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

B857363401						
FACILITY: Great Lakes Gas Trans S	SRN / ID: B8573					
LOCATION: 10339 GREAT LAKES F	DISTRICT: Gaylord					
CITY: BOYNE FALLS	COUNTY: CHARLEVOIX					
CONTACT: Mike Coy, Area Manager, Gaylord Area - Great Lakes Region		ACTIVITY DATE: 06/28/2022				
STAFF: David Bowman	COMPLIANCE STATUS: Compliance	SOURCE CLASS: MAJOR				
SUBJECT: Scheduled inspection of site.						
RESOLVED COMPLAINTS:						

On 28 June 2022 I, Dave Bowman, MI EGLE AQD, conducted a scheduled inspection of B8573, Great Lakes Gas Transmission (GLGT) Boyne Falls Compressor station, operating under MI-ROP-B8573-2019. They are located at 10339 Great Lakes Road, Boyne Falls, MI 49713. To get to the site travel North on Old US 27 from I-75 Exit 290. Turn North on Old US 27 and travel for 2.7 miles. Turn West onto Thumb Lake Rd traveling for 3.5 miles. Turn North onto Magee Rd for 5 miles. Turn West on Great Lakes Rd for 0.5 miles and arrive at the facility. It is on the North side of the Great Lakes Rd.

Upon my arrival the temperature was 58°F, the winds were light and coming from the west. There were no odors on the site and the site was clean and orderly. I met with Mike Coy, the Operations Manager, and signed into the site.

GLGT operates a pipeline carrying natural gas and this compressor station known as Boyne Fall Compressor station or AKA Compressor Station 11 (it is the 11th station along the pipeline). This station boost pressure to send gas to storage facilities and/or local distribution companies. It is ran as needed and when operating normally only one of two compressor engines are operated. The two compressor engines are EUUNIT1101 and EUUNIT1102, both are Rolls Royce Avon Model 76G Stationary Gas Turbines, that burn natural gas from the pipeline as fuel with a heat input of 158.8 MMBtu/hr.

The site is in Charlevoix County which is currently listed as attainment/unclassified for criteria pollutants. The source is subject to 40 CFR Part 70 for PTE 100 tpy CO and 100 tpy NOx. Source is a minor source of HAP. EUUNIT1101 and EUUNIT1102 were subject to PSD regulations (40 CFR 52.2) due to potential to emit over 250 tpy of CO and NOx. At time of last ROP renewal, it was determined that the source is NOT subject to 40 CFR Part 63 Subpart A and Subpart JJJJJ. EUAPU is subject to 40 CFR Part 63 Subpart ZZZZ NESHAP for RICE located at an area source for HAP emissions.

MAERS and Records have previously been reviewed and are logged into MACES.

There are three emission units (EU) located onsite. EUUNIT1101 and EUUNIT1102 are the compressors and EUAPU is an emergency generator. All three were installed in 1971.

EUAPU is a Kohler GV12-525IPG Generator Engine, 408 HP, Spark Ignition Rich Burn RICE with 3.26 MMBtu/hr heat input driving an electrical generator. The ROP states no emission limits and no stack requirements. EUAPU is in the basement of the main office building. It is vented from the EU to a large muffler then vertically out of the east side of the building. The stack is

approximately 6-8" diameter and was 10-12' tall with a 90° at the top. EUAPU was not operating at the time of inspection, but it was clean and appeared to be well maintained.

SC IV Does EUAPU have a non-resettable hour meter? Yes, and current hours were 1696.9. Records provided by source indicate 45 hours of Emergency run time and 14.31 hours of maintenance run time since last inspection.

Records review indicate that on 1 June 2022 the following PM requirements were conducted:

- 1. Hoses and belts inspected
- 2. Spark plugs inspected
- 3. Oil Analysis completed
- 4. Oil changed
- 5. Air filtered cleaned/replaced

FGAVONS (EUUNIT1101 and EUUNIT1102) The stack for EUUNIT1101 was not emitting and EUUNIT1102 had only heat shimmer.

Stack vent:

EUUNIT 1101 Diameter appeared to be at least 135.6" and height appeared to be a minimum of 45' AGL.

EUUNIT1101 was undergoing maintenance on the day of inspection.

EUUNIT 1102 Diameter appeared to be at least 135.6" and height appeared to be a minimum of 45' AGL

EUUNIT1102 was operating and there was a heat shimmer seen from the stack, but no visible emission.

Stack test completed on 10/25/21 verified the following emission limits:

Pollutant	Limit	Time Period	EU Units	Actual EUUNIT1101/EUUNIT1102
NOx	82 ppm by volume corrected to 15% O2	Hourly	EUUNIT1101 and EUUNIT1102 Individually	67.794 ppm/79.825 ppm
NOx	61.2 pph	Hourly	EUUNIT1101 and EUUNIT1102 Individually	38.736 pph/47.954 pph
со	300 ppm by volume	Hourly	EUUNIT1101 and EUUNIT1102 Individually	108.472 ppm/89.871 ppm

со	140 pph	Hourly	EUUNIT1101 and EUUNIT1102	37.729 pph/32.865 pph
			Individually	

NAME_____

DATE ______ SUPERVISOR______