

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

DETROIT



C. HEIDI GRETHER DIRECTOR

June 9, 2017

Mr. Linwood Bubar, President Detroit Renewable Power, LLC 5700 Russell St. Detroit, MI 48211-2545

SRN: M4148, Wayne County

Dear Mr. Bubar:

VIOLATION NOTICE

On April 20, 2017, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), conducted an inspection of Detroit Renewable Power located at 5700 Russell, Detroit, Michigan. The First Quarter 2017 Continuous Emissions Monitoring Systems (CEMS) Reports was received on April 27, 2017. The purpose of the April 20, 2017 inspection and review of the First Quarter 2017 CEMS reports was to determine Detroit Renewable Power'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 MI-ROP-M4148-2011a.

As a result of the inspection and review of the First Quarter 2017 CEMS Reports, the following violations were identified.

Process Description	Rule/Permit Condition Violated	Comments	
FGMSWPROC-LINES	ROP No. MI-ROP-M4148-2011a, FGMSWPROC-LINES, SC IV.1, VI.3 and VI.13	Primary and secondary baghouses have multiple days with pressure drop readings outside the recommended operating range and the range established during the most recent stack test.	
FGMSWPROC-LINES	ROP No. MI-ROP-M4148-2011a, FGMSWPROC-LINES, SC IV.3 Fugitive Dust Management Plan, Section 4.4.3	Records provided from October 3, 2016 through April 18, 2017 indicate that the negative pressure is not maintained at Tip East 5.	
	Odor Management Plant, Section 2.2g		

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FGBOILERS011-013 Boiler 13	ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.11.b	CO emissions based on a 1- hour block average exceeded 267 ppmv for two consecutive hours on March 26, 2017 (8:00 to 10:00 – 274 ppmv and 297 ppmv).
FGBOILERS011-013	ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC III. 10 and SC VI. 59	Lime slurry density and pounds per hour of pebble lime was not maintained during SO ₂ CEMS downtime.

Primary and Secondary Baghouse Pressure Drop - FGMSWPROC-LINES, SC IV.1, VI.3 and VI.13

FGMSWPROC-LINES, SC IV.1 requires that EUMSWPROC-LINE1, EUMSWPROC-LINE2 or EUMSWPROC-LINE3 not be operated unless the designated cyclones and baghouses for process lines are installed and operating properly. FGMSWPROC-LINES, SC VI. 3 requires that applicable emission unit not operate if the particulate control equipment pressure drop falls out of the range established during the most recent stack test and/or per the manufacturer's recommended operating pressure drop range. SC VI. 13 requires that any repairs or corrective action needed to address the causes of malfunction or failure of the control equipment be performed immediately.

Correspondence provided by the facility via email on May 3, 2017 indicates the operating pressure drop range is 2 inches water to 10 inches water (Greater Detroit Resource Recovery, Instruction Book for Ray-Jet Dust Collectors). The most recent stack testing event occurred on October 3, 2016 on process line 3 with pressure drop ranges as follows: Primary 300 - 2 to 2.4 inches water, Secondary 300 - 2 to 2.5 inches water.

In review of the records provided for October 29, 2016 through April 18, 2017, the pressure drop readings for the primary and secondary baghouses were out of manufacturer and stack test operating ranges on multiple days over a 171 day period (October 29, 2016 through April 18, 2017) as outlined in the below table.

Baghouse	Days out of operating range	% days outside operating range	Lowest reading outside of operating range (inches water)	Highest reading outside of operating range (inches water)
Primary Baghouse - Line 1 (107)	145	85	0	NA
Primary Baghouse - Line 2 (207)	96	56	0	12
Primary Baghouse - Line 3 (307)	3	2	0.4	NA
Secondary Baghouse - Line 1 (135)	12	7	NA	12
Secondary Baghouse - Line 2 (235)	12	7	NA	12
Secondary Baghouse - Line 3 (335)	12	7	0.08	NA

Primary and secondary baghouses have multiple days with pressure drop readings outside the manufacturer operating range and the range established during the most recent stack test. This is a violation of FGMSWPROC-LINES SC IV.1 and VI.3.

