



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
DETROIT



C. HEIDI GREETHER
DIRECTOR

September 26, 2018

Mr. Robert Suida, Plant Manager
Detroit Renewable Power, LLC
5700 Russell St.
Detroit, MI 48211-2545

SRN: M4148, Wayne County

Dear Mr. Suida:

SUBJECT: Correspondence regarding DRP's Violation Responses dated June 8, 2018, August 10, 2018 and August 15, 2018

On February 26, 2018, July 20, 2018, and July 26, 2018, the Michigan Department of Environmental Quality (MDEQ) Air Quality Division (AQD) sent Detroit Renewable Power (DRP) Violation Notices as a result of the review of Third Quarter 2017 Continuous Emissions Monitoring Systems (CEMS) Report, the Fourth Quarter 2017 CEMS Report, First Quarter 2018 CEMS Report, and 2017 Subpart Cb Reporting. Copies of the Violation Notices are enclosed for your reference. In review of DRP's Violation Notice responses dated June 8, 2018, August 10, 2018 and August 15, 2018, the AQD either disagrees with DRP's approach of compliance determination or has found that the responses do not adequately address the violation cited. The below tables summarize the violations for which the AQD is providing additional clarification and guidance on compliance determination going forward.

Violation Notice Dated February 26, 2018

| 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). |

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| 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). |
| | <p>ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.9.a</p> <p>40 CFR Part 60, Subpart Cb, §60.33b(b)(3)(i)</p> <p>40 CFR Part 62, Subpart FFF, §62.14103(b)(1)</p> <p>ACO AQD No. 6-2017, Paragraph 13</p> | SO ₂ emissions based on a 24-hour daily geometric mean exceeded 29 ppmv on 12/31/17 (66 ppmv). |
| 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). |
| | <p>ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.11.a</p> <p>40 CFR Part 60, Subpart Cb, §60.34b(a), Table 3</p> <p>ACO AQD No. 6-2017, Paragraph 13</p> | CO emissions based on a 24-hour block average exceeded 200 ppmv on 12/29/17 (204 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 10/9/2017 (19:00 to 20:00 – 249 ppmv). |

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

Violation Notice dated July 20, 2018

| Process Description | Rule/Permit Condition Violated | Comments |
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| Boilers 12 and 13 – First Quarter 2018 | ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.9.a 40 CFR Part 60, Subpart Cb, §60.33b(b)(3)(i) 40 CFR Part 62, Subpart FFF, §62.14103(b)(1) ACO AQD No. 6-2017, Paragraph 13 | Boiler 12 SO ₂ emissions based on a 24-hour daily geometric mean exceeded 29 parts per million by volume (ppmv) on 1/8/18 (33 ppmv), 1/15/18 (38 ppmv), and 1/24/18 (30 ppmv). Boiler 13 SO ₂ emissions exceeded the geometric mean limit on 1/23/18 (33 ppmv). |
| Boiler 12 – First Quarter 2018 | ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.11.a 40 CFR Part 60, Subpart Cb, §60.34b(a), Table 3 ACO AQD No. 6-2017, Paragraph 13 | Boiler 12 CO emissions based on a 24-hour block average exceeded 200 ppmv on 1/30/18 (283 ppmv). |
| Boilers 11 and 13 | ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC IV. 1 R 336.1910 | Failure to operate spray dryer absorber (SDA) properly during operation of Boiler 11 on 12/31/2017 and Boiler 13 on 1/5/18. |
| Boilers 11, 12, 13 | ROP No. MI-ROP-M4148-2011a, SOURCE-WIDE CONDITIONS, SC IX. 8 ACO AQD No. 6-2017, Paragraph 13 | Failure to maintain SDA Preventative Maintenance Weekly, Monthly, and Semi-Annual Checks as defined in ACO AQD No. 6-2017, Exhibit A. |

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|------------------------|--|---|
| Boilers 11, 12, and 13 | ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC III.3 | The facility reports the flue gas oxygen content less than 4% on various dates in the First Quarter 2018. |
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Violation Notice Dated July 26, 2018

| Process Description | Rule/Permit Condition Violated | Comments |
|---------------------|---|--|
| Boiler 11 and 13 | MI-ROP-M4148-2011a, FGBOILERS011-013, SC VII. 7.a.ii 40 CFR 60.39b 40 CFR 60.59b(g)(1)(ii) 40 CFR 62.14109 | Failure to list the highest emission level recorded for Boiler 11 (Sulfur dioxide [SO ₂] at 66 ppmv on 12/31/2017) and Boiler 13 (carbon monoxide [CO] at 204 ppmv on 12/29/2017). |

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

As documented in Violation Notice dated February 26, 2018, 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.

