

GRETCHEN WHITMER GOVERNOR

## STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY





November 3, 2023

VIA E-MAIL

Daniel Bollman, Vice President of Infrastructure, Facilities, and Planning Michigan State University 1147 Chestnut Road East Lansing, Michigan 48824 SRN: K3249,

SRN: K3249, Ingham County

Dear Daniel Bollman:

## VIOLATION NOTICE

On March 13, 22, and 24, 2023, the Department of Environment, Great Lakes, and Energy (EGLE), Air Quality Division (AQD), conducted an inspection of Michigan State University (MSU) located at 426 Auditorium Road, East Lansing, Michigan. The purpose of this inspection was to determine MSU's compliance with 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; and the conditions of Permit to Install (PTI) number 139-18; and the conditions of Renewable Operating Permit (ROP) number MI-ROP-K3249-2016a.

As a result of the inspection, staff have determined the following:

Process Description	Rule/Permit Condition Violated	Comments
Natural gas-fired medium pressure steam boiler rated at 300 MMBtu/hr and equipped with low nitrogen oxides (NOx) burners and flue gas recirculation (FGR)	PTI 139-18, EUSTMBOILER Special Condition (SC) I.1	From October 24, 2022, through early February 2023, facility was unable to demonstrate compliance with NOx limit of 0.04 lb/mmBtu, over a 30-day rolling average time period, when firing natural gas.
Natural gas-fired medium pressure steam boiler rated at 300 MMBtu/hr and equipped with low nitrogen oxides (NOx) burners and flue gas recirculation (FGR)	PTI 139-18, EUSTMBOILER Special Condition SC IV.4, and VI.2	A continuous emission monitoring system (CEMS) was not present during the October 24, 2022 initial start- up of EUSTMBOILER, and was not operating until early February, 2023. Therefore, the requirements of Appendix A to the PTI were not met.

Daniel Bollman Michigan State University Page 2 November 3, 2023

Natural gas-fired medium pressure steam boiler rated at 300 MMBtu/hr and equipped with low nitrogen oxides (NOx) burners and flue gas recirculation (FGR)PTI 139-18, EUSTMBOILER SC VII.3, and 40 CFR 60.7(c)(3).	MSU was not tracking downtime for the temporary CEMS or submitting downtime reports.
---	---

Information provided by MSU on September 19, 2023, in response to emailed questions on September 12, 2023, about EUSTMBOILER, indicated that EUSTMBOILER was not equipped with a continuous emission monitoring system (CEMS) on October 24, 2022, during the initial trial operation of the boiler, although a CEMS unit was reported to be operating on the unit in early February 2023, to gather data for building a predictive emission monitoring system model.

MSU was therefore, unable from October 24, 2022, through early February 2023, to demonstrate compliance with the PTI 139-18, EUSTMBOILER I.1 nitrogen oxide (NOx) limit of 0.04 lb/mmBtu, over a 30-day rolling average time period, when firing natural gas.

This also violates PTI 139-18, EUSTMBOILER SC IV.4, which requires the permittee to install, calibrate, maintain, and operate, in a satisfactory manner, devices to continuously record the nitrogen dioxide (NOx) emissions, and oxygen (O2) (or carbon dioxide (CO2)) content of the exhaust gas from EUSTMBOILER, and which requires the permittee to install and operate the CEMS or alternative monitoring system (AMS) to meet the timelines, requirements, and reporting detailed in Appendix A.

The absence of a CEMS until early February 2023, also violates PTI 139-18, EUSTMBOILER SC VI.2, which requires the permittee, in part, to continuously monitor and record, in a manner acceptable to the AQD District Supervisor, the NOx emissions and the O2 (or CO2) content from the exhaust gas from EUSTMBOILER. It also requires the permittee, in part, to operate the NOx CEMS or AMS to meet the timelines, requirements, and reporting detailed in Appendix A.

Additionally, MSU was said to not have been tracking downtime for the temporarily installed CEMS and did not submit downtime reports. This violates PTI 139-18, EUSTMBOILER SC VII.3, which requires the permittee to submit all reports required by the federal Standards of Performance for New Stationary Sources, 40 CFR 60.49b, including performance test data from initial performance tests, performance evaluations of the CEMS, NOx emission reports, and excess emission reports. The permittee shall submit these reports to the AQD District Supervisor within the time frames specified in 40 CFR 60.49b and/or 40 CFR 60.7. This also violated 40 CFR 60.7(c)(3), which requires submittal of reports of CEMS downtime.

Daniel Bollman Michigan State University Page 3 November 3, 2023

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by November 24, 2023 (which coincides with 21 calendar days from the date of this letter). The written response should include: the dates the violations occurred; an explanation of the causes and duration of the violations; whether the violations are ongoing; a summary of the actions that have been taken and are proposed to be taken to correct the violations and the dates by which these actions will take place; and what steps are being taken to prevent a reoccurrence.

Please submit the written response to Daniel McGeen at EGLE, AQD, Lansing District, at Constitution Hall, P.O. Box 30242, First Floor South, Lansing, Michigan 48909 or mcgeend@michigan.gov and submit a copy to Jenine Camilleri, Enforcement Unit Supervisor at EGLE, AQD, P.O. Box 30260, Lansing, Michigan 48909-7760.

If MSU 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 violations cited above and for the cooperation that was extended to me during my inspection of MSU. If you have any questions regarding the violations or the actions necessary to bring this facility into compliance, please contact me at the number listed below.

Sincerely,

Man

Daniel A. McGeen Environmental Quality Analyst Air Quality Division 517-648-7547

cc: Mary Lindsey, MSU Amanda Groll, MSU Annette Switzer, EGLE Christopher Ethridge, EGLE Brad Myott, EGLE Jenine Camilleri, EGLE Robert Byrnes, EGLE