GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
JACKSON DISTRICT OFFICE

DANIEL EICHINGER
ACTING DIRECTOR

July 11, 2023

Mr. Daniel Casey, Plant Manager
DTE Electric Company - Monroe Power Plant
3500 East Front Street
Monroe, Michigan 48161

SRN: B2816, Monroe County

Dear Dan Casey:

VIOLATION NOTICE

On June 10, 2023, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), received a Rule 366.1912(5) notification via email with a follow up letter received on June 19, 2023, from DTE Electric Company - Monroe Power Plant (DTE Monroe) located at 3500 E. Front St., Monroe, Michigan. The purpose of this notification was to notify AQD of an abnormal condition period which caused emissions of SO_2 in excess of a permit condition. DTE Monroe submitted this notification per the requirements of the federal Clean Air Act; Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451); the Air Pollution Control Rules; the conditions of Permit to Install (PTI) number 8-22; and the conditions of Renewable Operating Permit (ROP) number MI-ROP-B2816-2019;

Based on the information provided in the notification, staff determined the following:

Process Description	Rule/Permit Condition Violated	Comments
EU-UNIT2	R 336.1401, R 336.2810, 40 CFR 52.21(j), R 336.2902(2)(c), 40 CFR Part 51, Appendix S / PTI No. 8-22 SC I.5; MI-ROP-B2816-2019 SC I.5	Due to an abnormal condition on June 9, 2023, Unit 2 exceeded its SO_2 emission limit of 0.107 lb/MMBtu based on a 24 rolling average as determined each hour the boiler operates for 20 hours.

DTE Monroe determined the cause of the elevated emissions was the loss of oxidation air within the flue gas desulfurization (FGD) absorber tower. This was caused by the north oxidation air blower shutting down due to high oil temperature. This created sulfite binding within the absorber tower which caused the absorber tower to become saturated with gypsum. Gypsum is a normal product of the chemical reaction that reduces SO_2 within the FGD process. However, when the absorber tower becomes saturated with gypsum, the chemical reaction that reduces SO_2 within the tower is inhibited as the limestone powder that is injected into the FGD system cannot properly dissolve into the slurry to provide sufficient reduction of SO_2.

DTE Monroe asserted that once the elevated emissions were noticed via the continuous emissions monitoring system (CEMS), operations took action to troubleshoot and bring SO_2 emission rates back

to normal levels. Although the emissions were brought back into control within a few hours of the monitoring system signaling elevated emissions, the elevated emissions resulted in a longer period during which the 24-hour rolling average SO_2 emission rate was above the permitted limit. DTE stated that after the elevated emissions period and corrective actions being taken, SO_2 emissions returned to normal rates and have remained there, well below the permitted emission limit.

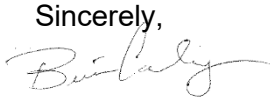
DTE Monroe has stated that corrective action has been taken based on this incident. The alarm system has been modified to better signal the loss of oxidation air and identify issues more quickly. DTE Monroe asserts that this will allow operations personnel to react more quickly to significant issues related to oxidation air levels. Additionally, DTE Monroe states that the alarm level related to oxidation air will escalate if the issue is not addressed after the initial alarm comes in. These modifications will ensure that the alarms are addressed in a timely manner to minimize any periods of elevated emissions.

DTE Monroe also stated that the Malfunction Abatement Plan (MAP) for the pollution control equipment associated with the FGD-controlled units is being updated to include the monitoring modifications and will be submitted to the Jackson District office within 45 days per MI-ROP-B2816-2019, EU-UNIT2 Special Condition III.1. The excess emissions associated with this incident will be included in the quarterly excess emissions reports which will be filed by Monroe Power Plant as required by June 30, 2023. The actions taken to correct the cited violation appear appropriate to bring this facility back into compliance.

If DTE Monroe believes the above observations or statements are inaccurate or do not constitute violations of the applicable legal requirements cited, please provide appropriate factual information to explain your position.

Thank you for your attention to resolving the violation cited above. If you have any questions regarding the violation or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,



Brian Carley
Environmental Quality Specialist
Air Quality Division
517-416-4631

cc: Barry Marietta, DTE Electric Company
Elise Ciak, DTE Electric Company
Annette Switzer, EGLE
Christopher Ethridge, EGLE
Brad Myott, EGLE
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Scott Miller, EGLE