

Covanta Marion, Inc.
4850 Brooklake Road NE
PO Box 9126
Brooks, OR 97305
Tel (503) 393-0890
Fax (503) 393-9714



July 5, 2022

Mr. Thomas Rhodes
Oregon Department of Environmental Quality
700 NE Multnomah Street, Suite 600
Portland, OR 97232

Re: Response to ODEQ Comments on Cleaner Air Oregon Air Toxics Test Report

Dear Mr. Rhodes:

We have reviewed comments provided by you via e-mail on June 3, 2022, regarding the Cleaner Air Oregon source testing that occurred at Covanta Marion on March 7 to 11, by Montrose Air Quality Services, LLC (Montrose). Based on your comments we have made the following modifications:

1. Low Steam Load Test Report
 - a. Method 29 Metals:
 - i. Montrose has reviewed their subcontracted laboratory Enthalpy Analytical's report, and in a revised table in Section 4: Table 4-2 (attached), all of Enthalpy Analytical's listed values for both front half and back half values on pages 113 to 135 of the report are included in the revised Table 4-2, including those values listed as ND.
2. High Steam Load Test Report
 - a. We have revised the facility process data in Appendix B to include 1-minute data for each of the test runs and corrected some typographical errors in Table 2.1 of the Original Executive Summary report. For completeness we have included the original Table 1.1 and the corrected Table 1.2 below for your records.
 - b. Method 26A: Halogens and Hydrogen Halides
 - i. We have revised the steam values, expressed in pounds of pollutant per 1,000-pounds steam [lb./1000 lb.], for all halogens and hydrogen halides using the Unit 1 steam production data from March 9, 2022.
 - c. Method 29: Metals
 - i. As stated in 1.a above, Montrose has reviewed their subcontracted laboratory Enthalpy Analytical's report, and in a revised table in Section 4: Table 4-5 (attached), all of Enthalpy Analytical's listed values for both the front half and back half values on pages 267 to 289 of the report are included in the revised Table 4-5, including those values listed as ND.
 - d. Method 23: Dioxins, Furans, and Polychlorinated Biphenyls (PCBs)
 - i & ii
This response covers both 2.d.i and ii below in reference to the use of

Section 2.11.c of the Oregon DEQ Source Sampling Manual for ISDL's, both for ND values and TEF calculations. Montrose used Section 2.11.c exclusively in preparing Tables 4-6 and 4-7 for dioxin, furan and PCB results; however, during the transfer of Vista laboratory data to the Montrose calculation spreadsheet, the laboratory ND values were inadvertently changed. These Vista laboratory ND's have been corrected and are included in the Montrose spreadsheets and the revised Tables 4-6 and 4-7 reflect these edits. In addition, Montrose used the Vista EMPC's, where indicated, for the Non-Detected (ND) 2,3,7,8-Cl substituted dioxins and furans isomers, as well as the numbered PCB's; however, for the total groups of dioxin and furan congeners and the total homologue groups of PCB's, Mono-CB to Deca-CB, Montrose used the reported Vista result, not the Vista reported EMPC.

iii. 2.d.iii requests that Total PCB results be shown as the sum of all PCB isomers and not as the sum of only the reportable PCB congeners. However, according to EPA's proposed Method 23's list of target analytes for PCBs, and the corresponding listing in the ODEQ-approved STP submitted by Covanta Marion, only those listed congeners were analyzed by Montrose's subcontracting laboratory Vista, so that a sum of all the homologues from Mono-CB to Deca-CB were not obtained. Covanta Marion had asked Montrose to contact Vista to determine if they can reanalyze their laboratory data to include those PCB homologue groups. As a result of that request, Vista completed processing the samples for all the homologues from Mono-CB to Deca-CB and the results are included in the revised report.

e. CARB Method 429: Polyaromatic Hydrocarbons (PAHs)

i. This comment refers to using Section 2.11.c of the Oregon DEQ Source Sampling Manual for ISDL's, both for ND values and TEF calculations. Montrose used Section 2.11.c exclusively in preparing Table 4-8 for PAH results; however, during the transfer of Vista laboratory data to the Montrose calculation spreadsheet, the laboratory ND values were inadvertently changed. The ND's have been corrected and are included in the Montrose spreadsheets and the revised Table 4-8 reflects these edits.

