DEPARTMENT OF ENVIRONMENTAL QUALITY

AIR QUALITY DIVISION

ACTIVITY REPORT: Scheduled Inspection

FY 2014 Insp.

| N631727006 | | 1/20/ |
|---|--|----------------------------------|
| FACILITY: SEMCO ENERGY Gas Company - Collin Field | | SRN / ID: N6317 |
| LOCATION: ANGLING RD, STARRVILLE | | DISTRICT: Southeast Michigan |
| CITY: STARRVILLE | | COUNTY: SAINT CLAIR |
| CONTACT: Elisabeth Barr, Engineer III | | ACTIVITY DATE: 09/18/2014 |
| STAFF: Iranna Konanahalli | COMPLIANCE STATUS: Compliance | SOURCE CLASS: SM 208A |
| SUBJECT: FY 2014 level-2 sched | luled inspection of SEMCO Energy Gas Company - | - Collins Field ("SEMCO Energy") |
| RESOLVED COMPLAINTS: | | |

E-file: N6317_SAR_ 2014 09 18

SEMCO Energy Gas Company - Collins Field (N6317)

Angling Road

Starville (Cotrellville), Michigan

NAICS Code: 48621

208a Initial Registration No.: LV-06-97 dated Feb 24, 1997 – As the rule is rescinded, SEMCO is preparing, as of September 2014, an application for synthetic minor ROP-opt-out permit.

My be subject to (1,000 HP > 500 HP; existing Area source NESHAP / MACT ZZZZ / MACT 4Z / RICE MACT, Standards of Performance for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines / Final rule (Page 3568, Federal Register / Vol. 73, No. 13 / Friday, January 18, 2008 / Rules and Regulations / Final rule; Page 51570 Federal Register / Vol. 75, No. 161 / Friday, August 20, 2010 / Rules and Regulations / Final rule; Page 12863 Federal Register / Vol. 76, No. 46 / Wednesday, March 9, 2011 / Rules and Regulations / Direct final rule; amendments for August 20, 2010, final rule; Page 6674 Federal Register / Vol. 78, No. 20 / Wednesday, January 30, 2013 / Rules and Regulations / Final rule. Page 48072 Federal Register / Vol. 79, No. 158 / Friday, August 15, 2014 / Rules and Regulations / Notice of final decision on reconsideration. etc.).:

Two 1000 HP natural gas compressors at natural gas transmission industry (NAICS 48621). NESHAP Subpart ZZZZ Compliance at HAP Area Sources: Owners/operators that demonstrate compliance with either NSPS Subpart IIII or JJJJ, as appropriate, will be in compliance with the NESHAP. . AQD has decided not to take delegation of these standards and therefore no attempt has been made evaluate SEMCO Energy's compliance with NESHAP / MACT 4Z.

On September 18, 2014, I conducted a level-2 scheduled inspection of SEMCO Energy Gas Company -- Collins Field ("SEMCO Energy"), a natural gas storage and distribution facility, located at Angling Road, Starville (Cotrellville), Michigan. The inspection was conducted to determine compliance with the Federal Clean Air Act; Article II, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451; and Michigan Department of Environmental Quality, Air Quality Division (MDEQ-AQD) administrative rules.

During the inspection, Ms. Elisabeth M. Barr (Phone: 810-887-3081 or 800-860-4277- ext. 3081; Fax: 810-887-4254; E-mail: elisabeth.barr@semcoenergy.com), Environmental Engineer, and Mr. Scott Shepherd (Ph: 810-531-5369), Compressor Operator, Mr. Ralph

Schoettle (Phone: 810-650-3769), Operations Tech, assisted me.

Mr. Jeff Ballard (Ph: 810-887-5027 or 800-860-4277; Fax: 810-887-5095; E-mail: Jeffrey.ballard@semcoenergy.com), PT & S Supervisor, Eastern Operations, was not present during the FY 2014 inspection.

SEMCO Energy's Collins field station buys natural gas from ANR (mostly), Consumer, MichCon, etc. and stores gas for winter months. When there is demand for natural gas in winter SEMCO sell it to utility companies for delivery to consumers. Mr. Shepherd divides his time between a couple of natural gas storage facilities; he visits at least once a day in mornings. Desiccant is used to take moister out of natural gas.

SEMCO Energy has the following equipment:

- 1. Two Waukesha 1000 hp RICE natural gas fired compressors (4-cycle rich burn engines) Area source NESHAP / MACT ZZZZ 4-cycle rich burn engines. Model L7042 GU 1,000 BHP, 1000 rpm. AQD has decided not to take delegation of these standards and therefore no attempt has been made evaluate SEMCO Energy's compliance with NESHAP / MACT 4Z. The compressors operate during non-heating seasons (Apr-Oct). Natural gas is taken out of underground bedrock formation cavity (Gray Niagaran Formation about 2,300 feet below ground surface) using its own storage pressure; very similar to a pressurized propane tank. Desiccant is used to take moister out of natural gas.
- 2. Flameless gas catalytic heater 5,000 BTU / Hour negligible emissions. The heater keeps the control systems from freezing in winter months.
- 3. Pipeline heater 2.5 million BTU / Hour negligible
- 4. Odorizing Unit methyl mercaptan is added as natural gas as supplied to utilities.
- 5. Flash gas emissions condensate (water) and crude oil is collected in separators along distributions lines are transferred to an on-site blow-off tank negligible VOC.

The compressors are made by Worthington Compressors, Inc. of Buffalo, NY. Model OF5HU-2 Serial Nos. A14846 & A14857. Maximum working pressure 1,000 psig. Both hours of operation and gas meters are present. Both compressors were installed in 1981. Natural gas is pressurized to 550-1050 psi. Two catalytic converters (one for each engine) are present to control the IC engine emissions.

All process equipment are exempt from Rule 336.1201 (Permit-to-Install) pursuant to Rules 285(g), 282(b)(i) and 284(e).

Collins compressor usage / emissions for CY 2013 are as follows:

115 M SCF / month natural gas (Jan 2013) Carbon Monoxide = 25.55 tons / year Volatile Organic Compounds (VOC) = 0.20 tons / year Nitrogen Oxides (NOx) 15.18 tons / year Hours of operation = NA hours / year

ROP synthetic minor permit

AQD sent SEMCO (Ms. Elisabeth Barr) the June 26, 2014, letter concerning phase out of 208a registration program. As of September 18, 2014, SEMCO is preparing and application for a ROP synthetic minor permit.

Conclusion

SEMCO will obtain a ROP synthetic minor permit.