

Metro Vancouver - Waste-to-Energy Facility CONTINUOUS EMISSION MONITORING SYSTEM

August 2025

1. Monthly Summary Report

Parameter	Compliance Limit (mg/dscm)	Compliance Period	Maximum Measurement (mg/dscm)		
			Unit 1	Unit 2	Unit 3
CO	50	24 hr	33.3	41.4	36.9
SO ₂	200	24 hr	157.4	158.8	136.3
NOx	190	24 hr	144.3	157.7	167.8
THC	10	24 hr	0.38	0.77	0.44
			Monthly Average (mg/dscm)		
			Unit 1	Unit 2	Unit 3
Opacity (%)			0.67	0.91	0.75
CO			24.0	27.8	25.5
THC			0.05	0.45	0.23
SO ₂			87.0	88.4	69.2
NOx			130.1	131.3	147.6

Interim Discharge Limits will apply until and including the following dates, at which point the Discharge Limits and Response Limits will apply

a. HCl – March 3, 2028

b. SO₂ – March 3, 2028

2. Monthly Exceedance Report

2.a. Discharge Limit Exceedances

Unit	Compliance Parameter	Discharge Limit (mg/dscm)	Date	Exceedance Level
Reason/Action Taken				

2.b. Response Limit Exceedances

Compliance Parameter: Carbon Monoxide

Response Limit: 100 mg/dscm 1/2 hour average

Unit No. 1

Date / Time	Duration	Exceedance (mg/dscm)	Action Taken
2-Aug 11:30	30 min	118.3	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
8-Aug 04:00	30 min	123.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
11-Aug 04:00	30 min	240.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
11-Aug 13:00	30 min	113.3	Boiler grate trip. Adjusted airflow, modified feed rate.
18-Aug 05:00	30 min	119.5	Volatile fuel. Started gas burners, modified feed rate.
18-Aug 12:30	30 min	103.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
21-Aug 06:30	30 min	113.4	Feeder hang up. Started gas burners, adjusted airflow.
21-Aug 08:00	30 min	120.9	Feeder hang up.
21-Aug 10:00	30 min	137.0	No action required.

22-Aug 09:00	30 min	101.5	Boiler grate trip. Started gas burners. Adjusted airflow, modified feed rate.
28-Aug 18:00	30 min	110.6	Started gas burners, adjusted airflow, modified feed rate.
30-Aug 19:30	30 min	127.8	Feeder hang up. Started gas burners, adjusted airflow, modified feed rate.

Compliance Parameter: Carbon Monoxide
Response Limit: 100 mg/dscm 1/2 hour average
Unit No. 2

Date / Time	Duration	Exceedance (mg/dscm)	Action Taken
1-Aug 01:30	30 min	125.3	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
1-Aug 07:00	30 min	107.9	Induced draft fan trip. Started gas burners, adjusted airflow, modified feed rate.
7-Aug 13:30	30 min	258.9	Started gas burners, adjusted airflow, modified feed rate.
7-Aug 16:30	30 min	145.2	Feeder hang up. Started gas burners, adjusted airflow, modified feed rate.
8-Aug 14:30	120 min	304.0	Feeder hang up. Started gas burners, adjusted airflow, modified feed rate.
15-Aug 06:00	30 min	172.3	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
18-Aug 11:30	30 min	138.7	Volatile fuel. No action needed.
22-Aug 06:30	30 min	175.8	Started gas burners, adjusted airflow, modified feed rate.
22-Aug 13:00	30 min	199.5	Started gas burners, adjusted airflow, modified feed rate.
22-Aug 17:00	60 min	134.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
24-Aug 09:00	30 min	114.1	Feeder hang up. Adjusted airflow, modified feed rate.
27-Aug 06:30	60 min	246.0	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
31-Aug 02:00	30 min	105.3	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
31-Aug 12:30	30 min	110.6	Volatile fuel. Started gas burners, adjusted airflow.

Compliance Parameter: Carbon Monoxide
Response Limit: 100 mg/dscm 1/2 hour average
Unit No. 3

Date / Time	Duration	Exceedance (mg/dscm)	Action Taken
1-Aug 06:30	30 min	121.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
2-Aug 08:30	30 min	200.2	Feeder hang up. Started gas burners, adjusted airflow, modified feed rate.
2-Aug 09:30	30 min	114.4	Feeder hang up. Started gas burners, adjusted airflow, modified feed rate.
9-Aug 14:00	30 min	100.3	Started gas burners, adjusted airflow, modified feed rate.
9-Aug 17:00	30 min	155.0	Started gas burners, adjusted airflow, modified feed rate.
11-Aug 19:30	30 min	122.2	Feeder hang up. Started gas burners, adjusted airflow, modified feed rate.
16-Aug 19:30	30 min	140.1	Volatile fuel. Started gas burners, adjusted airflow.
19-Aug 05:00	30 min	100.4	Started gas burners, adjusted airflow.
20-Aug 18:00	30 min	204.4	No action required.
22-Aug 22:00	30 min	107.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.

27-Aug 10:30	30 min	132.6	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
28-Aug 20:00	30 min	144.3	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.