As noted in DRP's response dated June 8, 2018, DRP implemented the addition of fuel oil to address the CO exceedances that occurred during malfunction of the RDF feed on August 20, 2018 and process upset event of the soot blowers on December 29, 2017. While the DRP achieved compliance with the 1-hour CO limit by the third hour of each incident, both incidents occurred during a malfunction. DRP did not provide information indicating the Boiler 13 was not firing RDF during this period on December 29, 2018. Therefore, shutdown provisions do not apply for that scenario.

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. While DRP did submit a Rule 912 notification for excess emission event on February 1, 2018, the AQD disagrees that the excess events are not violations as asserted in the Response to Violation Notice dated June 8, 2018.

As specified by MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.11.b. the CO limit of 267 ppmv of exhaust gases (dry basis) corrected to 7% oxygen applies at all times, with the exception of startup or shutdown. The Time/Period/Operating scenario for SC I.11.b states that the limit applies “per boiler based on a 1-hour block average except during periods of startup and shutdown”. The limit is not exempt from periods of malfunction. The AQD disagrees that the above incidents are not violations FGBOILERS011-013, SC I.11.b of as stated in the DRP Violation Notice Response dated June 8, 2018.

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

As documented in the Violation Notice dated February 26, 2018, 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.

As noted in DRP’s response dated June 8, 2018, DRP implemented additional combustion air and fuel oil to address NOx exceedance during September 12, 2017, additional combustion air, reduction of RDF feed, adjusted grate speed and auger speeds on September 29, 2018, attempted fuel oil on October 12, 2018, and reduction of RDF feed, adjusted grate speed and auger speeds on October 9, 2018. Documentation provided for December 10, 2017 indicates the NOx exceedance was during shutdown.

As specified by MI-ROP-M4148-2011a, FGBOILERS011-013, SC I.13.a. the NOx limit of 247 ppmv of exhaust gases (dry basis) corrected to 7% oxygen applies at all times, with the exception of startup or shutdown. The Time/Period/Operating scenario for SC I.13.b states that the limit applies “per boiler based on a 1-hour block average except during periods of startup and shutdown”. The limit is not exempt from periods of malfunction. The AQD wants to be clear that any exceedance of 247 ppmv on a 1-hour block average is a violation of FGBOILERS011-013, SC I.13.a. While DRP’s response indicates corrective action was taken or emissions were minimally greater than the limit, any exceedance that does not occur during startup or shutdown is considered a violation.

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

As documented in Violation Notice dated February 26, 2018, on December 31, 2017, Boiler 11 exceeded the 24-hour daily geometric mean SO₂ emission limit (29 ppmv) at

66 ppmv. As documented in Violation Notice dated July 20, 2018, Boiler 12 SO₂ emissions based on a 24-hour daily geometric mean exceeded 29 ppmv on January 8, 2018 (33 ppmv), January 15, 2018 (38 ppmv), and January 24, 2018 (30 ppmv). Boiler 13 SO₂ emissions based on a 24-hour daily geometric mean exceeded 29 ppmv on January 23, 2018 (33 ppmv). These exceedances are 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, these violations are also subject to stipulated fines.

Within the DRP Violation Notice Response dated August 10, 2018, DRP asserts that the SO₂ emission exceedances at Boiler 12 on January 8 and 25, 2018 and Boiler 13 on January 23, 2018 are not limit exceedances based on “Partial Block Period” definition included in the Appendix 1b. (definitions) of MI-ROP-M4148-2011a. Following research in the origination of the definitions included in Appendix 1b, the AQD has determined that the definitions were included with the intent to clarify the NSPS. Furthermore, EPA does not delegate to state agencies the authority to alter the stringency of the underlying standard, see 40 CFR, Subpart A, §60.10 below.

§60.10 State authority. The provisions of this part shall not be construed in any manner to preclude any State or political subdivision thereof from: (a) Adopting and enforcing any emission standard or limitation applicable to an affected facility, provided that such emission standard or limitation is not less stringent than the standard applicable to such facility.

While the “partial block period” language does exist within the ROP Appendix 1b., and the AQD understands it has caused some confusion, there is no underlying applicable requirement for that language. The underlying applicable requirements of the 24-hour emission limits included in MI-ROP-M4148-2011a is 40 CFR Part 60 Subpart Cb which references Subpart Eb. Within both regulations no such language pertaining to “partial block period” is listed. Rather the NSPS is quite clear on how to calculate the emissions for 24-hour arithmetic mean or geometric mean. As previously stated in the Violation Notice dated July 20, 2018 per 40 CFR §60.51b, the twenty-four hour daily average is defined as follows.

