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 Air Quality Division  
 Detroit Office

**VIA CERTIFIED MAIL**

April 26, 2017

Todd Zynda, Environmental Engineer  
 Michigan Department of Environmental Quality  
 Air Quality Division  
 3058 W. Grand Boulevard  
 Suite 2300  
 Detroit, MI 48202

**RE: Detroit Renewable Power – April 6, 2017 Violation Notice Response**

Dear Mr. Zynda:

This correspondence is Detroit Renewable Power's (DRP) response to the Violation Notice (VN) received on April 6, 2017 for allegedly violating the Carbon Monoxide (CO), Nitrogen Oxides (NOx), flue gas oxygen (O2) content and combustion zone temperature requirements, and for failure to report excursions in the Annual and Semi-Annual ROP certification. The VN has been issued based on the review of the Third and Fourth Quarter 2016 Continuous Emission Monitoring (CEMS) Reports, and the Semi-Annual and Annual report certifications for 2016. The conditions are defined in ROP No. MI-ROP-M4148-2011a. Each item from the VN (not in the same order but grouped by similarity) is in a table with the Permit Condition from the ROP and followed by DRP's response:

Rule/Permit Condition Violated	MDEQ Comments	Permit Condition (from ROP)
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 Third Quarter 2016.	Permittee shall not operate any boiler with a flue gas oxygen content of less than 4 percent by volume prior to the dry scrubber.
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 Fourth Quarter 2016.	Permittee shall not operate any boiler with a flue gas oxygen content of less than 4 percent by volume prior to the dry scrubber.

**DRP Response:** The flue gas O2 content is a secondary indication of complete combustion or proper CO levels in the boilers. O2 is obviously not a pollutant and CO is continuously measured at the stack for compliance utilizing the CEMS. DRP believes that the origin of this permit requirement is the assumption is that if the O2 levels are at or above 4% then complete combustion should occur and maintain CO levels below the permit limit. Accordingly, DRP reviewed the CO levels for each hour the O2 levels were below 4% and found that at no time did the CO exceed the

permit limit based on CEMS data. In fact, the average hourly CO values associated with the O2 exceedance timeframe were 108ppm @ 7% O2 in Third Quarter 2016 and 120ppm @ 7% O2 in Fourth Quarter 2016 which is significantly lower than the limit of 267ppm CO @ 7% O2 and also demonstrates the fact that there are no environmental impacts from the permit condition cited in the VN. In addition, after further review it is believed that the O2 sensor was slightly out of calibration as the average values for O2 levels below 4% were only slightly below at 3.6% in Third Quarter and 3.7% in Fourth Quarter. The O2 sensor has since been calibrated to ensure accuracy of the data. Lastly, DRP finds this permit condition to be redundant since the intent of the condition is a secondary indication of CO compliance. The primary CO compliance determination method is a CEMS which is validated daily and quarterly, and certified annually to demonstrate compliance with CO limits.

Rule/Permit Condition Violated	MDEQ Comments	Permit Condition (from ROP)
ROP No. MI-ROP-M4148-2011a, FGBOILERS011-013, SC III.2	The facility reports that the combustion zone was less than 1800°F and 1600°F on 7/2/2016 (7-hours consecutively) and 9/22/2016 (1-hour).	Permittee shall not fire RDF in any boiler at a combustion zone temperature less than 1800 degrees Fahrenheit, on a 1-hour basis. At no time shall the temperature be less than 1600 degree Fahrenheit.

**DRP Response:** The boiler temperature is initially recorded by a system known as Taylor and a signal is sent to the Trace System where the CEMS data is recorded and stored. DRP found that there was a communication error from the Taylor System to the Trace System on 7/2/2016 and the temperature of the combustion zone on 7/2/2016 was compliant with the permit limit of 1800 degrees Fahrenheit, as shown in the graph from the Taylor System in Appendix A. The communication error was discovered and corrected on 7/2/2016; however, the incorrect data was erroneously included in the quarterly report. On 9/22/2016 the boiler was shut down for part of the 13:00 hour in which the furnace temperature recorded as zero for this time period. Typically the data does not get recorded once the RDF is out of the boiler. In this instance the monitor recorded the data as zero inadvertently. In Appendix B on page 3 the RDF flow is at zero when the temperature was also at zero. The minute data is included for 12:00 to 16:00 to demonstrate the temperature was compliant when RDF was in the boiler. Therefore, after further review, there were no excursions associated with the combustion zone temperature limit.

Rule/Permit Condition Violated	MDEQ Comments	Permit Condition
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 11/10/16 (5:00 to 7:00 – 280 ppmv and 281 ppmv).	267 ppmv of exhaust gases (dry basis) corrected to 7% oxygen based on a 1-hour block average except during periods of startup or shutdown.
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 10/09/2016 (4:00 to 5:00 - 252 ppmv)	247 ppmv of exhaust gases (dry basis) corrected to 7% oxygen based on a 1-hour block average except during periods of startup or shutdown.