3. CEMS Availability

Analyzer	Required Availability (% hours per quarter)	Averaging Period	Monthly Availability		
			Unit 1	Unit 2	Unit 3
Opacity	90	Hour	100	100	99
Oxygen	90	Hour	98	98	95
CO	90	Hour	98	98	95
SO ₂	90	Hour	98	98	95
NOx	90	Hour	98	98	95
THC	90	Hour	98	98	93
Stack Flow	90	Hour	100	100	100

4. Shutdown Report

Unit 1

Duration in Hours	Reason	Date
0.56	Ash discharger plugged	August 5
6.32	Second pass cleaning	August 6
35.80	Boiler wash	August 8-10
54.30	Boiler tube leak	August 12-14
1.60	Fabric filter baghouse inspection	August 15
2.78	Lime feeder failure	August 20
0.10	Forced draft fan trip	August 29
0.07	Forced draft fan trip	August 31

Unit 2

Duration in Hours	Reason	Date
0.28	Induced draft fan trip	August 1
0.12	Feed chute hang up	August 2
0.30	Induced draft fan trip	August 6
12.91	Fabric filter compartment plug	August 9
60.47	Boiler wash	August 11-14
3.20	Fabric filter baghouse inspection	August 15
0.08	Induced draft fan trip	August 24
2.00	CEMS failure	August 27

Unit 3

Duration in Hours	Reason	Date
0.32	Underfire air compartment plugged	August 1
139.50	Refractory failure	August 2-8
1.02	Instrument failure	August 20
2.05	Instrument failure	August 20
0.25	Induced draft fan trip	August 27
0.08	Forced draft fan trip	August 31

5. Facility Bypass and Emergency/spill Event Report

Date/Time	Cause	Duration
	Action Taken	

6. Other Data

		UNIT 1	UNIT 2	UNIT 3
Waste Received	tonnes	18,326		
Waste Processed	tonnes/day	213	209	200
Maximum Waste Processed	tonnes/day	270	263	266
Natural Gas Consumed	m ³ /day	6,945		
	m ³ /month	215,292		
Fly ash disposed	tonnes	642		
Bottom ash disposed	tonnes	3,202		