Based on the baghouse maintenance records provided as part of the April 20, 2017, the facility has not conducted the necessary maintenance to bring the pressure drop back into the operating range in a consistent manner. As described above, the facility continues to operate the baghouses when the pressure drop is out of the specified operating range. This is a violation of FGMSWPROC-LINES SC VI. 13.

<u>Negative Pressure at Solid Waste Receiving and Storage Rooms - FGMSWPROC-LINES, SC IV.3, Fugitive Dust Management Plan, Section 4.4.3, and Odor Management Plant, Section 2.2g</u>

FGMSWPROC-LINES, SC IV.3, requires that a negative pressure is maintained in the solid waste receiving, processing, and storage rooms. The Fugitive Management Plan dated February 2011, Section 4.4.3 states that a hand held velometer will be used to "ensure inward flow is maintained". The Odor Management Plan dated December 2015, Section 2.2g states that the MSW building is maintained under negative pressure.

Records provided from October 3, 2016 through April 18, 2017 indicate that negative pressure is not maintained at Tip East 5 (the upper tipping floor entrance door). Velocity readings indicate a measurement for wind speed going out of tipping floor door "Tip East 5" for nearly all the readings provided from October 3, 2016 through April 18, 2017.

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Additionally, on April 30, 2017, in response to an odor complaint, the AQD documented that negative pressure is not maintained on the upper tipping floor doors. During the investigation, the tipping floor doors were closed, but there was excessive "mist" emanating from the tops of both upper tipping floor doors. The "mist", believed to be the facility masking agent, was also observed emanating from an area on the MSW storage building where the siding has been removed. Photographs were collected and were provided to the facility on May 1, 2017.

The daily velometer readings for October 3, 2016 through April 18, 2017 indicate that the negative pressure is not maintained at Tip East 5 (the upper tipping floor entrance door). Observations on April 30, 2017, also indicate that negative pressure is not maintained on the MSW Building. This is a violation of FGMSWPROC-LINES, SC IV.3, Fugitive Dust Management Plan, Section 4.4.3, and Odor Management Plant, Section 2.2g.

Carbon Monoxide 1-hour Block Average - FGBOILERS011-013, SC I.11.b

Review of the First Quarter 2017 CEMS Reports and CEMS data provided as part of the April 20, 2017 inspection it was identified that on March 26, 2017, Boiler 13 exceeded the 1-hour block average CO emission limit (267 ppmv) for two consecutive hours (274 ppmv and 297 ppmv); indicating corrective action was not implemented in a timely manner. This is a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.11.b.

Lime Slurry Density and Pounds per Hour Pebble Lime - FGBOILERS011-013, SC III.10 and SC VI. 59

FGBOILERS011-013, SC III. 10 requires that the slurry density be manually determined in the event of SO₂ CEMS malfunction or failure, and that lime slurry feed system be operated such that, at a minimum, 800 pounds per hour of pebble lime be added. FGBOILERS011-013, SC VI. 59 requires that the date, time, and duration of SO₂ CEMS malfunction or failure, the amount of pebble lime added per hour, the lime slurry density, and lime slurry flow rate be recorded.

According to email correspondence from Ms. Tabetha Peebles dated May 8, 2017, "The slurry density readings cannot be located for the time frames when the SO₂ CEMS was down (2-14-16 and 2-15-16, 7-2-16 through 7-4-16, 11-23-16 and 11-24-16, 12-1-16 and 12-2-16, 12-5-16 and 12-6-16, and 12-14-16)." Because the lime density was not maintained during the twelve days listed above, the pounds per hour pebble lime was also not maintained. This is a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC III.10 and SC VI. 59.

Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by June 30, 2017 (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.

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If Detroit Renewable Power 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,

Wilhemino McLemore for

Todd Zynda, P.E. Environmental Engineer Air Quality Division 313-456-2761

cc: Mr. Damian Doerfer, DRP Ms. LaReina Wheeler, City of Detroit, BSEED cc via email: Ms. Lynn Fiedler, DEQ Ms. Mary Ann Dolehanty, DEQ Mr. Christopher Ethridge, DEQ Mr. Thomas Hess, DEQ Ms. Wilhemina McLemore, DEQ Mr. Jeff Korniski, DEQ