**DRP Response:** The 2 hours of excess CO emissions and the 1 hour of excess NOx emissions were reported in the 4th Quarter CEMS Downtime and Excess Emissions Report and also the Annual 2016 ROP report certifications. The cause of the CO exceedance was due to an auger feed issue and plugged chutes. The operators responded as soon as possible by lowering the boiler load, adding ignitors, clearing the chute, correcting the auger issue, and adjusting the air and fuel. The

cause of the NOx exceedance was due to plugged chutes causing an excessive amount of ingress air. The operators responded as soon as possible by adjusting the dampers and added ignitors to lower the emissions. The nature of the refuse derived fuel (RDF) has inherent inconsistencies which can cause short periods of challenging combustion conditions, which can lead to excess emissions. The municipal solid waste (MSW) is brought in and large items are removed. This sorted MSW is then shredded to a size of less than 6 inches to allow the feed to traverse the conveyor system and enter the boiler more consistently and promote more even combustion. However, due to the potential moisture content of the RDF and/or the consistency of the RDF, there are times when the RDF is caught in the system and must be cleared. Depending on the severity of the plug or other factors, the issue may take more time to clear and bring the boiler combustion back into optimal conditions. Furthermore, the augers and chutes are inspected during all boiler shutdowns and the augers are replaced on a life cycle plan for the boiler. Lastly, DRP would like to point out that the CO compliance for 2014 through 2016 was 98.79% and NOx compliance for the same timeframe was 99.99%, indicating that DRP's management of the highly variable fuel is very successful.

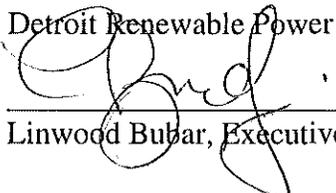
Rule/Permit Condition Violated	MDEQ Comments	Permit Condition
ROP No. MI-ROP-M4148-2011a, A. GC21.c R336.1213(3)(c)(i)	Failure to report combustion zone excursions and flue gas oxygen content excursions in Semi-Annual and Annual Certification Reports.	For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

**DRP Response:** MDEQ describes the violation as “failure to report combustion zone excursions and flue gas oxygen content excursions in the Semi-Annual and Annual Certification Reports” however the data that MDEQ claims DRP failed to report was submitted and reviewed by MDEQ in the CEMS Third and Fourth Quarter 2016 Reports, which are submitted under the ROP and with an ROP certification form. Most notably, the Semi-Annual and Annual 2016 ROP Certification reports reference the CEMS Third and Fourth Quarter 2016 Reports in the deviation table, see Appendix C. Moreover, the allegedly unreported data is directly referenced in the VN, obviously indicating that the information was reported and reviewed by MDEQ. Therefore, the violation is inaccurate as the data in question were reported in the quarterly reports and referenced in the Semi-Annual and Annual ROP Certifications.

I trust that this letter is a satisfactory response to the April 6, 2017 VN. If you have questions concerning the information discussed above, please feel free to contact Tabettha Peebles at (313) 972-4336.

Sincerely,

Detroit Renewable Power



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Linwood Bubar, Executive V.P.

Attachments

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

## Appendix A

# Combustion Zone Temperature from Taylor System

324 Tags In Alarm

18 Apr 14:34:20.420	PI1001X	SDA DIFF PRESS	MES HIHI 5.0017 C1 5.0000
18 Apr 14:32:29.016	1BMGCHE11	11 PLUGGED CHUTE (UPPER)	YES A2
18 Apr 14:34:11.518	1FWATE0219	BFP1B MTR OB	MES HI 187.34 A3 175.00