Twenty-four hour daily average or 24 hour daily average means either the arithmetic mean or geometric mean (as specified) of all hourly emission concentrations when the affected facility is operating and combusting municipal solid waste measured over a 24-hour period between 12:00 midnight and the following midnight.

40 CFR Part 60, Appendix A-7, 12.4.3, Equation 19-21 defines the calculation for daily geometric average pollutant rates as follows. Please take special note of the definition of n_t within the equation.

$$E_{ga} = \exp \left[\frac{1}{n_t} \sum_{j=1}^{n_t} [\ln(E_{hj})] \right] \quad \text{Eq. 19-21}$$

Where:

E_{ga} = Daily geometric average pollutant rate, ng/J (lbs/million Btu) or ppm corrected to 7 percent O₂.

E_{hj} = Hourly arithmetic average pollutant rate for hour “j,” ng/J (lb/million Btu) or ppm corrected to 7 percent O₂.

n_t = **Total number of hourly averages for which paired inlet and outlet pollutant rates are available within the 24-hr midnight to midnight daily period.**

On July 18, 2018 the AQD contacted the United States Environmental Protection Agency (USEPA), Municipal Waste Combustor NSPS Contact, Mr. Charles Hall. The purpose of the call was to get USEPA’s perspective on calculating the 24-hour emissions as defined under NSPS Subpart Cb and Eb. During the July 18, 2018 phone call, Mr. Hall concurred with the AQD’s determination.

The definitions without underlying applicable requirements included in MI-ROP-M4148-2011a will be removed from the permit during renewal.

DRP’s response dated June 8, 2018, states that the “alleged SO₂ excess emissions occurred during startup, resulting in only 6 hours of operation and 3 hours of startup that day. Therefore, these events are covered under startup and shutdown provisions”. The AQD disagrees with this assertion. Even while accounting for 3 hours of startup from 14:00 to 17:00, the geometric mean is greater than the emission limit of 29 ppmv for hours 17:00 to 24:00. The calculated geometric mean not including the first three hours for startup, is 65 ppmv.

The AQD disagrees with DRP’s approach to evaluating compliance with the 24-hour SO₂ emission limit. Going forward DRP should calculate and report SO₂ 24-hour geometric mean emissions per 40 CFR Part 60, Appendix A-7, 12.4.3, Equation 19-21.

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

As documented in the Violation Notice dated February 26, 2018, on December 29, 2017, the Boiler 13 exceeded the 24-hour block average CO emission limit (200 ppmv) at 204 ppmv. As documented in the Violation Notice dated July 20, 2018, on January 30, 2018, Boiler 12 exceeded the 24-hour block average CO emission limit (200 ppmv) at 283 ppmv. These exceedances are 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, these violations are also subject to stipulated fines.

Similar to the SO₂ exceedance discussion above, the CO 24-hour block average (arithmetic) should be calculated for all operating hours over a 24-hour period between

12:00 midnight and the following midnight as defined in 40 CFR §60.51b. Again, the “partial block period” language listed in DRP’s August 10, 2018 response does not have an underlying applicable requirement.

As noted in DRP’s response dated June 8, 2018, DRP implemented addition of fuel oil and reduction of RDF. DRP’s response states that “these events are covered under the startup and shutdown provisions and not considered a violation.” DRP did not provide information indicating the Boiler 13 was not firing RDF during this period on December 29, 2018. Therefore, shutdown provisions do not apply for that scenario. The AQD disagrees that this incident is not a violation as stated in the DRP Violation Notice Response dated June 8, 2018.

On July 26, 2018 during a meeting between the AQD and DRP, minute data was provided by DRP for January 30, 2018 Boiler 12 operations. Minute data indicates Boiler 12 was shutdown at 13:08. Using hourly CEMS data provided as part the First Quarter 2018 submittal, the calculated 24-hour arithmetic average for operating hours, not including 3 hours for shutdown (hours 10:00 through 13:00) is 283 ppmv. Minute data provided by the DRP’s consultant, Barr Engineering, indicates 24-hour CO emissions for Boiler 12 on January 30, 2018 as 257.87 ppmv.

The AQD disagrees with DRP’s approach to evaluating compliance with the 24-hour CO emission limit. Going forward DRP should calculated 24-hour CO emission in accordance with 40 CFR §60.51b.

