Mr. Todd Zynda June 30, 2017 Page 1 of 3



VIA CERTIFIED MAIL

June 30, 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 – June 9, 2017 Violation Notice Response

Dear Mr. Zynda:

This correspondence is Detroit Renewable Power's (DRP) response to the Violation Notice (VN) dated June 9, 2017 for alleged violations as a result of the annual inspection and review of the First Quarter 2017 CEMS Report. The conditions are defined in ROP No. MI-ROP-M4148-2011a, the Fugitive Dust Management Plan, and the Odor Management Plan. Each item from the VN 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, 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.	IV.3 Permittee shall not operate [the process lines 1-3] unless the designated cyclones and baghouses for the process lines are installed and operating properly. VI.3 Permittee shall monitor and keep records, at least once per day, of the pressure drop across each of the three primary and secondary baghouses. Permittee shall not operate the applicable emission unit 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. VI.13 Any repairs and corrective actions needed to address the causes of malfunction or failure of the control equipment shall be performed immediately.

JUL - 5 2017 Air Quality Division Detroit Office **DRP Response:** Previously DRP relied on daily inspections of the baghouses and the stack testing results to ensure the process lines met the PM limits. On a day-to-day basis, operations review the structural integrity of the baghouses to determine the condition of the bags to determine if work is required. If the baghouse clogs with material, then operations would be alerted via the control room panel stating there was an "overload." The pressure drop range established by the manufacturer's recommendation is now being included on the current recordkeeping form (ROP-Form-006) since the date of this letter, along with a requirement to ensure any occurrence resulting in "an out of range" will be corrected as soon as possible. A copy of the updated form is included in Appendix A.

Rule/Permit Condition Violated	MDEQ Comments	Permit Condition (from ROP)
ROP No. MI-ROP-M4148- 2011a, FGMSWPROC-LINES, SCIV.3 Fugitive Dust Management Plan 4.4.3 Odor Management Plan 2.2g	Records provided from October 3, 2016 through April 18, 2017 indicate negative pressure is not maintained at Tip East 5.	Permittee shall maintain a negative pressure in the solid waste receiving, processing and storage rooms during facility operations to minimize discharges of odor, dust and other materials. A velometer shall be used to periodically check open doors to ensure that inward airflow is maintained. The doors to the tipping floor shall be kept closed to the maximum extent practicable during refuse receiving periods. Each day when the receipt of solid waste has ceased, the doors to the MSW processing facility shall be kept continuously closed until the next morning when solid waste receiving resumes.

DRP Response: All equipment was operating as designed and the required records were all maintained. There have been no reported visible emissions in the last year

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 ppm for two consecutive hours on March 26, 2017 (8:00 to 10:00 -274 ppm and 297 ppm).	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.

DRP Response: The 2 hours of excess CO emissions were reported in the 1st Quarter CEMS Downtime and Excess Emissions Report. The cause of the CO exceedance was due to the composition of the RDF. You stated in a telephone conversation that the reason this exceedance was identified in the Violation Notice is due to the two hour duration indicating that the issue was not addressed in a timely fashion. DRP has included the 1-minute CEMS data in Appendix B which demonstrates the 8:00 hour was within the permit limit until 8:46, when it had a spike of 752 ppm. Operations reacted to the issue at 8:46 and resolved the issue by 9:45, or within an hour. Therefore, although two one-hour block periods were impacted, the actual duration was less than an hour.

Rule/Permit Condition Violated	MDEQ Comments	Permit Condition
ROP No. MI-ROP-M4148- 2011a, FGBOILERS011-013, SC.III.10 and SC.VI.59	 (1) Lime slurry density and (2) pounds per hour of pebble lime was not maintained during SO2 CEMS downtime. the SO2 CEMS was down 2-14-16, 2-15-16, 7-2-16 through 7-4-16, 11- 23-16, 11-24-16, 12-1-16, 12-2-16, 12-5-16, 12-6-16, and 12-14-16 	 The lime slurry feed system shall be modulated by interfacing with the sulfur dioxide continuous emission monitor. In the event of a malfunction or failure of the sulfur dioxide continuous emission monitor, the Permittee shall operate the lime slurry feed system such that, at a minimum, 800 pounds per hour of pebble lime shall be added. Once daily, during the period of monitor malfunction or failure, the permittee shall manually determine the slurry density. Permittee shall record the date, time, and duration of a malfunction event or failure of the sulfur dioxide continuous emission monitor, the amount of pebble lime added per hour, the lime slurry density, and lime slurry flow rate.