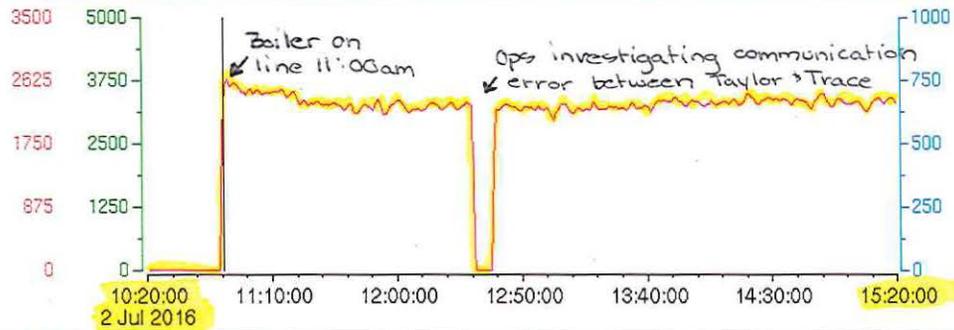
18 Apr 17 14:34:22

Display Menu Last Page Menu Personal Menu

MSG DIAG

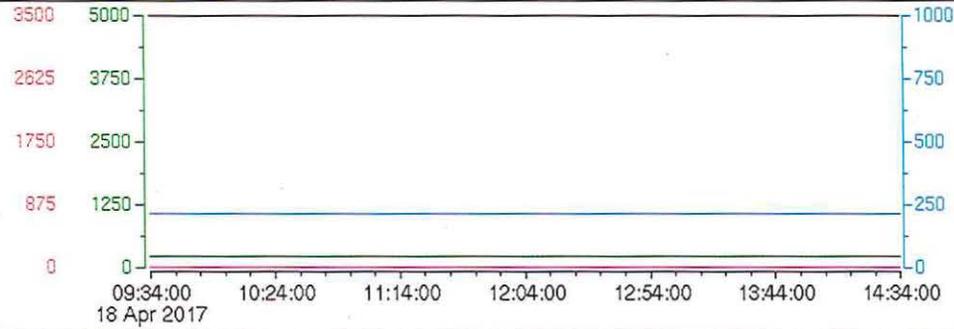
## GROUPTREND,CEM\_INFO,CEM\_HOURLY

Boiler 11



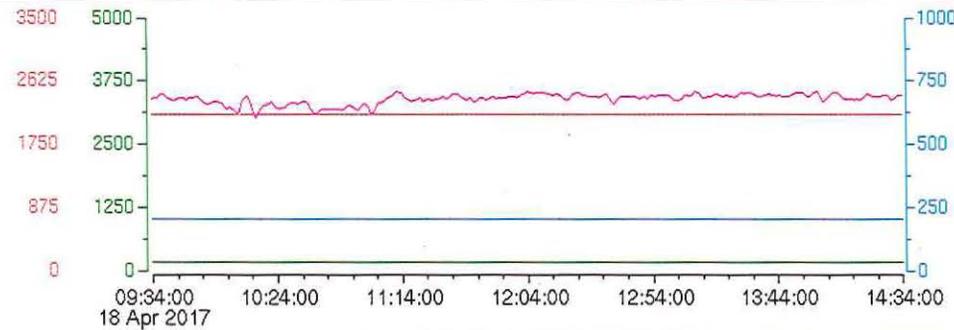
11CEM_CO L4.1091 PPM	11CEM_NOX 1.0018 PPM
11CEM_FTEMP L0.0000 DEGF	11-IGN-ON 2268.6 DEGF
	11CEM_SOX L0.0000 PPH

Boiler 12



12CEM_CO H221.77 PPM	12CEM_NOX 218.47 PPM
12CEM_FTEMP H5.9e16 DEGF	12-IGN-ON L0.0000 DEGF
	12CEM_SOX L0.0000 PPM

Boiler 13



13CEM_CO 164.99 PPM	13CEM_NOX 204.47 PPM
13CEM_FTEMP 2172.0 DEGF	13-IGN-ON 2428.1 DEGF
	13CEM_SOX L0.0000 PPM

### Trend Dialog

11CEM_CO MEASURE Data Error	11CEM_NOX MEASURE Data Error	11CEM_FTEMP MEASURE Data Error	02 Jul 16 11-IGN-ON MEASURE 2545.51	10:50:35	Restore Default	QUIT
					Modify X-Axis	

# Combustion Zone Temperature from Taylor System

329 Tags In Alarm

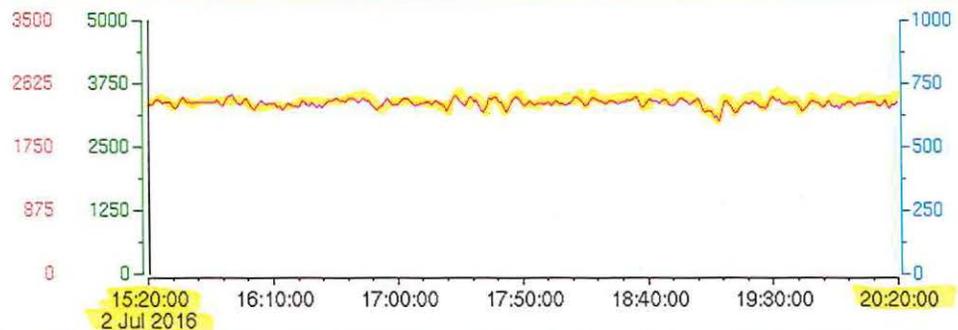
18 Apr 14:36:01.414 PI1001X SDA DIFF PRESS MES HIHI 4.9136 C1 5.0000  
 18 Apr 14:35:40.479 11SAAANZ0010 CO UNIT 11 MES HIHI 286.93 A1 267.00  
 18 Apr 14:34:29.347 1BMGDR13 RDF AUGER DR ST GEN 13 TRIP A1

