

Monthly Operating Reports

January 2025

The following January 2025 operating report was sent to the Ministry of Environment and Parks on March 10, 2025

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

January 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	49.1	47.7	30.9
SO ₂	200	24 hr	109.0	89.6	90.4
NOx	190	24 hr	132.6	132.8	136.3
THC	10	24 hr	0.18	2.67	0.50
			Monthly Average (mg/dscm)		
			Unit 1	Unit 2	Unit 3
Opacity (%)			1.24	0.54	0.75
CO			28.5	36.2	25.5
THC			0.01	0.40	0.22
SO ₂			52.8	59.6	59.8
NOx			123.3	128.4	132.8

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
5-Jan 14:00	30 min	107.1	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
9-Jan 07:30	30 min	103.3	Started gas burners, adjusted airflow, modified feed rate.
9-Jan 14:30	30 min	102.4	Started gas burners, adjusted airflow, modified feed rate.
10-Jan 10:00	90 min	247.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
10-Jan 14:00	30 min	114.8	Started gas burners, adjusted airflow, modified feed rate.
14-Jan 08:00	60 min	259.6	Boiler plugged. Started gas burners, adjusted airflow, modified feed rate.
14-Jan 09:00	30 min	149.7	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
14-Jan 10:00	30 min	126.5	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.

20-Jan 10:00	30 min	159.3	Volatile fuel. Adjusted airflow, modified feed rate.
27-Jan 16:00	30 min	116.8	Started gas burners, adjusted airflow, modified feed rate.
31-Jan 06:30	30 min	181.3	Started gas burners, adjusted airflow, modified feed rate.
31-Jan 16:00	30 min	139.3	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. 2

Date / Time	Duration	Exceedance (mg/dscm)	Action Taken
2-Jan 15:00	30 min	105.4	Started gas burners, adjusted airflow, modified feed rate.
3-Jan 09:00	30 min	159.7	Started gas burners, adjusted airflow, modified feed rate.
3-Jan 15:00	30 min	129.3	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.
10-Jan 21:00	30 min	102.2	Started gas burners, adjusted airflow, modified feed rate.
14-Jan 19:30	30 min	123.8	Started gas burners, adjusted airflow, modified feed rate.
16-Jan 17:30	30 min	269.4	Started gas burners, adjusted airflow.
16-Jan 18:30	30 min	196.1	Started gas burners, adjusted airflow, modified feed rate.
19-Jan 08:30	30 min	106.0	Started gas burners, adjusted airflow, modified feed rate.
19-Jan 19:00	30 min	261.4	Adjusted airflow.
22-Jan 17:30	30 min	136.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
23-Jan 07:30	30 min	118.7	Started gas burners, adjusted airflow, modified feed rate.
23-Jan 17:00	30 min	172.7	Started gas burners, adjusted airflow, modified feed rate.
29-Jan 08:30	30 min	164.3	Started gas burners, adjusted airflow, modified feed rate.
29-Jan 11:30	30 min	112.4	Adjusted airflow, modified feed rate.
31-Jan 10:00	30 min	179.5	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
24-Jan 21:00	30 min	100.2	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	98	95	97
CO	90	Hour	98	95	97
SO ₂	90	Hour	98	95	97
NOx	90	Hour	98	95	97
THC	90	Hour	98	95	97
Stack Flow	90	Hour	100	100	100

4. Shutdown Report

Unit 1

Duration in Hours	Reason	Date
0.38	Ash discharger plug	January 3
7.67	Ash discharger plug	January 6
0.28	Forced draft fan trip	January 13
26.40	Boiler wash	January 14-15
46.42	Furnace wall leak	January 16-17
25.07	Secondary economizer leak	January 20-21
0.65	BC Hydro power interruption	January 27
9.22	CEMS maintenance	January 28
1.47	Fabric filter baghouse inspection	January 28

Unit 2

Duration in Hours	Reason	Date
37.55	Fabric filter bag change	January 12-13
1.88	Fabric filter hopper bridged	January 14
10.83	Fabric filter hopper bridged	January 21
45.68	Secondary economizer leak	January 24-25
30.50	Vent valve maintenance	January 26-27
0.23	BC Hydro power interruption	January 27

Unit 3

Duration in Hours	Reason	Date
418.98	Major grate system repair	January 2-19
2.60	Fabric filter baghouse bridged	January 20
0.23	BC Hydro power interruption	January 27
10.00	CEMS issues	January 27-28
5.50	Refuse crane maintenance	January 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/day	14,786		
Waste Processed	tonnes/day	201	211	106
Maximum Waste Processed	tonnes/day	281	283	268
		Units 1, 2, and 3		
Natural Gas Consumed	m ³ /day	7,608		
	m ³ /month	235,857		
Fly ash disposed	tonnes	488		
Bottom ash disposed	tonnes	2,144		