DRP Response: Upon revision of the Startup, Shutdown, and Malfunction (SSM) Plan, operations updated their daily logs to ensure lime slurry density is documented daily (the new SSM forms started on 12-3-16). However, employees continued to use the old forms that did not include a place for lime slurry. An example of the correct form is included in Appendix C. In addition, DRP would like to provide the lime usage for several of the days in which the SO2 CEMS was down. This information is included in Appendix D. The average lime feed rate exceeded 800 lbs. per hour, which means that, although we do not have records to demonstrate the precise hourly feed rate during each CEMS downtime, we are highly confident that a feed rate of 800 lbs. per hour or greater was maintained throughout the event.

I trust that this letter is a satisfactory response to the June 9, 2017 VN. If you have questions concerning the information discussed above, please feel free to contact Damian Doerfer at 313-963-3394.

Sincerely,

Detroit Renewable Power Linwood/Bubar, Executive V.P. Attachments Ms. LaReina Wheeler, City of Detroit, BSEED Ce via email: Ms. Lynn Fiedler, DEQ Ms. Mary Ann Dolehanty, DEQ Mr. Christopher Ethridge, DEQ Mr. Thomas Hess, DEQ Ms. Wilhemina McLemore, DEO Mr. Jeff Korniski, DEQ Mr. Damian Doerfer, DRP



.

· · ·						
Date	Time	Observer Name	Observer Signature	DP	Reading	Pulse Air
				107		on / off
				207		on / off
				307		on / off
				135		on/off
				235		on / off
		-		335		on / off
				107	·····	on / off
				207		on / off
				307		on / off
				135		on / off
				235		on / off
		<u> </u>		335		on / off
			l I	107		on / off
				207		on / off
				307		on / off
				135		on / off
				235		on / off
				335		on / off
				107		on / off
				207		on / off
				307		on / off
				135		on / off
				235		on / off
				335		on / off
				107		on / off
				207		on / off
				307		on / off
				135		on / off
				235		on / off
			****	335		on / off
				107		on / off
				207		on / off
				307		on / off
				135		on / off
				235		on / off
				335		on / off
				107		on / off
				207		on / off
				307		on/off
				135		on / off
				235		on / off
				115		an / off

6 S:\Environmental\Air\ROP\Recordkeeping for ROP\Recordkeeping Summary ROP-Form-006 Revision 2 06/13/2017

DAILY Environmental Documentation - must keep for five years

Recordkeeping for the Renewable Operating Permit (ROP) (MI-ROP-M4148-2011a): FGMSWPROC-LINES Section VI.2

Municipal Solid Waste (MSW) - Baghouse Readings

Appendix **B**

Data Summary Report

Company: Detroit Renewable Power 5700 Russell Street Detroit, MI 48211 Data Group: U-13>1Min Computed Report Name: No Title Start of Report: 03/26/2017 08:00 End of Report: 03/26/2017 10:00

