Reporting – – There are no reporting requirements associated with this emission unit; therefore, this section is not applicable.

8. Stack/Vent Restrictions – There are no stack or vent restrictions established in the ROP for this emission unit; therefore, this section is not applicable.

9. Other Requirements – The State of Michigan is not delegated to enforce 40 CFR Part 63 Subpart ZZZZ.

NAME _____

DATE _____

SUPERVISOR _____