

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY DETROIT



KEITH CREAGE

SRN: B2103, Wayne County

June 21, 2016

Ms. Wendy Barrott, General Manager Great Lakes Water Authority Wastewater Treatment Plant 9300 West Jefferson Avenue, Suite 103 Detroit, MI 48209

Dear Ms. Barrott:

- VIOLATION NOTICE

From January 18-21, 2016, and from February 2-3, 2016, emissions testing was conducted on the four biosolids dryer trains at the Biosolids Drying Facility (BDF) operated by New England Fertilizer Company (NEFCO). The BDF is part of the Great Lakes Water Authority (GLWA) Detroit Wastewater Treatment Plant (WWTP) stationary source located at 9300 West Jefferson Avenue in Detroit, Michigan. Emissions testing is required at Special Condition (SC) V.1 of the FGDryerTrains flexible group within the WWTP's Renewable Operating Permit (No. MI-ROP-B2103-2014c). The tests serve as a means to demonstrate 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); and the administrative rules and the emission limitations set forth in SCs I.4 through I.12 in FGDryerTrains, including an emission limitation at SC I.9 of 0.82 pounds sulfur dioxide (SO₂) per hour applied to each of the four biosolids dryer trains.

The emissions tests performed on January 18-21 and February 2-3, 2016 revealed the following violations:

Process Description	Rule/Permit Condition Violated	Comments
Biosolids Dryer Trains named individually in the ROP as EUDryerTrainA, EUDryerTrainB, EUDryerTrainC, EUDryerTrainD	MI-ROP-B2103-2014c, FGDryerTrains, SC I.9;	Emissions testing performed from January 18-21 measured SO ₂ emissions of 0.92 pounds per hour for EUDryerTrainD. Emissions testing performed from February 2-3 measured SO ₂ emissions of 0.83 pounds per hour for EUDryerTrainC.

The measured SO_2 emissions of 0.92 pounds per hour for EUDryerTrainD and 0.83 pounds per hour for EUDryerTrainC each represent a violation of the SO_2 emission

Ms. Wendy Barrott Page 2 June 21, 2016

limitation of 0.82 pounds per hour enumerated within MI-ROP-B2103-2014c, FGDryerTrains, at SC I.9 and applicable to each dryer train within the BDF.

On February 12, 2016, representatives from GLWA and NEFCO met with staff from the Michigan Department of Environmental Quality – Air Quality Division (DEQ-AQD) at the DEQ-AQD Detroit Office to discuss the aforementioned violations. At this meeting, GLWA and NEFCO provided DEQ-AQD staff with a draft of a SO₂ Compliance Plan. In the time since this meeting, GLWA and NEFCO have begun to implement the SO₂ Compliance Plan, and have provided DEQ-AQD with updates regarding the progress being made to implement the SO₂ Compliance Plan, including:

- An updated SO₂ Compliance Plan, dated March 16, 2016;
- Correspondence dated April 19, 2016 that provided an update as to the progress being made in implementing the SO₂ Compliance Plan;
- An amended Malfunction Abatement Plan for the Biosolids Drying Facility, dated May 19, 2016;
- A SO₂ Compliance Plan Update, dated June 17, 2016.

These updates serve to satisfy the requirement to provide a written response to this Violation Notice. However, the June 17, 2016 SO_2 Compliance Plan Update includes data reports from Continuous Emission Monitoring (CEM) equipment that has been installed on the stacks of the four dryer trains to continuously measure SO_2 emissions; this data indicates that there have been additional measured exceedances of the hourly SO_2 emission limit, in violation of MI-ROP-B2103-2014c. These exceedances are summarized as follows:

- Data Set #1 covers the period from April 5 through April 13, 2016. During this time period, EUDryerTrainA and EUDryerTrainC operated. The data summary table lists a maximum measured hourly SO₂ emission of 1.41 lb/hour for EUDryerTrainA, and 1.47 lb/hour for EUDryerTrainC.
- Data Set #2 covers the time period from April 14 through May 2, 2016; all four dryer trains operated at some point during this time period. The data summary table lists maximum measured hourly SO₂ emissions of 0.85 lb/hour for EUDryerTrainA, 1.73 lb/hour for EUDryerTrainC, and 1.64 lb/hour for EUDryerTrainD.

Of the 456 hours during this time period, EUDryerTrainA had numerical data for 340 hours, with two reported hourly emissions that exceeded the permit limit during this time period. EUDryerTrainC had numerical data for 142 hours, with 32 reported hourly emissions exceedances. EUDryerTrainD had numerical data reported for 204 hours, with six reported hourly emissions

 Data Set #3 covers the time period from May 3 through June 2, 2016. During this time period, EUDryerTrainA, EUDryerTrainC and EUDryerTrainD operated. Ms. Wendy Barrott Page 3 June 21, 2016

The data summary table lists maximum measured hourly SO_2 emissions of 1.39 lb/hour for EUDryerTrainA, 1.09 lb/hour for EUDryerTrainC, and 1.54 lb/hour for EUDryerTrainD.

Of the 744 hours during this time period, EUDryerTrainA had numerical data for 707 hours, with 107 reported hourly emissions that exceeded the permit limit during this time period. EUDryerTrainC had numerical data for 199 hours, with 9 reported hourly emissions exceedances. EUDryerTrainD had numerical data reported for 468 hours, with 86 reported hourly emissions

If GLWA believes that 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 in a written response by July 12, 2016 (which coincides with 21 calendar days from the date of this letter).

Thank you for your continued attention to resolving the violations cited above. Should you require any further information regarding this matter, please contact me at the number listed below.

Sincerely,

Stephen Weis

Senior Environmental Engineer

Air Quality Division

Jeff Konnter for

313-456-4688

cc: Mr. Raymond Scott, City of Detroit, BSEED

Ms. LaReina Wheeler, City of Detroit, BSEED

cc/via email: Ms. Lynn Fiedler, DEQ

Ms. Teresa Seidel, DEQ

Mr. Thomas Hess, DEQ

Ms. Heidi Hollenbach, DEQ

Ms. Annette Switzer, DEQ

Ms. Wilhemina McLemore, DEQ

Mr. Jeff Korniski, DEQ

Ms. Jodi Peace, DEQ