7. Complaints and Responses

Date/Time	Complaint	Action Taken

January 2025 - Monthly CEMS Data

	Boiler #1								Boiler #2								Boiler #3							
Stack	O ₂	SO ₂	NO _x	CO	THC	Opacity	Furnace	Stack	O ₂	SO ₂	NO _x	CO	THC	Opacity	Furnace	Stack	O ₂	SO ₂	NO _x	CO	THC	Opacity	Furnace	
Date	Temp	(%)	(mg/m³)	(mg/m³)	(mg/m³)	(mg/m³)	(%)	Temp	Temp	(%)	(mg/m³)	(mg/m³)	(mg/m³)	(mg/m³)	(%)	Temp	Temp	(%)	(mg/m³)	(mg/m³)	(mg/m³)	(mg/m³)	(%)	Temp
1/1/24	154	9.9	34.3	120.8	19.6	0.00	1.01	926	151	11.4	49	126.2	31.8	0.01	0.42	914	153	9.6	39.3	130.4	25.9	0.06	0.66	889
1/2/24	154	10.3	27.7	123.4	24.5	0.00	1.02	942	151	11.5	51.2	126.6	32.2	0.01	0.41	938								
1/3/24	152	10.2	31	121.7	23.9	0.00	0.98	943	145	11.3	48.1	125.5	38.9	0.02	0.40	943								
1/4/24	153	10.2	38.8	119.2	24.1	0.00	0.94	932	147	11.3	49.3	125.7	32.1	0.21	0.37	929								
1/5/24	153	10.5	40.4	119.9	32.6	0.00	0.97	924	148	11.2	55.2	125.4	29.5	0.05	0.41	941								
1/6/24									147	11.7	37.8	123.5	24.9	0.00	0.42	939								
1/7/24	153	10.6	37	123.5	31.3	0.00	1.03	927	145	11.9	48.7	125.6	26.7	0.00	0.47	937								
1/8/24	154	10.4	41	127.2	28.1	0.00	0.97	927	150	11.3	50.4	125.6	31.9	0.01	0.42	928								
1/9/24	154	10.4	27.7	125.4	32.9	0.00	0.99	938	151	10.9	56.2	128.2	28.2	0.00	0.42	942								
1/10/24	152	9.7	27.5	125.1	41.2	0.01	1.00	956	150						0.43	966								
1/11/24	153	10.1	29.5	119.8	29.9	0.00	0.99	939	151	10.4	65.6	128.2	31.6	0.00	0.42	934								
1/12/24	152	10.4	35.2	119.3	25.4	0.04	1.05	941																
1/13/24	151	10.6	40	105.8	29.3	0.01	0.99	947																
1/14/24	144	10.9	42.6	102.7	49.1	0.18	0.98	963	153	11.3	89.6	129.8	29.7	0.02	0.50	930								
1/15/24									153						0.51	948								
1/16/24									153	11.3	69.4	132.8	47.7	2.67	0.47	945								
1/17/24									154	10.8	72.2	132.2	40.5	1.38	0.71	943								
1/18/24	158	10	73.2	125.6	22.4	0.01	1.03	929	153	11.4	75	129.6	43.1	1.01	0.62	934								
1/19/24	158	10.2	81.7	122.2	24.3	0.00	1.34	921	152	11.4	68.1	128.4	43.8	0.84	0.61	929								
1/20/24									153	11.3	80.9	129.9	38	0.67	0.93	939	153	10.5	76.8	129.2	26.4	0.50	0.74	882
1/21/24																	154	10.6	90.4	131.7	30.9	0.40	0.74	904
1/22/24	152	9.3	109	130.3	14.8	0.00	1.37	960	152	11.2	69.5	129.9	41.3	0.50	0.71	959	154	10.4	79.7	134.7	24.5	0.23	0.74	915
1/23/24	152	9.3	89.9	129.4	20.8	0.02	1.29	942	143	11	51.8	130	41.4	0.36	0.61	964	155	10.6	67.9	133.9	23.4	0.29	0.73	887
1/24/24	154	9.5	85.8	126.8	24.2	0.00	1.36	928									154	10.5	54.1	133.3	30.5	0.19	0.73	875
1/25/24	155	9.8	95.1	128.4	21.4	0.00	1.77	938									155	10.7	79.5	135	26.6	0.26	0.78	901
1/26/24	155	10.6	69.8	132.1	21.3	0.03	2.70	916									155	10.8	58.9	136.3	28.5	0.17	0.80	904
1/27/24	150	10.8	36.1	116.2	25.9	0.00	1.78	893									155	11.1	30	131.6	22.6	0.14	0.76	889
1/28/24									150	10.9	65.4	129.6	44.2	0.21	0.66	914								
1/29/24	155	9.8	49.8	131.7	36.8	0.01	1.38	929	149	10.5	46.6	129.3	41.1	0.19	0.68	905	155	10.1	41.3	132.8	26.2	0.24	0.79	904
1/30/24	157	9.9	59.8	132.6	41.5	0.02	1.43	938	151	10.2	51.2	131.2	34.3	0.25	0.72	925	155	10.9	39.4	132	18	0.16	0.77	869
1/31/24	156	10.2	63.9	130.4	37.7	0.02	1.36	933	149	10.6	60.7	131.9	42.8	0.42	0.62	920	155	10.1	60.8	132.5	22.2	0.00	0.72	893
Average	153	10.2	52.8	123.3	28.5	0.01	1.24	935	150.0	11.1	59.6	128.4	36.2	0.40	0.54	936	154.4	10.5	59.8	132.8	25.5	0.22	0.75	892.7
Min	144	9.3	27.5	102.7	14.8	0.00	0.94	893	143.0	10.2	37.8	123.5	24.9	0.00	0.37	905	153.0	9.6	30.0	129.2	18.0	0.00	0.66	869.0
Max	158	10.9	109.0	132.6	49.1	0.18	2.70	963	154.0	11.9	89.6	132.8	47.7	2.67	0.93	966	155.0	11.1	90.4	136.3	30.9	0.50	0.80	915.0
St Dev	2.9	0.44	24.66	7.48	8.15	0.04	0.40	14.8	2.93	0.42	12.94	2.57	6.60	0.63	0.14	14.94	0.79	0.41	19.48	2.01	3.65	0.14	0.04	13.48

Blank days have less than 18 hours of valid data due to unit shut downs or analyzer outage.
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.