Validation: Valid Data Only

detroit

renewable power

A Detroit Renewable Energy LLC Company

Group#-Channel#	G37-C34	G37-C9	G37-C10	G37-C36	
Long Descrip.	U13 Stack	U-13-1Min	U-13-1Min	U13 Stack	
Short Descrip.	13 CO ug	RDFFlow	SteamFl	13 CO @7%	
Units	ppm	K#/Hr	K#/Hr	ppmc	
Range	0-2000	0-200	0-500	0-5000	
03/26/2017 08:00	266.0	98	337	346	
03/26/2017 08:01	254.0	101	347	315	•
03/26/2017 08:02	172.0	103	354	213	
03/26/2017 08:03	. 161.0	106	362	203	
03/26/2017 08:04	149.0	106	360	190	·
03/26/2017 08:05	63.0	103	352	83	
03/26/2017 08:06	51.0	101	345	69	
03/26/2017 08:07	64.0	100	342	85	
03/26/2017 08:08	63.0	99	338	85	
.03/26/2017 08:09	59.0	98	337	78	
03/26/2017 08:10	147.0	99	339	191	
03/26/2017 08:11	197.0	100	343	258	· · ·
03/26/2017 08:12	162.0	. 101	346	207	
03/26/2017 08:13	241.0	101	348	305	
03/26/2017 08:14	173.0	102	348	· 225	
03/26/2017 08:15	249.0	102	349	315	·
03/26/2017 08:16	128.0	99	338	176	
03/26/2017 08:17	81.0	98	333	116	
03/26/2017 08:18	165.0	98	332	223	·
03/26/2017 08:19	270.0	98	335	354	
03/26/2017 08:20	322.0	99	339	411	
03/26/2017 08:21	230.0	100	342	296	
03/26/2017 08:22	173.0	101	344	225	
03/26/2017 08:23	118.0	101	345	153	· ·
03/26/2017 08:24	106.0	101	343	142	
03/26/2017 08:25	95.0	99	335	132	
03/26/2017 08:26	65.0	92	313	98	
03/26/2017 08:27	40.0	81	305	. 66	
03/26/2017 08:28	50.0	83	301	78	
03/26/2017 08:29	58.0	. 89	299	84	
03/26/2017 08:30	43.0	90	302	. 62	
03/26/2017 08:31	159.0	94	318	. 205	
03/26/2017 08:32	280.0	97	330	344	
03/26/2017 08:33	148.0	98	336	187	· · ·
03/26/2017 08:34	198.0	100	343	248	
03/26/2017 08:35	200.0	101	348	253	
03/26/2017 08:36	97.0	101	344	131	
03/26/2017 08:37	48.0	101	345	64	•
03/26/2017 08:38	45.0	100	340	59	

Date/Time Printed: 06/21/2017 11:27

Page 1

			007 010			
Group#-Channel#	637-034	637-09	G37-CIU	637-636		
Long Descrip.	UIS Stack	0-13-1Min	0-13-1M1n	UIS STACK		
Short Descrip.	13 CO ug	RDFFlow	SteamFl	13 CO 07%		
Units .	ppm	K#/Hr	K#/Hr	ppmc	·	
Range	0-2000	0-200	0-500	0-5000		
03/26/2017 08:39	47.0	97	331	65		
03/26/2017 08:40	42.0	97	330	56		
03/26/2017 08:41	77.0	97	332	97		
03/26/2017 08:42	98.0	95	321	129		
03/26/2017 08:43	· 60.0	90	303	90	•	
03/26/2017 08:44	72.0	87	294	114		
03/26/2017 08:45	276.0	88	297	396		
03/26/2017 08:46	752.0	92	312	977		
03/26/2017 08:47	1371.0	96	327	1672	·	
03/26/2017 08:48	1479.0	101	344	1728		
03/26/2017 08:49	931.0	105	359	1106		
03/26/2017 08:50	721.0	107	361	. 887		
03/26/2017 08:51	313.0	97	348	431		
03/26/2017 08:52	73.0	. 92	341	108		
03/26/2017 08:53	80.0	86	320	120		
03/26/2017 08:54	38.0	80	303	64		
03/26/2017 08:55	32.0	75	286	57		
03/26/2017 08:56	33.0	74	285	56		
03/26/2017 08:57	34.0	75	289	51		
03/26/2017 08:58	39.0	78	299	55		
03/26/2017 08:59	41.0	80	308	55		
03/26/2017 09:00	44.0	82	314	59		
03/26/2017 09:01	45.0	81	309	63		
03/26/2017 09:02	32.0	78	300	48		
03/26/2017 09:03	34.0	82	291	54		
03/26/2017 09:04	35.0	82	279	57		
03/26/2017 09:05	35.0	82	279	57		
03/26/2017 09:06	31.0	82	279	46		
03/26/2017 09:07	43.0	84	288	. 59		
03/26/2017 09:08	180.0	85	290	232		
03/26/2017 09:09	258.0	· 85	289	. 359		
03/26/2017 09:10	268.0	86	293	. 373		
03/26/2017 09:11	268.0	86	293	373		
03/26/2017 09:12	859.0	93	316	1126		
03/26/2017 09:13	1043.0	98	333	1283		
03/26/2017 09:14	1235.0	101	346	1480		
03/26/2017 09:15	921.0	104	354	1143		
03/26/2017 09:16	, 750.0	103	351	939		
03/26/2017 09:17	399.0	102	346	523		
03/26/2017 09:18	134.0	101	341	184		
03/26/2017 09:19	72.0	98	332	99		
03/26/2017 09:20	65.0	95	322	93		
03/26/2017 09:21	40.0	94	219	57		
03/20/2017 09:22	37.0	94	318	1C co		
03/26/2017 09:23	01.U 160 A	90 90	324	00 . 220		
03/20/2017 09:24	700.U	כע רס	323 333	. 122		•
03/20/2017 09:20	323.0	, oc	334	423 505		
03/20/2017 $03:2003/26/2017$ $00:27$	106 N	70 05	200	, 000 267		
03/20/2017 09:27	190.U 71 A	55 07	300	. 207		
VJ/20/2011 09.20	, 1.0	07	222	20		