Should you have any questions or need additional information please contact me at 503-393-0890.

Sincerely,



Kirk Little
Facility Manager

TABLE 1.1
Profiled Industrial Waste Received

Date Received	Waste Type	Description	Feed Type	Tons
3/7/2022	Non-manufacturing waste	Non-manufacturing waste to include floor sweepings, bathroom and food waste. Non-recyclable manufacturing waste to include cardboard/paper. Plastic scrap, wood scrap, and rubber.	Pit	3.65
3/7/2022	Manufacturing and Industrial Debris	Office trash, plastic film, coffee cups, plastic film canisters, film negatives, mouse pads, empty containers, floor sweepings, and cardboard.	Pit	3.94
3/8/2022	Non-manufacturing waste	Non-manufacturing waste to include floor sweepings, bathroom and food waste. Non-recyclable manufacturing waste to include cardboard/paper. Plastic scrap, wood scrap, and rubber.	Pit	4.71
3/8/2022	Process and Production Waste	Plastic lined paper bags and packaging.	Pit	10.16
3/8/2022	Confidential Materials	Empty prescription pill bottles and confidential documents.	Pit	7.93
3/8/2022	Confidential Materials	Empty prescription pill bottles and confidential documents.	Pit	4.21
3/8/2022	Manufacturing and Industrial Debris	Wood, paper, textiles, office trash, cafeteria waste.	Pit	4.88
3/8/2022	Confidential Materials	Confiscated materials seized by law enforcement to include non-hazardous drugs and weapons.	Direct	0.70
3/8/2022	Confidential Materials	Confiscated materials seized by law enforcement to include non-hazardous drugs and weapons.	Direct	0.35
3/8/2022	Confidential Materials	Confiscated materials seized by law enforcement to include non-hazardous drugs and weapons.	Direct	0.22
3/8/2022	Manufacturing and Industrial Debris	Solidified latex paint	Pit	21.09
3/8/2022	Confidential Materials	Empty prescription pill bottles and confidential documents.	Pit	8.90
3/9/2022	Pharmaceuticals and Debris	Discarded empty containers, gloves, glass vials, caps, PPE, rags from pharmaceutical production.	Pit	0.88
3/9/2022	Non-manufacturing waste	Trash generated by warehousing, logistics, and office activities. Includes bagged trash, wood, cardboard, corrugated plastics, shrink-wrap, and pallets.	Pit	3.32
3/9/2022	Regulated Garbage	APHIS – Regulated Garbage	Modified-Direct	5.89
3/9/2022	Regulated Garbage	APHIS – Regulated Garbage	Modified-Direct	3.80
3/10/2022	Regulated Garbage	APHIS – Regulated Garbage	Modified-	0.50

			Direct	
3/10/2022	Non-manufacturing waste	Foam-padded wooden crates	Pit	3.53
3/10/2022	Confidential Materials	Confiscated materials seized by law enforcement to include non-hazardous drugs and weapons.	Direct	0.21
3/10/2022	Non-manufacturing waste	Non-manufacturing waste to include floor sweepings, bathroom and food waste. Non-recyclable manufacturing waste to include cardboard/paper. Plastic scrap, wood scrap, and rubber.	Pit	2.71
3/10/2022	Manufacturing and Industrial Debris	Discarded empty containers and PPE, debris, such as gloves, glass vials, caps, PPE, HEPA Filters, rags, and absorbed water.	Pit	0.78
3/10/2022	Plant Trash and Manufacturing Waste	Janitorial waste, nylon/polyester bristles, natural hog hair bristles, rubber bands, and nylon/polyester fabric.	Pit	6.69
3/11/2022	Confidential Materials	Confiscated materials seized by law enforcement to include non-hazardous drugs and weapons.	Direct	0.35
3/11/2022	Confidential Materials	Confiscated materials seized by law enforcement to include non-hazardous drugs and weapons.	Direct	0.01
3/11/2022	Confidential Materials	Empty prescription pill bottles and confidential documents.	Pit	4.13
3/11/2022	Regulated Garbage	APHIS – Regulated Garbage	Modified-Direct	2.69
3/11/2022	Process and Production Waste	Used oil filters from commercial and passenger vehicles.	Pit	5.11
3/11/2022	Confidential Materials	Confiscated materials seized by law enforcement to include non-hazardous drugs and weapons.	Direct	0.07
3/11/2022	Regulated Garbage	APHIS – Regulated Garbage	Modified-Direct	1.20
3/11/2022	Process and Production Waste	HVAC filters	Pit	1.06
3/11/2022	Consumer Health and Beauty	Used toner cartridges, printer consumables, cardboard, and wood pallets.	Pit	7.00

