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

N593524807

FACILITY: Alpena Compressor Station		**SRN / ID:** N5935
LOCATION: 8512 E. ARNOLD LAKE ROAD, HARRISON		**DISTRICT:** Saginaw Bay
CITY: HARRISON		**COUNTY:** CLARE
CONTACT: Phillis Rynne, PE , Staff Engineer, Environmental Management & Resourc		**ACTIVITY DATE:** 03/31/2014
STAFF: Sharon LeBlanc	**COMPLIANCE STATUS:** Compliance	**SOURCE CLASS:** MAJOR
SUBJECT: FCE compliance inspection of unmanned facility.		
RESOLVED COMPLAINTS:		

On Monday, March 31, 2014, S. LeBlanc conducted a scheduled site inspection at the DTE Gas Company Alpena Compressor Station (SRN N5395), 8512 E. Arnold Lake Road, Harrison, Clare County, Michigan. DTE representative Phillis Rynne, provided a tour of the facility. The facility was not operating upon arrival and was reported to not have operated in a number of years.

One Renewable Operating Permit (MI-ROP-N5935-2009) is associated with the facility, and was renewed on November 23, 2009. A ROP Renewal Application was received for the facility on March 7, 2014. Based on potential to emit, the facility is major for NOx and CO. The facility is also reported to be an area source of HAPs.

The purpose of the visit was to confirm compliance with the referenced permit.

FACILITY

The Alpena Compressor Station (ACS) is located in the northeast corner of Clare County, on the south side of E. Arnold Lake Road. The nearest intersection is North Athey Avenue and E. Arnold Lake Road. The facility is surrounded by predominantly large privately owned parcels, some of which are residential in nature.

Historically, the purpose of the facility was to increase the pressure of the natural gas in the pipeline allowing it to continue to move. The name "Alpena" reflects the location of the largest recipient/destination of the natural gas in the lines when the facility was in operation. When the Antrim gas fields came into production, there was no longer a need for the facility to push gas, so the facility which is an unmanned station is not operational at this time.

The station is fenced, and locked with three northern buildings housing equipment, two sheds, four above ground storage tanks with secondary containment (used oil, lube oil, glycol mix, and EUHYDROCARBONTNK), above ground gas chillers, NGL separator and radiator. The southernmost shed houses five recently installed Shafer valve operators. The western most shed houses the inline separators for the mainline pipeline coming onto the station.

Equipment housed within buildings include the natural gas fired reciprocating engine (EUWHITESUPERIOR) and associated compressor housed on the east side of the site. In addition, the natural gas fired boiler (EUBOILER), water heater (EUWATERHEATER) and generator (EUGENERATOR) housed in the office building located on the west side of the site. The remaining equipment building onsite previously housed two turbines which were reported to have been removed from site over 15 years ago.

Changes reported to have occurred at the facility between March 2010 and March 2012 inspections included installation of a new water well and installation of valve operators. Neither of which affect existing process for the facility or required permits. No more recent changes were noted or reported at the time of the inspection.

EUWHITESUPERIOR and EUGENERATOR are both reported to be subject to 40 CRF Part 63 Subpart ZZZZ for Reciprocating Internal Combustion Engines (RICE).

Exempt Equipment - includes the following natural/sweet gas fired equipment which were determined exempt from permitting under Rule 201;

- AJAX 1,250,000BTU/hr boiler (EUBOILER),

- 37K BTU/hr water heater (EUWATERHEATER),
- 1,200,000 BTU/hr generator (EUGENERATOR) and
- 1000-gallon above ground sweet crude oil storage tank (EUHYDROCARBONTNK).

The water heater and boiler are exempt under Rule 282(b)(i), and the generator is reported to be exempt under Rule 285(g). EUHYDRCARBONTNK is reported to be exempt under Rule 284(e). As noted above, EUGENERATOR has been determined to be subject to the RICE MACT, and has been included in the most recent ROP renewal application.

Grandfathered Equipment - EUWHITESUPERIOR, the natural gas fired reciprocating engine used to power the natural gas pipeline compressor was installed in 1975, and is reported to be grandfathered from NSR requirements.

COMPLIANCE HISTORY

Prior to the March 31, 2014 site inspection, the most recent inspection was conducted on March 22, 2012. No compliance issues were noted in conjunction with that inspection. There are no Violation Notices of record for the facility.

Semiannual and annual certifications and emission reporting is submitted in a timely manner, with no deviations or emission exceedances reported.

COMPLIANCE EVALUATION

The only non-exempt equipment included in the ROP for the facility is EUWHITESUPERIOR. Permit conditions associated with the referenced equipment are limited to fuel type. Reporting requirements are limited to semiannual and annual reports as outlined in the ROP.

Operating Status - At the time of the inspection the facility was not operating, and was reported to have not been operated for a number of years with the exception of equipment bump-starts and short interval operation for maintenance purposes. As previously indicated, the two turbines associated with the facility were removed a number of years ago.

EUBOILER was operating at the time of the site inspection, and provides heat to the facility buildings. The hour meter for EUGENERATOR indicated a total operation of 692 hours for the over 14 year period. The engine oil tank located next to the generator was less than ½ full.

EUWHITESUPERIOR was reported to have not been operated at all for the past few years. Fuel usage for the referenced reciprocating engine (White Superior 2000 HP) is based on measure changes in pressure on in house metering. In essence, the fuel use is determined based on the increased pressure achieved in the lines.

Material Use - Equipment associated with the facility are reported to operate on natural gas. Material use records are required only for EUWHITESUPERIOR. As previously indicated, fuel use for the referenced equipment is calculated based on the change in pressure on the natural gas lines achieved by the engine and its associated compressor(s). No fuel use was reported for the past couple of years.

EUHYDROCARBONTNK was reported to have never been used.

Emission Points – One emission point is identified in the facility ROP. SV-05 is the stack for exhaust gases associated with EUWHITESUPERIOR. The permit does not specify dimensions or emission limits for the stack. Photo of the referenced stack, which is located on the south-side of the building, is attached.

Monitoring and Testing- No monitoring or testing conditions/requirements are specified in the ROP for EUWHITESUPERIOR.

Reporting – The ROP for the facility require prompt reporting of deviations associated with EUWHITESUPERIOR. In addition, semiannual reporting of monitoring and deviations as well as annual certification of compliance are required under conditions of the ROP. Reports including MAERS, have

been received on a timely basis for the facility, and as the facility has not operated, no deviations have occurred or were reported.

Summary - The ACS facility has not been in operation for a number of years. The ROP for the facility was renewed on November 23, 2009. A ROP Renewal Application was received for the facility on March 7, 2014. The facility was found to be in compliance with the ROP.

NAME Marion L. Steffens DATE 4/7/2014 SUPERVISOR C. Hare