18 Apr 17 14:36:08

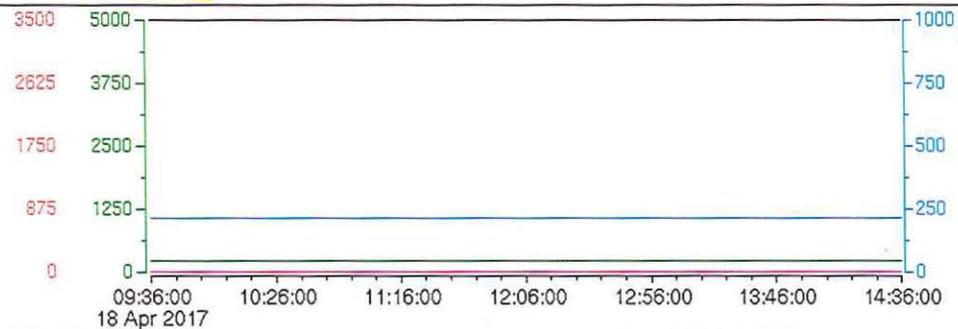
Display Menu Last Page Menu Personal Menu

MSG DIAG

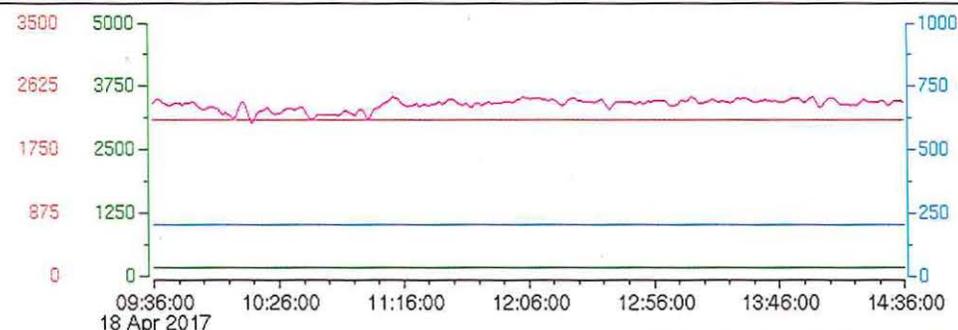
## GROUPTREND\_CEM\_INFO\_CEM\_HOURLY



11CEM_CO L4.1091 PPM	11CEM_NOX 1.0018 PPM
11CEM_FTEMP L0.0000 DEGF	11-IGN-ON 2204.6 DEGF
	11CEM_SOX L0.0000 PPH



12CEM_CO H221.77 PPM	12CEM_NOX 218.47 PPM
12CEM_FTEMP H5.9816 DEGF	12-IGN-ON L0.0000 DEGF
	12CEM_SOX L0.0000 PPM



13CEM_CO 164.99 PPM	13CEM_NOX 204.47 PPM
13CEM_FTEMP 2172.0 DEGF	13-IGN-ON 2382.5 DEGF
	13CEM_SOX L0.0000 PPM

Modify X Axis

Current Time

Start (d m y h:m:s)

End (d m y h:m:s)



Scroll



Zoom



QUIT

## Appendix B

# Data Summary Report

**Company:** Detroit Renewable Power  
5700 Russell Street  
Detroit, MI 48211



**Data Group:** U-11>1 Min.CEMS Data  
**Report Name:** No Title  
**Start of Report:** 09/22/2016 12:00  
**End of Report:** 09/22/2016 16:00

**Validation:** Valid Data Only

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<b>Group#-Channel#</b>	G1-C11	G1-C9
<b>Long Descrip.</b>	U-11-1Min	U-11-1Min
<b>Short Descrip.</b>	FurnTemp	RDFFlow
<b>Units</b>	deg F	K#/Hr
<b>Range</b>	0-3500	0-200
09/22/2016 12:00	2191	80
09/22/2016 12:01	2263	82
09/22/2016 12:02	2244	83
09/22/2016 12:03	2208	84
09/22/2016 12:04	2213	85
09/22/2016 12:05	2158	83
09/22/2016 12:06	2165	82
09/22/2016 12:07	2182	81
09/22/2016 12:08	2206	81
09/22/2016 12:09	2214	82
09/22/2016 12:10	2174	82
09/22/2016 12:11	2109	78
09/22/2016 12:12	2089	76
09/22/2016 12:13	2087	74
09/22/2016 12:14	2111	74
09/22/2016 12:15	2210	78
09/22/2016 12:16	2252	83
09/22/2016 12:17	2269	87
09/22/2016 12:18	2256	89
09/22/2016 12:19	2220	88
09/22/2016 12:20	2191	85
09/22/2016 12:21	2128	81
09/22/2016 12:22	2170	80
09/22/2016 12:23	2155	79
09/22/2016 12:24	2139	77
09/22/2016 12:25	2164	77
09/22/2016 12:26	2187	78
09/22/2016 12:27	2199	80
09/22/2016 12:28	2253	82
09/22/2016 12:29	2270	85
09/22/2016 12:30	2308	88
09/22/2016 12:31	2319	90
09/22/2016 12:32	2220	87
09/22/2016 12:33	2189	84
09/22/2016 12:34	2244	84
09/22/2016 12:35	2280	86
09/22/2016 12:36	2313	88
09/22/2016 12:37	2311	91
09/22/2016 12:38	2301	92

