

STATE OF MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY DETROIT



C. HEIDI GRETHER
DIRECTOR

SRN: M4148, Wayne County

February 26, 2018

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

Dear Mr. Bubar:

On December 27, 2017, the Department of Environmental Quality (DEQ), Air Quality Division (AQD), received the Third Quarter 2017 Continuous Emissions Monitoring Systems (CEMS) Report for Detroit Renewable Power located at 5700 Russell, Detroit, Michigan. The Fourth Quarter 2017 CEMS Report was received on February 2, 2018. In addition, a Rule 912 notification was received on February 5, 2018. During review of the quarterly reports and Rule 912 notification, the AQD evaluated 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; MI-ROP-M4148-2011a; and Administrative Consent Order (ACO) AQD No. 6-2017.

VIOLATION NOTICE

During the review of the Third Quarter 2017, Fourth Quarter 2017 Continuous Emissions Monitoring Systems Reports and associated CEMS data, and review the Rule 912 notification, the following violations were identified:

Process Description	Rule/Permit Condition Violated	Comments		
Boiler 11 – Third Quarter 2017	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 8/20/2017 (17:00 to 19:00 – 316 ppmv and 284 ppmv).		
	ROP No. MI-ROP-M4148- 2011a, FGBOILERS011-013, SC I.13.a	NOx emissions based on a 1-hour block average exceeded 247 ppmv on 9/12/2017 (6:00 to 7:00 – 248 ppmv) and 9/29/2017 (0:00 to 1:00 - 249 ppmv).		

Boiler 11 – Fourth Quarter	ROP No. MI-ROP-M4148- 2011a, FGBOILERS011-013, SC I.13.a	NOx emissions based on a 1-hour block average exceeded 247 ppmv on 10/12/2017 (9:00 to 10:00 – 248 ppmv) and 12/10/2017 (16:00 to 17:00 - 255 ppmv).		
	ROP No. MI-ROP-M4148- 2011a, FGBOILERS011-013, SC I.9.a 40 CFR Part 60, Subpart Cb,	SO ₂ emissions based on a 24-hour daily geometric mean exceeded 29 ppmv on 12/31/17 (66 ppmv).		
	§60.33b(b)(3)(i)			
	40 CFR Part 62, Subpart FFF, §62.14103(b)(1)			
	ACO AQD No. 6-2017, Paragraph 13			
Boiler 13 – Fourth Quarter	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 12/29/2017 (20:00 to 22:00 – 349 ppmv and 268 ppmv).		
	ROP No. MI-ROP-M4148- 2011a, FGBOILERS011-013, SC I.11.a	CO emissions based on a 24-hour block average exceeded 200 ppmv on 12/29/17 (204 ppmv).		
	40 CFR Part 60, Subpart Cb, §60.34b(a), Table 3			
	ACO AQD No. 6-2017, Paragraph 13			
	ROP No. MI-ROP-M4148- 2011a, FGBOILERS011-013, SC I.13.a	NOx emissions based on a 1-hour block average exceeded 247 ppmv on 10/9/2017 (19:00 to 20:00 – 249 ppmv)		
FGBOILERS011-013	ROP No. MI-ROP-M4148- 2011a, FGBOILERS011-013, SC VII.5	Failure to report all excess emissions for Third Quarter 2017 and Fourth Quarter 2017.		
	40 CFR Part 60, Subpart A,			

	§60.7(c)	
	R336.2170(1)(a)(ii)	
Boiler 12 – Rule 912	ROP No. MI-ROP-M4148-	CO emissions based on a
Notification	2011a, FGBOILERS011-013,	1-hour block average
	SC I.11.b	exceeded 267 ppmv for
		five consecutive hours on
	ACO AQD No. 6-2017,	1/30/2018 (3:00 to 8:00 –
	Paragraph 13	305 ppmv, 667 ppmv, 508
		ppmv, 651 ppmv, and 570
		ppmv).

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

On August 20, 2017, Boiler 11 exceeded the 1-hour block average CO emission limit (267 ppmv) for two consecutive hours (17:00 to 19:00 - 316 ppmv and 284 ppmv); indicating corrective action was not implemented in a timely manner. On December 29, 2017, Boiler 13 exceeded the 1-hour block average CO emission limit (267 ppmv) for two consecutive hours (20:00 to 22:00 - 349 ppmv and 268 ppmv); indicating corrective action was not implemented in a timely manner. Each incident is a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.11.b.

On January 30, 2018, Boiler 12 exceeded the 1-hour block average CO emission limit (267 ppmv) for five consecutive hours (3:00 to 8:00 - 305 ppmv, 667 ppmv, 508 ppmv, 651 ppmv, and 570 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. Per ACO AQD No. 6-2017, Paragraph 13, this violation is also subject to stipulated fines as the more than three consecutive hours were exceeded.

Nitrogen Oxide 1-hour Block Average - FGBOILERS011-013, SC I.13.a

During the third quarter 2017, Boiler 11 exceeded the 1-hour block average NOx emission limit (247 ppmv) for one hour on September 12, 2017 (6:00 to 7:00 - 248 ppmv) and on September 29, 2017 (0:00 to 1:00 - 249 ppmv). During the fourth quarter 2017, Boiler 11 exceeded the 1-hour block average NOx emission limit for one hour on October 12, 2017 (9:00 to 10:00 - 248 ppmv) and December 10, 2017 (16:00 to 17:00 - 255 ppmv). Boiler 13 also exceed the NOx emission limit for one hour during the fourth quarter on October 9, 2017 (19:00 to 20:00 - 249 ppmv).

