

## STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY SOUTHEAST MICHIGAN DISTRICT OFFICE



DAN WYANT DIRECTOR

August 21, 2015

Mr. Dennis Plaster Vice President of Operations Sumpter Energy Associates 46280 Dylan Drive, Suite 200 Novi, Michigan 48377

SRN: N8004, Macomb County

Dear Mr. Plaster:

## **VIOLATION NOTICE**

On August 7, 2015, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of Sumpter Energy's landfill gas to energy plant located at 36450 29 Mile Road, Lenox Township, Michigan. The purpose of this inspection was to determine Sumpter Energy'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 administrative rules and the conditions of Renewable Operating Permit (ROP) number MI-ROP-N8004-2013.

During the inspection, staff observed the following:

Process Description	Rule/Permit Condition Violated	Comments
Engines 1 through 7 (FGENGINES)	ROP-MI-N8004-2013 General Condition 4, FGENGINES Special Conditions VI.1. through VI.8.	Sumpter Energy was unable to provide records during my on-site inspection. Therefore the AQD was unable to determine compliance with the record keeping conditions and the emission limits established in the ROP.
Engines 8 and 9 (FGICENGINE2)	ROP-MI-N8004-2013 General Condition 4, FGICENGINE2 Special Conditions VI.1. through VI.8.	Sumpter Energy was unable to provide records during my on-site inspection. Therefore the AQD was unable to determine compliance with the record keeping conditions and the emission limits established in the ROP.
Engines 8 and 9 (FGICENGINE2)	FGICENGINE2 Condition VI.4 and Appendix 2 – The Schedule of Compliance.	Based on the spreadsheet provided during my inspection by Mr. Vince Dang and the monthly summaries provided by Derenzo, it appears the SO2 emission calculations are not calculated using the most recent landfill gas

		sulfur content sampling results. Specifically, when the concentrations are above 500ppm and 600ppm.
Engines 8 and 9 (FGICENGINE2)	FGICENGINES2 Condition I.5, the SO2 lb/hour emission limit	Based on the provided engine curtailment plan and the H2S/gas flow data, Sumpter Energy appears to have exceeded the SO2 emission limit of 7.5 lb/hr on July 15, 2015, July 31, 2015, and August 1, 2015.

During my inspection, Sumpter Energy was unable to produce the requested record keeping and emission records. On August 10, 2015, as instructed by Mr. Jason Neumann, the AQD emailed a request to obtain a copy of the records required to be maintained by MI-ROP-N8004-2013 (see the enclosed copy). To date the requested records have not been provided.

This is a violation of the recordkeeping requirements specified in ROP number MI-ROP-N8004-2013. Specifically, General Condition 4, FGENGINES Conditions VI.1. through VI.8., and FGICENGINE2 Conditions VI.1. through VI.8.

During my inspection, Mr. Vince Dang did provide me with the monthly/weekly/daily H2S sampling results. Mr. Dang explained that at the beginning of July, they ran out of calibration gas for the GEM gas analyzer and were now using draeger tubes to obtain H2S concentrations. In the excel sheet provided, it appears the H2S concentrations are being corrected for pretest calibrations even when the draeger tubes are being used. This needs to be corrected as no calibrations are conducted when using draeger tubes.

Based on conversations with Mr. Dang and Mr. Tyler Wilson, Derenzo and Associates, it is unclear who is conducting the beginning of the month sampling and how the sample is being collected (i.e., GEM analyzer, draeger tube, lab sample).

In addition, it appears the monthly SO2 emissions are being calculated using the initial sample taken at the beginning of the month. FGICENGINE2, condition number VI.4., specifically states: The permittee shall keep, in a satisfactory manner, monthly SO<sub>2</sub> mass emission calculation records for each engine in FGICENGINE2. The SO<sub>2</sub> emission calculations shall be based on the most recent landfill gas sulfur content sampling results (per the sampling required under SC V.3) and the monthly landfill gas usage of the engines. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. SO2 emissions need to be calculated using the most recent collected landfill gas sample in order to accurately calculate SO2 emissions and also curtail engine usage in a timely manner, if necessary. This is not currently being done.

Sumpter Energy must also sample at the frequencies specified in Appendix 2 – The Schedule of Compliance. Appendix 2 states: If the H2S concentrations are above 500 ppm, gas sampling shall be conducted weekly and if the H2S concentrations are about 600 ppm, gas sampling shall be conducted daily. These results should be used when calculating the monthly SO2 emissions.

On November 15, 2012, Sumpter Energy was issued a Violation Notice Letter for exceeding the SO2 emission limit. In response to this violation notice, a Schedule of Compliance was written into Appendix 2 of the ROP renewal and Sumpter Energy proposed a Sulfur Monitoring and Emissions Curtailment Plan. The most recent revision of this Plan was received by the AQD on February 27, 2015. Upon review of the H2S data, it appears Sumpter Energy is not consistently following the compliance schedule/engine curtailment plan. Specifically, on July 15, 2015, July 31, 2015, and August 1, 2015, the landfill gas H2S concentrations were above 700ppm and the gas flow was above 1010 scfm. According to this data and the revised plan, Sumpter Energy exceeded the SO2 permit limit of 7.5 lbs/hr on these days.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by September 11, 2015 (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.

In addition, please provide the following:

- 1. Copies of the records required to be maintained by MI-ROP-N8004-2013, from July 2014 through August 2015.
- 2. Updated monthly SO2 emission calculations for 2014 and 2015.
- 3. A detailed outline of who is conducting the H2S sampling and the methods that are being used to collect the samples.

If Sumpter Energy 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. 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,

Rebecca Loftus

Senior Environmental Quality Analyst

Air Quality Division

586-753-3735

Attachment: Email Dated August 10, 2015

cc/via e-mail: Ms. Emily Zambuto, Aria Energy

Mr. Jason Neumann, Aria Energy

Mr. Vince Dang, Aria Energy

Mr. Steve Walters, WM

Ms. Lynn Fiedler, DEQ

Ms. Teresa Seidel, DEQ

Mr. Thomas Hess, DEQ

Mr. Chris Ethridge, DEQ