TABLE 1.2
SUMMARY OF SOURCE TEST OPERATIONAL PARAMETERS

Test Method, Run	Unit	RMW Processed (tons, single use packaging)	RMW Processed (tons, reusable containers)	RMW % of total Fuel	LDI Processed (gallons)	LDI Rate (gpm)	Natural Gas (kscf)	Average Steam Load (lbs/hr)	Baghouse Inlet Temperature (°F)	Lime Slurry Feed (dry lbs/hr)	Ammonia Injection (gal/hr)	Carbon Feed (lbs/hr)
29, 1	2 ¹	1.44	0.00	8	455	3.5	0	58.6	303	249	0.5	10.1
29, 2	2 ¹	2.26	0.75	17	465	3.5	0	58.9	304	250	0.7	9.8
29, 3	2 ¹	2.16	1.75	23	455	3.5	0	58.7	304	249	0.6	9.8
26A, 1	2 ¹	1.44	0.00	8	455	3.5	0	58.6	303	249	0.5	10.1
26A, 2	2 ¹	2.26	0.75	17	465	3.5	0	58.9	304	250	0.7	9.8
26A, 3	2 ¹	2.16	1.75	23	455	3.5	0	58.7	304	249	0.6	9.8
23, 1	2	1.98	3.90	16	703	2.9	0.8	67.7	304	249	0.2	9.8
23, 2	2	2.34	6.24	23	764	3.2	0	67.7	304	249	0.4	9.5
23, 3	2	2.00	2.07	10	734	3.1	0	68.3	304	249	0.2	9.8
26, 1	1	1.00	1.68	13	433	3.5	0.4	68.3	305	254	0.6	9.8
26, 2	1	2.84	1.26	20	408	3.3	0.4	68.6	309	255	0.5	9.9
26, 3	1	0.96	2.16	16	411	3.3	0.4	66.5	310	254	1.0	9.8
29, 1	2	0.80	2.73	16	404	3.0	0	67.6	302	249	0.6	9.8
29, 2	2	2.96	1.05	17	426	3.0	0	68.4	304	250	0.5	9.8
29, 3	2	0.48	3.84	20	410	3.0	0	68.5	304	249	0.4	9.9
CARB 429, 1	2	1.98	3.90	16	703	2.9	0.8	67.7	304	250	0.2	9.8
CARB 429, 2	2	2.34	6.24	23	764	3.2	0	67.7	304	249	0.4	9.5
CARB 429, 3	2	2.00	2.07	10	734	3.1	0	68.3	304	249	0.2	9.8
SW-846 0023a, 1	1	3.70	3.60	18	748	3.1	0	64.5	302	254	0.8	9.8

SW-846 0023a,2	1	3.32	1.17	12	755	3.2	0.8	63.2	311	249	0.4	9.8
SW-846 0061, 1	2	0.80	2.73	16	404	3.0	0	67.6	302	249	0.6	9.8
SW-846 0061, 2	2	2.96	1.05	17	426	3.0	0	68.1	304	250	0.5	9.8
SW-846 0061, 3	2	0.48	3.84	20	410	3.0	0	68.6	304	249	0.4	9.9

¹ Low-fire test conditions