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Group#-Channel#	G1-C11	G1-C9
Long Descrip.	U-11-1Min	U-11-1Min
Short Descrip.	FurnTemp	RDFFlow
Units	deg F	K#/Hr
Range	0-3500	0-200
09/22/2016 12:39	2282	93
09/22/2016 12:40	2241	91
09/22/2016 12:41	2221	89
09/22/2016 12:42	2250	89
09/22/2016 12:43	2237	88
09/22/2016 12:44	2260	88
09/22/2016 12:45	2229	87
09/22/2016 12:46	2170	84
09/22/2016 12:47	2193	85
09/22/2016 12:48	2276	90
09/22/2016 12:49	2297	94
09/22/2016 12:50	2271	95
09/22/2016 12:51	2228	92
09/22/2016 12:52	2208	89
09/22/2016 12:53	2214	88
09/22/2016 12:54	2226	87
09/22/2016 12:55	2209	86
09/22/2016 12:56	2207	85
09/22/2016 12:57	2205	84
09/22/2016 12:58	2253	86
09/22/2016 12:59	2267	88
09/22/2016 13:00	2239	88
09/22/2016 13:01	2205	86
09/22/2016 13:02	2228	86
09/22/2016 13:03	2285	91
09/22/2016 13:04	2311	94
09/22/2016 13:05	2269	94
09/22/2016 13:06	2245	91
09/22/2016 13:07	2186	85
09/22/2016 13:08	2198	82
09/22/2016 13:09	2242	83
09/22/2016 13:10	2263	84
09/22/2016 13:11	2272	84
09/22/2016 13:12	2289	84
09/22/2016 13:13	2266	84
09/22/2016 13:14	2254	84
09/22/2016 13:15	2279	84
09/22/2016 13:16	2272	84
09/22/2016 13:17	2262	83
09/22/2016 13:18	2293	85
09/22/2016 13:19	2318	88
09/22/2016 13:20	2276	87
09/22/2016 13:21	2243	85
09/22/2016 13:22	2284	86
09/22/2016 13:23	2314	87
09/22/2016 13:24	2311	88
09/22/2016 13:25	2311	87
09/22/2016 13:26	2324	86
09/22/2016 13:27	2317	85
09/22/2016 13:28	2305	85

Group#-Channel#	G1-C11	G1-C9
Long Descrip.	U-11-1Min	U-11-1Min
Short Descrip.	FurnTemp	RDFFlow
Units	deg F	K#/Hr
Range	0-3500	0-200
09/22/2016 13:29	2338	86
09/22/2016 13:30	2331	86
09/22/2016 13:31	2310	86
09/22/2016 13:32	2350	89
09/22/2016 13:33	675	25
09/22/2016 13:34	0	0
09/22/2016 13:35	0	0
09/22/2016 13:36	0	0
09/22/2016 13:37	0	0
09/22/2016 13:38	0	0
09/22/2016 13:39	0	0
09/22/2016 13:40	0	0
09/22/2016 13:41	0	0
09/22/2016 13:42	0	0
09/22/2016 13:43	0	0
09/22/2016 13:44	0	0
09/22/2016 13:45	0	0
09/22/2016 13:46	0	0
09/22/2016 13:47	0	0
09/22/2016 13:48	0	0
09/22/2016 13:49	0	0
09/22/2016 13:50	0	0
09/22/2016 13:51	0	0
09/22/2016 13:52	1764	59
09/22/2016 13:53	2360	88
09/22/2016 13:54	2206	85
09/22/2016 13:55	2157	82
09/22/2016 13:56	2212	81
09/22/2016 13:57	2273	83
09/22/2016 13:58	2308	88
09/22/2016 13:59	2247	87
09/22/2016 14:00	2165	83
09/22/2016 14:01	2127	81
09/22/2016 14:02	2209	81
09/22/2016 14:03	2161	79
09/22/2016 14:04	2087	75
09/22/2016 14:05	2130	72
09/22/2016 14:06	2173	73
09/22/2016 14:07	2258	76
09/22/2016 14:08	2285	80
09/22/2016 14:09	2322	84
09/22/2016 14:10	2343	89
09/22/2016 14:11	2301	90
09/22/2016 14:12	2251	89
09/22/2016 14:13	2227	86
09/22/2016 14:14	2241	84
09/22/2016 14:15	2263	84
09/22/2016 14:16	2332	87
09/22/2016 14:17	2334	89
09/22/2016 14:18	2309	90