SDA Installed and Operating Properly - ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC IV. 1 and R 336.1910

As documented in the Violation Notice dated July 20, 2018, on June 27, 2018, the AQD requested hourly CEMS data (including RDF fuel feed rate, fuel oil feed rate, and lime slurry flow) for identified days of SO₂ exceedances during the fourth quarter 2017 and first quarter 2018. Following review of the CEMS data provided on July 10, 2018, it was identified that the lime slurry flow rate for the SDA was zero or near zero during times of boiler operation. The following days were documented where the boilers were in operation firing RDF and the SDA control was not operating properly.

- Boiler 11 on December 31, 2018, firing RDF from 14:00 to 24:00, lime slurry flowrate at 0.0 gallons per minute (gpm).
- Boiler 13 on January 5, 2018, firing RDF from 10:00 to 15:00, lime slurry flow rate of 0.0 gpm (with the exception of 13:00 at 1.5 gpm).

The above listed days are a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC IV.1 and R 336.1910. R336.1910 requires that “an air-cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the administrative rules and existing law.”

Within the Response to Violation Notice dated August 10, 2018, DRP states that “review of the distributed control system (DCS) indicates that the spray dryer absorber (SDA) slurry was feeding during the identified periods except for December 31, 2017”. Within the response DRP provided the SDA slurry feed rates from DCS. Slurry feed rates confirm zero flow on December 31, 2018 at Boiler 11 and insufficient slurry flow on January 5, 2018 at Boiler 13 (slurry flow 2.49 gpm or less for the majority of the boiler operation). The DCS data provided for January 15, 2018 at Boiler 12 indicates that DRP was operating the SDA control at varying slurry flows up to 25 gpm.

The violations identified for December 31, 2017 (Boiler 11) and January 15, 2018 (Boiler 13) are considered unresolved as additional information provided indicates that the facility was not operating the SDA control in a satisfactory manner. This is reflected in the SO₂ emission exceedance on December 31, 2017 at Boiler 11 and elevated SO₂ emissions during startup and shutdown on January 5, 2018 at Boiler 13.

Flue Gas Oxygen Content - FGBOILERS011-013, SC III.3

As documented in the Violation Notice dated July 29, 2018, during review of the First Quarter CEMS Report it was identified that on several occasions the flue gas oxygen content at Boiler 11, 12, and 13 has been less than 4 percent by volume on a 1-hour average as listed below.

- Boiler 11 – 1/12/2018 (1 hour), 1/13/18 (2 hours), 1/14/18 (1 hour), 2/11/18 (1 hour), 2/18/18 (3 hours), 2/21/18 (2 hours), 2/22/18 (9 hours), 2/23/18 (10 hours), 2/24/18 (11 hours), 2/25/18 (1 hour), 3/2/18 (2 hours), 3/21/18 (3 hours)
- Boiler 12 – 2/24/18 (5 hours), 2/28/18 (1 hour), 3/4/18 (1 hour), 3/5/18 (9 hours), 3/6/18 (16 hours), 3/7/18 (24 hours), 3/8/18 (3 hours), 3/31/18 (2 hours)
- Boiler 13 – 1/18/18 (1 hour), 1/21/18 (1 hour), 1/22/18 (3 hours), 1/23/18 (1 hour), 1/25/18 (1 hour), 1/26/18 (15 hours), 1/27/18 (2 hours), 2/4/18 (2 hours), 2/8/18 (1 hour), 2/13/18 (4 hours), 2/15/18 (13 hours), 2/26/18 (3 hours), 2/27/18 (10 hours), 2/28/18 (3 hours), 3/11/18 (1 hour), 3/12/18 (4 hours)

The above listed occurrences are a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, Special Condition (SC) III.3.

DRP’s Violation Notice Response dated August 10, 2018 states “the underlying applicable requirement for this condition is 40 CFR 52.21(j), which analyzes the best available control technology to establish an emission limit. An evaluation of compliance with the combustion related emission limits for CO and NO_x and furnace temperature was performed. For each event when the oxygen content was less than 4%, the units were demonstrating compliance with the CO, NO_x, and furnace temperature limits, as

presented in Attachment E". DRP recommended that the monitoring requirement of oxygen content be withdrawn from the ROP.

The AQD has reviewed Attachment E. The facility appears to be in compliance with CO, NO_x and furnace temperature limits. However, FGBOILERS011-013, SC III.3 has underlying applicable requirements of both 40 CFR 52.21(j) and R 336.1201(3). R 336.1201(3) reads as follows.

R 336.1201(3) A permit to install may be approved subject to any condition, specified in writing, that is reasonably necessary to assure compliance with all applicable requirements.

While DRP has demonstrated compliance with NO_x, CO, and furnace limits for these occurrences, SC III.3 originated from a permit to install, and can only be modified or removed through a permit to install. Going forward, DRP should comply with the 4% oxygen content requirement. If DRP cannot comply with the SC III.3, a permit to install application should be submitted to address the condition.

