July 17, 2023



Ms. Joyce Zhu EGLE – Air Quality Division 27700 Donald Court Warren, MI 48092

RE: DTE Gas Company Response to the EGLE-AQD Violation Notice of June 26, 2023, Issued to Milford Compressor Station

This letter is in response to the Violation Notice (VN) issued by EGLE-AQD to DTE Gas Company on June 26, 2023, to DTE Gas – Milford Compressor Station related to the Design/Equipment parameters for equipment at the site. The VN cited the following:

Process Description	Rule/Permit Condition Violated	Comments	
Design/Equipment parameters (FGTURBINES)	SC IV.1 (FGTURBINES) of ROP No. MI-ROP-B7221- 2020	The maximum nominal rating of each unit in FGTURBINES shall not exceed 10,504 HP (ISO). The nameplate capacity of Turbine 1, Turbine 2, and Turbine 3 state that the maximum capacity of each turbine engine is 11107 HP.	
Design/Equipment parameters (FGAUXHEATING)	SC IV.1 (FGAUXHEATING) of ROP No. MI-ROP- B7221-2020	The maximum design heat input capacity for EUFURNACE shall not exceed 0.2075 MMBTU per hour on a fuel heat input basis. The nameplate of the water heater states the maximum design heat input capacity for EUFURNACE is 350000 BTU/HR (0.35 MMBTU per hour).	

DTE Gas Company's response below provides its review of the situation and outlines actions to address the areas identified by this VN.

FGTURBINES

The issue identified with FGTURBINES has been determined to be the difference between the "nameplate" rating and the "nominal" rating for the units. The nameplate of the units shows a

rating of 11,107 horsepower (hp) which is the rating of the units at ISO conditions (sea level, 60% relative humidity, 59°F). the permit application, and the resulting permit condition, identified 10,504 hp as the ISO rating. It has since been verified that 10,504 hp is the nominal rating of the units at this site based on Milford Compressor Station conditions (900' elevation, 60% humidity, 59°F). Nominal output of the unit under site conditions varies from the ISO rating based on site-specific factors including elevation, ambient temperature, and relative humidity. Emission factors and emission estimates used in permitting are accurate for the unit and no changes are necessary. The emission limits in the permit are also valid for the unit. DTE is willing to work with EGLE permitting staff to amend the current permit to clarify the rating of the unit and the term nominal if requested by EGLE. If requested by EGLE, DTE will submit the necessary application within 180 days of this submittal

FGAUXHEATING

The nameplate capacity of EUFURNACE is indeed 0.35 mmBtu/hr. There was a change made by during construction from the originally permitted 0.2075 mmBtu/hr unit which was not communicated in order to modify the permit at the time. Although DTE has a robust change management process in place through its ongoing continuous improvement (CI) processes, this project was broad in scope and fast-moving. This was thought to be a very minor change and was not communicated at the time. The environmental permitting group continues to work with our operating groups and project teams to stress the need that all changes, regardless of size, be communicated as soon as possible.

Based on the installed unit and the originally permitted unit, potential emissions change by a very small amount for EUFURNACE and FGAUXHEATING. As you are aware, U.S. EPA AP-42 emission factors were used in calculating potential emissions for this unit and the other units in the FGAUXHEATING group. Changes in nitrogen oxide (NOx) and carbon monoxide (CO) emissions for FGAUXHEATING, which includes EUFURNACE, with the 0.35 mmBtu/hr heat input for EUFURNACE included are summarized below.

Pollutant	Emission Factor	Total FGAUXHEATING Emissions (ton/yr)		Emissions Change
	(lb/MMCF ¹)	0.2075 mmBtu/hr	0.35 mmBtu/hr	(ton/yr)
		EUFURNACE	EUFURNACE	
NOx	100	0.321	0.383	0.062
CO	84	0.270	0.322	0.052

1 – MMCF = million cubic feet natural gas; projected at 6.3 MMCF/yr at 8,760 hours of operation

As you can see, emissions for EUFURNACE and FGAUXHEATING increase by less than 0.1 ton/yr for both NOx and CO when calculations include the installed unit rather than the permitted unit. This has no impact on the regulatory analysis for these units or for the site. It should also be noted that reported emissions from the site have been accurate for the units installed as

actual fuel use is used to calculate reported emissions and heat input of the units has no part in that calculation.

Although there is minimal impact on the potential emissions related to the heat input rating inconsistency in the heat input ratings. DTE will coordinate with EGLE staff to determine the application within 180 days of this submittal. As there are no emission limits included in the change for EUFURNACE, DTE is proposing to modify the permit condition to address the appropriate method to make this modification and is proposing to submit the necessary permit for FG AUXHEATING, the only modification will be to the heat input rating in FGAUXHEATING SC IV.1 for EUFURNACE.

If you have any questions on the information in this letter or would like further information, please contact me at <u>Barry.Marietta@dteenergy.com</u> or (810) 343-6391.

Sincerely,

Barry Marietta

Barry Marietta Manager – Environmental Strategy DTE Energy (810) 343-6391 Barry.Marietta@dteenergy.com

Cc (electronic): Mr. Todd Baker, DTE Mr. Chris Conley, DTE Mr. John Leonard, DTE Ms. Amanda Kosch, DTE Mr. Shamim Ahammod, EGLE Ms. Jenine Camilleri, EGLE