Group#-Channel#	G1-C11	G1-C9
Long Descrip.	U-11-1Min	U-11-1Min
Short Descrip.	FurnTemp	RDFFlow
Units	deg F	K#/Hr
Range	0-3500	0-200
09/22/2016 14:19	2290	88
09/22/2016 14:20	2264	87
09/22/2016 14:21	2275	86
09/22/2016 14:22	2286	87
09/22/2016 14:23	2286	88
09/22/2016 14:24	2286	88
09/22/2016 14:25	2270	88
09/22/2016 14:26	2254	86
09/22/2016 14:27	2197	84
09/22/2016 14:28	2186	84
09/22/2016 14:29	2168	82
09/22/2016 14:30	2224	84
09/22/2016 14:31	2276	88
09/22/2016 14:32	2282	91
09/22/2016 14:33	2235	90
09/22/2016 14:34	2213	88
09/22/2016 14:35	2195	86
09/22/2016 14:36	2167	84
09/22/2016 14:37	2156	83
09/22/2016 14:38	2196	83
09/22/2016 14:39	2216	86
09/22/2016 14:40	2239	91
09/22/2016 14:41	2227	93
09/22/2016 14:42	2150	92
09/22/2016 14:43	2219	81
09/22/2016 14:44	2154	86
09/22/2016 14:45	2104	80
09/22/2016 14:46	2100	75
09/22/2016 14:47	2103	74
09/22/2016 14:48	2117	74
09/22/2016 14:49	2126	75
09/22/2016 14:50	2118	76
09/22/2016 14:51	2133	77
09/22/2016 14:52	2140	73
09/22/2016 14:53	2231	72
09/22/2016 14:54	2191	80
09/22/2016 14:55	2171	78
09/22/2016 14:56	2164	76
09/22/2016 14:57	2183	78
09/22/2016 14:58	2203	80
09/22/2016 14:59	2228	83
09/22/2016 15:00	2221	85
09/22/2016 15:01	2167	84
09/22/2016 15:02	2132	80
09/22/2016 15:03	2121	77
09/22/2016 15:04	2158	76
09/22/2016 15:05	2198	77
09/22/2016 15:06	2180	77
09/22/2016 15:07	2173	78
09/22/2016 15:08	2187	80

Group#-Channel#	G1-C11	G1-C9
Long Descrip.	U-11-1Min	U-11-1Min
Short Descrip.	FurnTemp	RDFFlow
Units	deg F	K#/Hr
Range	0-3500	0-200
09/22/2016 15:09	2248	85
09/22/2016 15:10	2246	88
09/22/2016 15:11	2199	87
09/22/2016 15:12	2156	83
09/22/2016 15:13	2088	77
09/22/2016 15:14	2065	72
09/22/2016 15:15	2087	70
09/22/2016 15:16	2097	70
09/22/2016 15:17	2168	71
09/22/2016 15:18	2181	73
09/22/2016 15:19	2240	75
09/22/2016 15:20	2221	77
09/22/2016 15:21	2208	79
09/22/2016 15:22	2243	81
09/22/2016 15:23	2240	84
09/22/2016 15:24	2238	87
09/22/2016 15:25	2203	87
09/22/2016 15:26	2109	84
09/22/2016 15:27	2121	81
09/22/2016 15:28	2145	81
09/22/2016 15:29	2104	78
09/22/2016 15:30	2066	70
09/22/2016 15:31	2112	65
09/22/2016 15:32	2149	67
09/22/2016 15:33	2161	69
09/22/2016 15:34	2150	71
09/22/2016 15:35	2195	80
09/22/2016 15:36	2099	83
09/22/2016 15:37	2043	78
09/22/2016 15:38	2084	76
09/22/2016 15:39	2114	76
09/22/2016 15:40	2127	76
09/22/2016 15:41	2137	76
09/22/2016 15:42	2112	75
09/22/2016 15:43	2110	74
09/22/2016 15:44	2154	74
09/22/2016 15:45	2222	70
09/22/2016 15:46	2261	69
09/22/2016 15:47	2287	73
09/22/2016 15:48	2253	73
09/22/2016 15:49	2191	69
09/22/2016 15:50	2162	67
09/22/2016 15:51	2211	68
09/22/2016 15:52	2253	71
09/22/2016 15:53	2238	73
09/22/2016 15:54	2156	70
09/22/2016 15:55	2128	67
09/22/2016 15:56	2133	64
09/22/2016 15:57	2165	63
09/22/2016 15:58	2217	63

Group#-Channel#	G1-C11	G1-C9
Long Descrip.	U-11-1Min	U-11-1Min
Short Descrip.	FurnTemp	RDFFlow
Units	deg F	K#/Hr
Range	0-3500	0-200

09/22/2016 15:59	2269	66
09/22/2016 16:00	2275	78

Period Average =	2040	75
Period Max Value =	2360	95
Period Min Value =	0	0
Period Totals =	4.9161E+5	1.8184E+4
Period % Recovery =	100.0	100.0