7. Complaints and Responses

Date/Time	Complaint	Action Taken

ATTACHMENT 2

August 2025 - Monthly CEMS Data

Date	Boiler #1								Boiler #2								Boiler #3							
	Stack Temp	O ₂ (%)	SO ₂ (mg/m ³)	NO _x (mg/m ³)	CO (mg/m ³)	THC (mg/m ³)	Opacity (%)	Furnace Temp	Stack Temp	O ₂ (%)	SO ₂ (mg/m ³)	NO _x (mg/m ³)	CO (mg/m ³)	THC (mg/m ³)	Opacity (%)	Furnace Temp	Stack Temp	O ₂ (%)	SO ₂ (mg/m ³)	NO _x (mg/m ³)	CO (mg/m ³)	THC (mg/m ³)	Opacity (%)	Furnace Temp
8/1/25	153.1	10.4	48.5	130.5	20.8	0.06	0.50	965	146.9	12.4	61.5	125.2	37.9	0.73	0.86	889	154.9	9.8	62.3	138.3	31.5	0.21	1.85	871
8/2/25	151.1	10.5	61.2	128.6	23.9	0.11	0.49	903	147.2	12.1	78.9	124.3	30.5	0.64	0.88	893								
8/3/25	149.6	11.2	82.6	130.4	30.9	0.00	0.49	985	144.1	12.1	95.1	123.7	18.5	0.62	0.89	919								
8/4/25	147.2	10.6	54.5	129.3	21.8	0.01	0.50	917	144.6	12.2	65.5	119.4	24.8	0.60	0.84	909								
8/5/25	145	11	46.3	128.3	21.2	0.02	0.49	892	143.1	12.5	50.7	119.4	29.6	0.71	0.85	905								
8/6/25									141.4	12.4	50	114.1	23.8	0.67	1.00	922								
8/7/25	147.8	11.3	66.4	128.5	27.8	0.06	0.49	926	142.2	12.1	60.3	107.9	35.1	0.66	1.34	915								
8/8/25									140	12.4	68.5	109	41	0.77	0.93	941								
8/9/25																	158.8	9.1	136.3	135.8	36.9	0.44	0.70	873
8/10/25	155.6	10.4	157.4	139.8	23.7	0.38	0.48	878	151.5	11.3	86	118.4	21.5	0.54	0.92	906	158.3	9.4	107.3	142.3	26	0.11	0.71	881
8/11/25	160	10.4	128.4	144.3	25.5	0.14	0.47	942									158.2	9.3	75.4	167.4	23	0.31	0.64	884
8/12/25																	158.6	9.7	125	142.6	24	0.31	0.65	884
8/13/25																	156.6	9.5	80.4	137.1	22.4	0.26	0.66	883
8/14/25									151.8	9.8	139.4	141.4	24.3	0.35	1.08	912	154.5	9.4	82.8	140.4	23.3	0.15	0.73	904
8/15/25	155.7	9.8	105.7	133.3	15.5	0.01	0.52	896	152.9	10	116.9	136.8	31	0.35	0.99	899	154.1	9.2	66.4	139.9	21.3	0.26	0.78	884
8/16/25	156.3	9.7	105.4	133.6	19.1	0.01	0.51	899	154	9.7	119	135.9	24.8	0.30	0.98	906	153.9	9.4	69.5	144.9	22.6	0.39	0.78	867
8/17/25	156.5	9.3	113.7	132.5	18.4	0.02	0.55	920	153.6	10	118.8	134.3	26.2	0.32	0.98	909	154.3	9.6	56.3	155.6	17	0.15	0.81	868
8/18/25	153.4	9.2	95.1	126.1	27.4	0.08	0.67	876	152.6	9.4	96.3	131.7	30.9	0.40	0.88	907	153.3	9.3	55.9	147	23.2	0.15	0.81	877
8/19/25	152.5	8.7	150.5	127.7	16.5	0.03	0.88	940	150	9.5	158.8	128.1	29	0.40	0.87	900	154	9.4	93.4	144.7	21.3	0.20	0.75	872
8/20/25	153.5	8.8	115.7	130.4	18.3	0.00	1.20	845	152.9	9.8	96.5	139.2	20.1	0.30	0.86	895	152.9	9.8	59.5	167.8	31.9	0.38	0.66	873
8/21/25	149.6	8.7	73.5	127.2	29.3	0.05	1.95	959	152.6	9.4	90.2	149.4	30.5	0.27	0.89	899	151.7	9.8	55.8	161.2	20.6	0.22	0.70	881
8/22/25	153.3	8.8	66.1	129	24.4	0.01	2.31	902	152.7	9.4	84.8	139.4	41.4	0.44	0.88	900	149.5	9.2	49.6	158	26.6	0.32	0.67	880
8/23/25	151.4	8.9	78	127.7	29.4	0.01	1.26	890	152.8	9.1	86.5	146.3	20.2	0.27	0.90	901	150.5	9.3	58.3	159.3	24.9	0.13	0.68	872
8/24/25	153.2	8.7	104.2	127.3	26.7	0.01	0.34	890	153.6	9.8	110.1	146.7	29.9	0.35	0.87	892	150.1	8.9	66.7	158.5	30.9	0.16	0.71	877
8/25/25	150.5	8.8	66.3	123.5	24.4	0.01	0.35	861	153.3	10	74	130.4	31.6	0.33	0.84	893	149.1	9.1	49.4	140.6	24.6	0.14	0.66	883
8/26/25	151.6	9.3	85.3	126.9	18.8	0.01	0.35	927	151.8	9.9	102.6	133.5	22.7	0.31	0.83	894	149.9	9.5	69.3	149	27.8	0.17	0.70	877
8/27/25	151.9	9.2	55.4	128.2	21.1	0.01	0.35	927	151	9.3	66.7	151.7	32.3	0.39	0.83	903	149.8	9.5	38.8	160.9	27.2	0.16	0.69	873
8/28/25	155.5	9.2	94.2	130.6	27.1	0.01	0.33	959	153.4	9.5	82.2	157.7	24	0.32	0.81	910	152.2	9.8	58.8	162	28.2	0.32	0.67	870
8/29/25	156.4	9.4	70.6	129.6	25.7	0.03	0.34	908	153.1	9.6	69.8	129.3	21.4	0.33	0.80	925	153.5	9.9	46.9	135	24.1	0.11	0.65	892
8/30/25	155.7	9.4	71.2	129	28.9	0.05	0.40	919	153.3	9.4	72.1	125.8	23.3	0.30	0.83	921	152.2	9.5	43.7	128.3	25.7	0.18	0.69	890
8/31/25	155.5	9.6	78.3	130.8	33.3	0.00	0.42	884	152.9	9.3	84.8	127	24.5	0.39	0.86	913	151.9	9.7	53.5	126.3	26.7	0.21	0.70	884
Average	153	9.7	87.0	130.1	24.0	0.05	0.67	912	150.0	10.5	88.4	131.3	27.8	0.45	0.91	906.6	153.5	9.5	69.2	147.6	25.5	0.23	0.75	879.2
Min	145	8.7	46.3	123.5	15.5	0.00	0.33	845	140.0	9.1	50.0	107.9	18.5	0.27	0.80	889.0	149.1	8.9	38.8	126.3	17.0	0.11	0.64	867.0
Max	160	11.3	157.4	144.3	33.3	0.38	2.31	985	154.0	12.5	158.8	157.7	41.4	0.77	1.34	941.0	158.8	9.9	136.3	167.8	36.9	0.44	1.85	904.0
St Dev	3.4	0.83	29.84	4.27	4.74	0.08	0.50	33.7	4.44	1.27	26.21	12.70	6.19	0.16	0.11	11.96	2.99	0.26	24.67	12.07	4.30	0.09	0.24	8.56

Blank days have less than 18 hours of valid data due to unit shut downs or analyzer outage/maintenance.
 According to standard guidelines used by Metro Vancouver Air Quality Policy and Environment Division, a minimum of 18 hours of valid data is required to generate a valid 24hr average.