Subpart Cb Reporting

As documented in Violation Notice dated July 26, 2018, per ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, Special Condition (SC) VII. 7.a.ii and 40 CFR 60.59b(g)(1)(ii) the annual and semi-annual report shall include "a list of the highest emission level recorded for sulfur dioxide, nitrogen oxides, carbon monoxide...".

Within Appendix A of the Subpart Cb Report dated March 23, 2018, DRP reports the highest emission levels for the 2nd half 2017 as follows.

- Boiler 11 on December 31, 2017 – SO₂ 24-hour geometric mean of 26 parts per million (ppm) at 7% oxygen (O₂)
- Boiler 13 on December 29, 2017 – CO 24-hour daily average of 194 ppm at 7% O₂

Continuous Emission Monitoring Systems (CEMS) data included in Appendix E of the submittal dated June 15, 2018 indicates that actual highest emissions levels as follows.

- Boiler 11 on December 31, 2017 – SO₂ 24-hour geometric mean of 66 ppm at 7% O₂
- Boiler 13 on December 29, 2017 – CO 24-hour daily average of 204 ppm at 7% O₂

DRP did not revise Appendix A within the submittal dated June 15, 2018 to reflect the highest emission level recorded. Failure to list the highest emission level recorded listed above is a violation of ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC VII. 7.a.i, 40 CFR 60.39b, 40 CFR 60.59b(g)(1)(ii), and 40 CFR 62.14109.

Within DRP's Response to Violation Notice dated August 15, 2018, DRP asserts that SO₂ emissions at Boiler 11 on December 31, 2017 were not the highest emission level recorded. DRP references the "partial block period" language for the recorded SO₂ emissions at Boiler 11. As previously stated above under the SO₂ discussion above, the AQD disagrees with DRP's approach to evaluating compliance with the 24-hour SO₂ emission limit. Going forward DRP should calculate and report SO₂ 24-hour geometric mean emissions per 40 CFR Part 60, Appendix A-7, 12.4.3, Equation 19-21. There is no underlying applicable requirement for the "partial block period" language and this language will be removed from the permit during ROP renewal.

DRP also asserts that the 24-hour CO emissions at Boiler 13 on December 29, 2017 were not the highest emission level recorded. DRP again references a "partial block period" due the result of a malfunction. As stated above, the AQD disagrees with DRP's approach to evaluating compliance with the 24-hour CO emission limit. Going forward DRP should calculate 24-hour CO emission in accordance with 40 CFR §60.51b. DRP also claims that the excess emissions occurred during a period of malfunction due to a process upset event of soot blower operation. The AQD disagrees that the soot blower operation upset is considered a malfunction based on the definition of a malfunction listed below.

Per 40 CFR Part 60, Subpart A, §60.2, a malfunction is defined as follows.

"Malfunction means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions."

The process upset event of the soot blower operations does not qualify as a malfunction as the event appears to occur regularly as documented by the CO exceedances reported with the First Quarter 2018 and Second Quarter 2018 reports.

- Boiler 11 – 1/2/18 (13:00 to 14:00), 1/6/18 (16:00 to 17:00), and 6/2/18 (0:00 to 1:00)
- Boiler 12 - 3/8/18 (19:00 to 20:00)
- Boiler 13 – 1/15/18 (9:00 to 10:00), 1/26/18 (20:00 to 21:00), 1/27/18 (6:00 to 7:00), 2/2/18 (0:00 to 1:00), 6/15/18 (7:00 to 8:00), 6/15/18 (14:00 to 15:00), and 6/18/18 (20:00 to 21:00).

The AQD disagrees with DRP's approach of not reporting the highest emissions based on "partial block period" language. The partial block language does not have an underlying applicable requirement and will be removed from the ROP during the ROP renewal. Going forward DRP should calculate and report all 24-hour emissions in accordance to 40 CFR Part 60, Subpart Cb and Eb.

Mr. Robert Suida
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In conclusion, it is the AQD's intent that this correspondence will provide sufficient guidance for DRP to successfully conduct compliance determinations for the above listed items. If you have any questions, please contact me at the number listed below.

Sincerely,



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

Enclosures

cc: Mr. Mark Fletcher, DRP
Mr. Paul Max, City of Detroit, BSEED
Mr. John Leone, AG
Ms. Mary Ann Dolehanty, DEQ
Mr. Craig Fitzner, DEQ
Mr. Christopher Ethridge, DEQ
Ms. Jenine Camilleri, DEQ
Ms. Wilhemina McLemore, DEQ
Mr. Jeff Korniski, DEQ