## **Appendix C**

**Deviation Table**  
Reporting Period: 01-01-16 thru 06-30-16

Index	EG or EU	Table/Cond No.	Date of deviation start*	Date of deviation end*	Previously reported?	Duration of deviation*	Method to determine compliance status	Description of deviation	Reason for deviation	Corrective action taken
1	FGMWSPROC-LINES	IV.2	Periodic during 01/01/2016-06/30/2016		N	Intermittent	Internal Review	Various times throughout this period one or more roof exhaust filters were not operational	Mechanical/electrical issues with the fan(s)	Repairs made to the fan(s)
2	FGMWSPROC-LINES	IV.3	Periodic during 01/01/2016-06/30/2016		N	Intermittent	Internal Review	Various times throughout the reporting period MSW door(s) were not closed	Mechanical/electrical issues with the door(s)	Repairs made to the door(s)
3	FGBOILERS011-013	VI.1	Periodic during 01/01/2016-06/30/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 Opacity Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
4	FGBOILERS011-013	VI.2	Periodic during 01/01/2016-06/30/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 SO2 Monitor Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
5	FGBOILERS011-013	VI.15	Periodic during 01/01/2016-06/30/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 NOx Monitor Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
6	FGBOILERS011-013	VI.23	Periodic during 01/01/2016-06/30/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 CO Monitor Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
7	FGBOILERS011-013	VI.29	Periodic during 01/01/2016-06/30/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 O2 Monitor Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
8	FGBOILERS011-013	I.11.b	1/8/2016 13:00	1/8/2016 14:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Boiler trip due to condensate make-up line failure causing low drum level trip	Boiler shut down
9	FGBOILERS011-013	I.11.b	1/21/2016 8:00	1/21/2016 9:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Auger speed control erratic	Lowered load, added ignitors, put auger speed control in manual, and changed fuel
10	FGBOILERS011-013	I.11.b	1/22/2016 13:00	1/22/2016 14:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Unknown cause	Lowered load, added ignitors, put auger speed control in manual, and changed fuel
11	FGBOILERS011-013	I.11.b	2/5/2016 17:00	2/5/2016 18:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Wet fuel from fire in shredder caused multiple chutes to plug	Lowered load, changed fuel, and manually positioned dampers
12	FGBOILERS011-013	I.11.b	2/7/2016 1:00	2/7/2016 2:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Unit was shutting down	Adjustments were made to fuel feed and air flow
13	FGBOILERS011-013	I.11.b	2/13/2016 8:00	2/13/2016 9:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Loss of quench tank seal due to level sensing line plug	Lower load, added ignitors, identified and corrected issue with level sensing line plug
14	FGBOILERS011-013	I.11.b	2/14/2016 18:00	2/14/2016 19:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Loss of quench tank seal due to level sensing line plug	Lowered load, added ignitors, put auger speed control in manual, and changed fuel
15	FGBOILERS011-013	I.11.b	2/23/2016 0:00	2/23/2016 1:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Plugged chutes and line feed issues	Lower load, added ignitors, adjusted fuel and air
16	FGBOILERS011-013	I.11.b	2/23/2016 20:00	2/23/2016 21:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Erratic feed due to a plugged chute	Lower load, added ignitors, adjusted fuel and air
17	FGBOILERS011-013	I.11.b	2/24/2016 4:00	2/24/2016 5:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Erratic fuel feed due to cutting wraps	Lowered load, added ignitors, stopped cutting wraps, and adjusted fuel and air
18	FGBOILERS011-013	I.11.b	3/6/2016 9:00	3/6/2016 10:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Soot blowing	Lowered load, added ignitors, changed fuel, and took rear center tilts from down to zero
19	FGBOILERS011-013	I.11.b	3/11/2016 19:00	3/11/2016 20:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Clinker formation on the boiler walls interfering with combustion	Lowered load, and added ignitors
20	FGBOILERS011-013	I.11.a	3/24/2016 0:00	3/24/2016 23:59	Y	2	Internal Review	Boiler #11 exceeded the 24-hour block average permit limit of 267ppm CO	Start up of the unit was at 22:00 and therefore only two hours are included in the 24 hour block average.	Under the Emission Guidelines (40CFR 60.58b(a)(1)) and the DRP's ROP (Definition of Startup on page 78), the emission standards do not apply during periods of startup. During periods of startup, monitoring data shall be dismissed or excluded from compliance calculations, but must be recorded and reported in accordance with 40 CFR 60.59b(d)(7).
21	FGBOILERS011-013	I.11.b	3/29/2016 1:00	3/29/2016 2:00	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Wet fuel from fire in shredder caused multiple chutes to plug	Lowered load, changed fuel, and manually positioned dampers
22	FGBOILERS011-013	I.11.b	4/3/2016 23:00	4/3/2016 23:59	Y	1	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Shutdown of the boiler	Added ignitors and adjusted the air and fuel
23	FGBOILERS011-013	I.11.b	4/17/2016 3:00	4/17/2016 5:00	Y	2	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Wet fuel from fire in shredder caused multiple chutes to plug	Lowered load, changed fuel, and manually positioned dampers