Date/Time Printed: 06/21/2017 11:27

.

				· · ·	
Group#-Channel#	.G37-C34	G37-C9	G37-C10	G37-C36	
Long Descrip.	U13 Stack	U-13-1Min	U-13-1Min	U13 Stack	
Short Descrip.	13 CO ug	RDFFlow	SteamFl	13 CO @7%	
Units	ppm	K#/Hr	K#/Hr	ppmc	
Range	0-2000	0-200	0-500	0-5000	· ·
.03/26/2017 09:29	248.0	86	329	325	
03/26/2017 09:30	1009.0	86	329	1264	
03/26/2017 09:31	348.0	84	318	. 479	
03/26/2017 09:32	103.0	. 80	303	154	
03/26/2017 09:33	40.0	77	292	· 62	
03/26/2017 09:34	39.0	72	277	· 62	
03/26/2017 09:35	40.0	69	265	67	
03/26/2017 09:36	40.0	69	265	67	
03/26/2017 09:37	55.0	65	251	93	
03/26/2017 09:38	82.0	65	250	137	•
03/26/2017 09:39	72.0	65	250	119	
03/26/2017 09:40	· 77.0	67	257	124	
03/26/2017 09:41	170.0	68	263	260	
03/26/2017 09:42	239.0	71	274	365	
03/26/2017 09:43	187.0	74	285	277	
03/26/2017 09:44	376.0	78	299	507	
03/26/2017 09:45	419.0	81	309	539	
03/26/2017 09:46	251.0	74	308	339	
03/26/2017 09;47	93.0	71	305	. 139	
03/26/2017 09:48	39.0	68	295	63	
03/26/2017 09:49	34.0	· 63	278	57	
03/26/2017 09:50	27.0	60	267	. 48	
03/26/2017 09:51	26.0	58	260	45	
03/26/2017 09:52	26.0	59	261	43	
03/26/2017 09:53	27.0	61	271	43	
03/26/2017 09:54	27.0	63	277	43	
03/26/2017 09:55	28.0	64	283	43	·
03/26/2017 09:56	28.0	65	283	43	
03/26/2017 09:57	27.0	65	284	43	
03/26/2017 09:58	28.0	66	289	44	
03/26/2017 09:59	30.0	69	301	45	
03/26/2017 10:00	35.0	71	307	51	·
Period Average =	202.6	88	315	264	
Period Max Value =	1479.0	107	362	1728	
Period Min Value =	26.0	58	250	. 43	
Period Totals =	2.4511E+4 1.	0607E+4 3	.8069E+4 3	.1931E+4	
Period % Recovery =	100.0	100.0	100.0	100.0	
•					

.

. .

Appendix C

117

æ.