Each NOx exceedance did not occur during startup or shutdown scenarios. Each incident is a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.13.a.

Carbon Monoxide 24-hour Block Average - FGBOILERS011-013, SC I.11.a

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On December 29, 2017, the Boiler 13 exceeded the 24-hour block average CO emission limit (200 ppmv) at 204 ppmv. This is a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.11.a and 40 CFR Part 60, Subpart Cb, §60.34b(a), Table 3. Per ACO AQD No. 6-2017, Paragraph 13, this violation is also subject to stipulated fines.

Sulfur Dioxide 24-hour Daily Geometric Mean - FGBOILERS011-013, SC I.9.a

On December 31, 2017, the Boiler 11 exceed the 24-hour daily geometric mean SO₂ emission limit (29 ppmv) at 66 ppmv. This is a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.9.a and 40 CFR Part 60, Subpart Cb, §60.33b(b)(3)(i), and 40 CFR Part 62, Subpart FFF, §62.14103(b)(1). Per ACO AQD No. 6-2017, Paragraph 13, this violation is also subject to stipulated fines. It should be noted that "partial block period" as defined in MI-ROP-M4148-2011a (pages 79 and 80) does not apply to "geometric averages or geometric means".

Excess Emission Reporting - ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC VII.5

As part of the third and fourth quarter 2017 report reviews, the AQD requested the CEMS data for both quarters. The third quarter 2017 CEMS data was received via email on February 12, 2018. The fourth quarter CEMS data was received via email on February 14, 2018. Following review of third and fourth quarter 2017 CEMS data, the below excess emissions were identified as not reported. This is a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC VII.5; 40 CFR Part 60, Subpart A, §60.7(c); and R336.2170(1)(a)(ii).

Table 1 - Third Quarter 2017 Excess Emissions Not Reported						
Date	Time Start	End Time	Boiler	Pollutant	ppmv	Notes
7/19/2017	14:00	15:00	11	СО	273	Startup
7/28/2017	10:00	11:00	11	СО	443	Startup
7/28/2017	13:00	14:00	11	СО	287	
8/1/2017	3:00	4:00	11	СО	347	
8/22/2017	12:00	13:00	11	СО	301	
8/24/2017	15:00	16:00	11	СО	314	
9/11/2017	3:00	4:00	11	CO	280	
9/11/2017	10:00	11:00	11	СО	272	
9/11/2017	14:00	15:00	11	СО	279	
7/7/2017	2:00	3:00	12	СО	308	Startup
8/25/2017	14:00	15:00	12	CO	418	Startup
8/30/2017	15:00	16:00	12	CO	284	
9/15/2017	6:00	7:00	12	СО	280	

9/18/2017	1:00	2:00	12	СО	327	Shutdown
9/18/2017	2:00	3:00	12	СО	273	Shutdown
9/18/2017	3:00	4:00	12	CO	856	Shutdown
9/23/2017	13:00	14:00	12	CO	1107	Startup
9/25/2017	2:00	3:00	12	CO	301	
9/29/2017	21:00	22:00	12	СО	294	
7/13/2017	3:00	4:00	13	СО	1042	Startup

Table 2 - Fourth Quarter 2017 Excess Emissions Not Reported

Date Time Start End Time Boiler Pollutant ppmv Notes							
Date	Time Start	End Time		Pollutant	ppmv	Notes	
10/7/2017	2:00	3:00	11	СО	871	Startup	
11/3/2017	9:00	10:00	11	СО	313	Startup?	
11/7/2017	16:00	17:00	11	СО	596	Startup	
11/7/2017	20:00	21:00	11	СО	431		
11/20/2017	16:00	17:00	11	СО	310	Startup	
12/1/2017	11:00	12:00	11	СО	356	Startup	
12/5/2017	13:00	14:00	11	СО	353	Startup	
12/7/2017	11:00	12:00	11	СО	1043	Startup	
12/8/2017	10:00	11:00	11	СО	626		
12/11/2017	1:00	2:00	11	СО	292		
12/11/2017	8:00	9:00	11	СО	277		
12/14/2017	8:00	9:00	11	СО	1009	Startup	
12/19/2017	13:00	14:00	11	СО	284		
12/31/2017	14:00	15:00	11	СО	574	Startup	
						24-hour Geometric	
12/31/2017	14:00	23:99	11	со	66	Mean	
11/28/2017	22:00	23:00	12	СО	584	Startup	
12/27/2017	19:00	20:00	12	СО	281		
12/29/2017	4:00	5:00	12	СО	281		
10/8/2017	15:00	16:00	13	СО	461	Startup	
10/9/2017	19:00	20:00	13	NOx	249		
10/17/2017	14:00	15:00	13	NOx	253	Shutdown	
12/5/2017	13:00	14:00	13	СО	419	Startup	
						24-hour Geometric	
						Mean -	
12/27/2018	3:00	7:00	13	SO2	51	Startup/Shutdown	
						24-hour Block	
12/29/2017	0:00	23:99	13	со	204	Average	

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Please initiate actions necessary to correct the cited violations and submit a written response to this Violation Notice by March 19, 2018 (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.

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,

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

cc: Mr. Damian Doerfer, DRP

Mr. Paul Max, 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