**Deviation Table**  
**Reporting Period: 01-01-16 thru 12-31-16**

Index	EG or EU	Table/Cond No.	Date of deviation start*	Date of deviation end*	Previously reported?	Duration of deviation*	Method to determine compliance status	Description of deviation	Reason for deviation	Corrective action taken
1	FGMWSPROC-LINES	IV.2	Periodic during 01/01/2016-06/30/2016		Y	Intermittent	Internal Review	Various times throughout this period one or more roof exhaust filters were not operational	Mechanical/electrical issues with the fan(s)	Repairs made to the fan(s)
2	FGMWSPROC-LINES	IV.2	Periodic during 07/01/2016-12/31/2016		N	Intermittent	Internal Review	Various times throughout this period one or more roof exhaust filters were not operational	Mechanical/electrical issues with the fan(s)	Repairs made to the fan(s)
3	FGMWSPROC-LINES	IV.3	Periodic during 01/01/2016-06/31/2016		Y	Intermittent	Internal Review	Various times throughout the reporting period MSW door(s) were not closed	Mechanical/electrical issues with the door(s)	Repairs made to the door(s)
4	FGMWSPROC-LINES	IV.3	Periodic during 07/01/2016-12/31/2016		N	Intermittent	Internal Review	Various times throughout the reporting period MSW door(s) were not closed	Mechanical/electrical issues with the door(s)	Repairs made to the door(s)
5	FGMSWPROC-LINES	VI.2, VI.3, and VI.11	Periodic during 01/01/2016-12/31/2016		N	Intermittent	Internal Review	Daily velocimeter and baghouse readings and visible emissions readings were missed	Inadvertently missed	Observation completed on next required cycle
6	EUASH-HANDLING	VI.1 and VI.3	Periodic during 01/01/2016-12/31/2016		N	Intermittent	Internal Review	Daily and weekly visible emission observations were missed	Inadvertently missed	Observation completed on next required cycle
7	EULIME-FEEDSYS	VI.4	Periodic during 01/01/2016-12/31/2016		N	Intermittent	Internal Review	Daily visible emission observations were missed	Inadvertently missed	Observation completed on next required cycle
8	EULIME-FEEDSYS	VI.1 and VI.4	7/12/2016 0:00	7/16/2016 0:00	N	Intermittent	Internal Review	Visible emissions	Bad gasket on silo hatch	Replaced gasket
9	EULIME-FEEDSYS	VI.1	8/9/2016 17:00	8/9/2016 18:00	N	Intermittent	Internal Review	Visible emissions	Loose latch on silo hatch	Tightened loose latch on hatch
10	FGBOILERS011-013	VI.1	Periodic during 01/01/2016-12/31/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 Opacity Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
11	FGBOILERS011-013	VI.2	Periodic during 01/01/2016-12/31/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 SO2 Monitor Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
12	FGBOILERS011-013	VI.15	Periodic during 01/01/2016-12/31/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 NOx Monitor Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
13	FGBOILERS011-013	VI.23	Periodic during 01/01/2016-12/31/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 CO Monitor Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
14	FGBOILERS011-013	VI.29	Periodic during 01/01/2016-12/31/2016		Y	Intermittent	Internal Review	Boiler #11, #12, and #13 O2 Monitor Downtime	See CEMS Quarterly Downtime and Excess Emission Reports for details	Analyzer returned to service
15	FGBOILERS011-013	I.11.b	1/8/2016 13:00	1/8/2016 14:00	Y	1 hour	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Boiler trip due to condensate make-up line failure causing low drum level trip	Boiler shut down
16	FGBOILERS011-013	I.11.b	1/21/2016 8:00	1/21/2016 9:00	Y	1 hour	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Auger speed control erratic	Lowered load, added ignitors, put auger speed control in manual, and changed fuel
17	FGBOILERS011-013	I.11.b	1/22/2016 13:00	1/22/2016 14:00	Y	1 hour	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Auger speed control erratic	Lowered load, added ignitors, put auger speed control in manual, and changed fuel
18	FGBOILERS011-013	I.11.b	2/5/2016 17:00	2/5/2016 18:00	Y	1 hour	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Wet fuel from fire in shredder caused multiple chutes to plug	Lowered load, changed fuel, and manually positioned dampers
19	FGBOILERS011-013	I.11.b	2/7/2016 1:00	2/7/2016 2:00	Y	1 hour	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Unit was shutting down	Adjustments were made to fuel feed and air flow
20	FGBOILERS011-013	I.11.b	2/13/2016 8:00	2/13/2016 9:00	Y	1 hour	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Loss of quench tank seal due to level sensing line plug	Lower load, added ignitors, identified and corrected issue with level sensing line plug
21	FGBOILERS011-013	I.11.b	2/14/2016 18:00	2/14/2016 19:00	Y	1 hour	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Loss of quench tank seal due to level sensing line plug	Lowered load, added ignitors, put auger speed control in manual, and changed fuel
22	FGBOILERS011-013	I.11.b	2/23/2016 0:00	2/23/2016 1:00	Y	1 hour	Internal Review	Boiler #11 exceeded the one (1) hour permit limit of 267ppm CO on a 1-hour block average	Plugged chutes and line feed issues	Lower load, added ignitors, adjusted fuel and air