

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

September 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	35.8	40.9	35.0
SO ₂	200	24 hr	104.2	80.9	58.2
NOx	190	24 hr	141.3	129.3	133.0
THC	10	24 hr	0.19	0.87	0.33
			Monthly Average (mg/dscm)		
			Unit 1	Unit 2	Unit 3
Opacity (%)			0.43	0.76	0.69
CO			24.0	28.2	25.1
THC			0.02	0.36	0.23
SO ₂			59.3	58.3	37.3
NOx			130.3	125.6	130.2

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, 2025

b. SO₂ – March 3, 2025

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
6-Sep 10:30	30 min	106.7	Volatile fuel. Started gas burners, adjusted airflow.
18-Sep 05:00	30 min	137.2	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
22-Sep 08:30	30 min	104.5	Volatile fuel. Started gas burners, adjusted airflow.
27-Sep 07:00	30 min	122.0	Poor refuse quality. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.

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-Sep 07:00	30 min	105.0	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
5-Sep 12:30	30 min	170.4	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
8-Sep 05:00	30 min	114.2	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
9-Sep 09:30	30 min	130.0	Volatile fuel. Started gas burners, adjusted airflow.
10-Sep 08:00	30 min	114.5	Feeder hang up. Started gas burners, adjusted airflow, modified feed rate.
13-Sep 19:30	30 min	207.4	No action required.
16-Sep 06:30	30 min	208.3	Volatile fuel Started gas burners, adjusted airflow, modified feed rate.
17-Sep 14:00	30 min	124.0	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.

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-Sep 10:00	30 min	106.2	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
1-Sep 11:00	30 min	148.9	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
1-Sep 19:00	30 min	107.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
1-Sep 21:00	30 min	126.8	Started gas burners, adjusted airflow, modified feed rate.
2-Sep 10:30	30 min	114.9	Volatile fuel. Adjusted airflow, modified feed rate.
3-Sep 13:30	30 min	119.7	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
4-Sep 10:30	30 min	194.1	No action required.
4-Sep 14:00	30 min	135.7	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
5-Sep 13:30	30 min	119.7	Feed chute bridged. Started gas burners, adjusted airflow, modified feed rate.
10-Sep 17:30	30 min	112.5	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
12-Sep 11:00	30 min	188.9	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.

2.c. Transient Conditions

Gas burners unavailable during shutdown and furnace temperature average below 800C

Unit	Duration	Date	Time
Cause			
Action Taken to Restore Steady State Conditions			
Remedial Action Planned and/or Taken			

3. CEMS Availability

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

4. Shutdown Report

Unit 1

Duration in Hours	Reason	Date
67.35	Grate bar replacement	September 1-3
2.09	Fabric filter baghouse inspection	September 4
0.52	BC Hydro power interruption	September 7
0.42	Feed chute malfunction	September 12
0.30	Volatile fuel	September 18
0.35	Volatile fuel	September 26
56.18	Major scheduled outage	September 28-30

Unit 2

Duration in Hours	Reason	Date
0.53	BC Hydro power interruption	September 7
0.15	Boiler maintenance	September 7
5.03	Fabric filter baghouse inspection	September 8
0.30	Furnace pressure trip	September 9
0.37	Furnace pressure trip	September 9
0.15	Furnace pressure trip	September 12
0.25	Low drum level trip	September 12
2.65	Forced draft fan trip	September 13
0.90	Furnace pressure trip	September 14
7.76	Fabric filter baghouse maintenance	September 16
0.12	Furnace pressure trip	September 18
72.63	Grate bar replacement	September 18-21

Unit 3

Duration in Hours	Reason	Date
0.17	Furnace pressure trip	September 2
2.32	Hydraulic leak	September 4
0.50	BC Hydro power interruption	September 7
0.07	Furnace pressure trip	September 8
444.37	Major scheduled outage	September 12-30

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	16,138		
Waste Processed	tonnes/day	209	213	91
Maximum Waste Processed	tonnes/day	261	260	258
Natural Gas Consumed	m ³ /day	8,622		
	m ³ /month	258,648		
Fly ash disposed	tonnes	496		
Bottom ash disposed	tonnes	2,515		