AAO SLAKER LOG 1

DATE: 4-20-17

1

0

1380 GPM / 1800 RPM						
LOW FLOW ALARM 480 GPM						
1A CONDENSATE PUMP	03:00	07:00	11:00	15:00	19:00	23:00
DISCHARGE PSI	350	370	370	1 3.70	350	350
OIL LEVEL	Y2	12	h	th	12	1/2
1B CONDENSATE PUMP						
DISCHARGE PSI		T 400	1 400	460	380	365
OILLEVEL		12-	12	In	(12	Vhr.
1A CLOSED CYCLE COOLING		1	<u>مى بىرىيىسىن مەسىمە مەسەمە بىرىمىسى بىرىمىسە مەسەمەمە مەسەمەمەمەمەمەمەمەمەمەمەمەمە</u>	<u>(</u>		
DISCHARGE PRESSURE		1 /				
OILLEVEL						
1B CLOSED CYCLE COOLING					<u>.</u>	
DISCHARGE PRESSURE	25	75	23	26	26	26
OILLEVEL	112	TR	In	In	VZ	Va
600 GPM/1750 RPM						
1A BUILDING HEAT PUMP					A	
DISCHARGE PRESSURE				1/		
OILLEVEL						
SYSTEM TEMPERATURE						
EXSPANSION TANK LEVEL						
1B BUILDING HEAT PUMP		7		r /		
DISCHARGE PRESSURE						
OIL LEVEL	-					
SYSTEM TEMPERATURE						
EXSPANSION TANK LEVEL						
1A AIR COMPRESSOR 790 cfm			/			
H.P. AIR TEMP OUT 180 F MAX		·		l		
OIL TEMPERATURE 158 F MAX						
OIL PRESSURE 20 PSIG MIN						
OIL LEVEL	Y2	1h	1/2	1/2	V/2	1/m
WATER TEMPERATURE						
AIR DISCHARGE TEMPERATURE	84	182	182	182	182	180
AIR FILTER DIFFERENTIAL						
AIR DISCHARGE PSI 100 PSIG	115	L_11b	165	115	-4^{\prime}	110
1B AIR COMPRESSOR 790 cfm					··	
H.P. AIR TEMP OUT 180 F MAX		ļ/		¢		
OIL TEMPERATURE 158 F MAX		/	/	/		
OIL PRESSURE 20 PSIG MIN	35	L/_	/	/		
	1/2	/	/	/		
	90	/		/		
	1 05	_/	_/	/		
AIR FILTER DIFFERENTIAL	18	-/	/	/		
	115	· /]		L/		
		r		·····,)		ر ر
INJECTION TEMPERATURE 40-60 F		/		<i>/</i>		
DISCHARGE AIR TEMPERATURE 100 F	<u> </u>	├───/──┤	/	└── / ──		
DISCHARGE AIK PRESSURE 110 PSI	<u> </u>	├/	_/	⊢-/		
		L I	_/		·	L]
			1		1.4	
SLURNT SPECIFIC GRAVILY		$l'l \leq l$	_11'C		1.19	
x						\frown
					Mr. A	the last

Appendix D

.

DRP - Lime Usage for SO2 CEMS Downtime per Violation Notice

Date	Boiler #	Hours SO2 CEMS Down	Lime Usage (tons)*	Lime Usage (Ibs)	Lime Usage (Ibs/hr)	Lime Usage (lbs/hr) for each boiler	Lime Usage (Ibs/ton RDF)*	
2/12/2016	11	6						
2/12/2016	13	10	16	32000	1333	667	18.5	
2/13/2016	13	24	38	76000	3167	1583	38.5	
2/14/2016	13	24	20	40000	1667	833	22.3	
2/15/2016	13	2	40	80000	3333	1667	52.8	
2/18/2016	11	1	20	40000	1667	833	22.4	
2/22/2016	11	2	34	68000	2833	1417	32.13	
3/13/2016	11	1	28	56000	2333	1167	30	
3/17/2016	13	3	28	56000	2333	1167	28.7	
7/2/2016	11	13	36	72000	3000	1500	42.8	
7/3/2016	11	24	36	72000	3000	1500	39.6	
7/4/2016	11	12	32	64000	2667	1333	38.0	
7/26/2016	13	2	45	90000	3750	1875	47.9	
7/27/2016	13	3	24	48000	2000	1000	26.3	
7/28/2016	13	3	31	62000	2583	1292	45.2	
8/7/2016	13	20	28	56000	2333	1167	30.7	
8/8/2016	13	8	36	72000	3000	1500	38.9	
8/23/2016	13	7	20	40000	1667	833	22.2	
9/29/2016	12	3		٢	No data availa	ble		
11/23/2016	13	8	20	40000	1667	833	35.1	
11/24/2016	12	4						
11/24/2016	13	9	32	64000	2667	1333	31.5	
12/2/2016	11	1						
12/2/2016	13	3	22	44000	1833	917	35.5	
12/5/2016	11	1						
12/6/2016	11	1						
12/6/2016	12	1						
12/14/2016	12	2	No data available					

*Represents total lime usage for all operating boilers on the corresponding calendar day.