DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION
ACTIVITY REPORT: Scheduled Inspection

N708436233

FACILITY: Riverside Energy Michigan - Bagley 16		SRN / ID: N7084
LOCATION: SECTION 16, BAGLEY TWP		DISTRICT: Gaylord
CITY: BAGLEY TWP		COUNTY: OTSEGO
CONTACT:		ACTIVITY DATE: 08/26/2016
STAFF: Bill Rogers	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MINOR
SUBJECT: Scheduled Inspection, Minor Source		
RESOLVED COMPLAINTS:		

On August 26, 2016, I inspected the Riverside Energy Bagley 16 facility. This is a minor source with no permits.

The facility is in our files as Atlas Oil and Gas. It passed to Chevron, but the file name was never changed. It now belongs to Riverside Energy. I have changed the name in MACES.

The latitude and longitude of this facility, as listed in our facility information, is not very close. A better latitude and longitude would be 45.00236 (North Latitude) and -84.69943 (West Longitude). I will correct this in our database if I can, or pass the information on to someone who can do so.

The facility includes one small compressor engine. It is marked with steel numbers welded to the engine mount as NGCS 228, identifying it as Unit 228 of Natural Gas Compression Services, a former name of one of the engine service companies active in this area. It has a catalytic oxidizer. According to notes on a clipboard inside the closed (glass) cover of the instrument panel the catalyst temperatures today were 751 degrees f inlet and 752 outlet. This is a very small difference but if correct a temperature rise across a catalyst hints that the catalyst is operating properly.

The engine was operating at 1420 RPM, according to the instrument panel. There was no odor, unusual vibration, or opacity. The exhaust leaves the compressor shed horizontally through a wall, to a horizontal muffler outside. After the muffler the exhaust is deflected unobstructed vertically upward by a pipe elbow. I estimated the exhaust height and diameter roughly, by eye, as about 12 feet high and 12 inches diameter.

There is a glycol dehydrator. I did not note whether it was operating. I did not see any opacity or water droplets (steam) from it. I did not detect any odors.

I didn't see any brine or slop tank on site. Small tanks and containers on site include, inside the compressor shed, one 300 gallon drum on stilt type tank labeled as Chevron HDAX low ash engine oil and a second similar tank, unlabeled; both of these were over wooden berm structures. There were several standard sized drums, apparently empty, unlabeled. Three standard sized drums were labeled as "RCRA Exempt or Non-RCRA Waste" and one as "Spill Kit." There was also a metal cylinder tank which appeared approximately 300 gallon size, labeled as waste oil. Outside the shed I noticed two 300 gallon drum on stilt tanks, one labeled methanol, one labeled triethylene glycol. There was a smaller drum on stilts tank next to the triethylene glycol tank labeled "Sulfa-Clean."

Maintenance appeared good. I didn't see any stained soils which might indicate leaks or spills.

We have a file on this facility. It includes an approved malfunction abatement plan.

Potential to emit calculations, in the file, claim that the engine is a Cat 3516 LE of 632 HP. PTE is said to be less than 100 tons without control, although there is a catalyst installed for pollution control. In addition, on February 27, 2009, Atlas Energy (as it then was) sent AQD a letter about permit applicability. In this letter Atlas stated the engine has a maximum heat input rate less than 10 million BTU per hour, uncontrolled potential to emit of CO of 9.83 tons per year, and uncontrolled potential to emit of NOx of 12.29 tons per year. These numbers are all low enough for the engine to qualify for exemption from the requirement to obtain a Permit to Install, and also below the level where a Renewable Operating Permit would be required. A copy of the letter and of Potential to Emit calculations is attached.

Potential to Emit calculations, attached, and a sheet showing daily gas production, also attached, both indicate the glycol dehydrator at this site is exempt from the more stringent control requirements under 40

CFR 63 Subpart HH. There are two exemptions: One for dehydrators which process less than 85,000 standard cubic meters per day, and one for dehydrators which emit less than approximately one ton of benzene per year. According to calculations, attached, the dehydrator of the Bagley 16 meets both exemptions; production is about 31,000 SCM/day, which is less than 85,000 SCM/day, while total non-methane VOC emissions (which would have to include benzene) are estimated as 92 pounds per year, which is under one ton per year. The worst case assumption would be that all of that 92 pounds are benzene, in which case the dehydrator still meets the exemption. Actual benzene emissions are likely to be far less than this.

NAME William J Rogers Jr DATE 2016-AUG-30 SUPERVISOR