7. Complaints and Responses

Date/Time	Complaint	Action Taken

September 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
9/1/25								154	9.7	71.1	129.3	32.8	0.52	0.82	898	150.8	9.5	48.3	131.3	35	0.29	0.67	881	
9/2/25								153.3	9.5	80.9	124.2	28.1	0.37	0.84	920	152.4	9.7	58.2	132	33.2	0.24	0.68	891	
9/3/25								153.3	10	67.8	125.3	27.9	0.41	0.83	910	152.4	10.2	43.1	133	27.5	0.31	0.68	888	
9/4/25	155.3	10.2	59	140.3	24.7	0.01	0.39	892	154.4	9.7	56.7	128.3	25.9	0.35	0.80	917	152.2	10.2	31.5	132	27.5	0.33	0.65	874
9/5/25	155.9	10.2	64.7	133.5	22.9	0.00	0.43	868	154.3	9.9	44.3	125.1	36.6	0.41	0.84	896	151.9	10.1	29.5	130.7	26.8	0.22	0.66	861
9/6/25	157.7	9.9	70.5	126.5	26.8	0.08	0.41	873	154.9	9.7	55.2	125.1	25.8	0.38	0.88	896	151.5	10	31.1	132.1	25.7	0.29	0.67	855
9/7/25	155.8	9.5	88	126.5	21.9	0.01	0.42	920	156.8	9.7	68.2	126	25.5	0.37	0.87	897	151.4	10	41.9	131.5	21.8	0.11	0.66	858
9/8/25	159.1	9.7	60.5	124.6	26	0.00	0.45	837	156	10.1	55.5	126.1	23.7	0.53	1.03	895	151.4	9.9	34.9	128	18.8	0.19	0.68	872
9/9/25	152.4	9.2	76.7	132.6	22.6	0.00	0.52	912	153.5	9.8	54.8	126.8	32.1	0.32	0.83	890	148.7	9.9	32.8	129.2	18.8	0.17	0.70	890
9/10/25	150.1	9.2	47.7	129.6	25.4	0.00	0.50	901	151.8	9.6	52.8	125.4	32.3	0.28	0.83	889	145.4	9.8	28.1	125.4	21.8	0.20	0.70	873
9/11/25	151.8	9.1	53.4	129.4	19	0.01	0.49	926	150.7	9.4	58.4	124	26.3	0.20	0.86	906	147.8	9.8	31.1	127.4	19.1	0.14	0.79	890
9/12/25	152.2	9.9	49.9	137.4	21.1	0.00	0.25	877	151.9	9.7	50.9	124.7	34.7	0.34	0.86	902								
9/13/25	152.5	10.1	49.7	133.2	17.7	0.01	0.22	871	152.4	9.9	54.8	125.4	40.9	0.87	0.87	893								
9/14/25	153.7	10.3	51.1	128.2	21.6	0.01	0.31	885	151	10	64.9	126	27.4	0.35	0.80	911								
9/15/25	153.6	10	66.6	131	24.5	0.00	0.37	888	152.1	10	74.3	124	30.7	0.30	0.89	903								
9/16/25	153.2	10	104.2	141.3	17.1	0.01	0.43	906																
9/17/25	151	9.6	54.5	133.9	26.4	0.08	0.39	916	149.5	10.1	49	124.8	30.6	0.39	0.46	899								
9/18/25	151.1	9.7	54.9	139.8	25.4	0.19	0.37	919	147.2	9.7	58.9	125.4	35.5	0.57	0.47	897								
9/19/25	150.7	9.6	45.4	129.2	23.4	0.00	0.41	931																
9/20/25	151.5	9.7	45.4	124.1	22.8	0.00	0.48	900																
9/21/25	152.8	9.8	64.5	127.5	23.9	0.00	0.46	933																
9/22/25	153	9.7	50	126.1	23.5	0.10	0.47	931	149.8	9.9	62.7	125.2	25.7	0.36	0.53	908								
9/23/25	153.9	9.6	65.4	128.4	23.6	0.01	0.50	903	148.8	9.8	68.6	126.6	24.9	0.25	0.54	901								
9/24/25	152.8	9.9	60.5	127.6	27	0.00	0.49	925	149.6	9.7	65.3	126.5	23.1	0.18	0.55	906								
9/25/25	153.1	9.7	53.4	126.9	27.5	0.01	0.48	894	149.9	9.8	59.7	124.7	22.9	0.20	0.61	901								
9/26/25	149.6	9.7	43.9	121.9	24.6	0.00	0.48	906	143.8	9.8	53.6	122.3	25.2	0.25	0.55	906								
9/27/25	152.6	9.5	44.2	126.6	35.8	0.01	0.49	934	148.4	9.9	48.2	125	25.8	0.27	0.55	897								
9/28/25									149.9	9.7	60.2	126.8	24.4	0.31	0.56	884								
9/29/25									149.6	10	36.2	125.7	21	0.31	0.68	892								
9/30/25									144.9	10.1	43.9	126.8	23.7	0.34	1.31	878								
Average	153	9.7	59.3	130.3	24.0	0.02	0.43	902	151.2	9.8	58.3	125.6	28.2	0.36	0.76	899.7	150.5	9.9	37.3	130.2	25.1	0.23	0.69	875.7
Min	150	9.1	43.9	121.9	17.1	0.00	0.22	837	143.8	9.4	36.2	122.3	21.0	0.18	0.46	878.0	145.4	9.5	28.1	125.4	18.8	0.11	0.65	855.0
Max	159	10.3	104.2	141.3	35.8	0.19	0.52	934	156.8	10.1	80.9	129.3	40.9	0.87	1.31	920.0	152.4	10.2	58.2	133.0	35.0	0.33	0.79	891.0
St Dev	2.3	0.31	14.52	5.27	3.73	0.05	0.08	24.8	3.17	0.18	10.15	1.40	4.93	0.14	0.20	9.50	2.27	0.21	9.46	2.40	5.62	0.07	0.04	13.43

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.