

Monthly Operating Reports

March 2025

The following March 2025 operating report was sent to the Ministry of Environment and Parks on May 13, 2025.

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

March 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	38.6	38.4	32.5
SO ₂	200	24 hr	137.5	159.0	98.9
NOx	190	24 hr	134.3	140.2	151.0
THC	10	24 hr	2.23	1.53	0.50
			Monthly Average (mg/dscm)		
			Unit 1	Unit 2	Unit 3
Opacity (%)			0.8	1.0	0.8
CO			28.2	28.1	24.6
THC			0.1	0.6	0.2
SO ₂			76.4	87.0	47.7
NOx			128.02	131.64	134.27

The BC Ministry of Environment and Parks issued an amended Operational Certificate on April 4, 2025, extending the existing interim discharge limits for HCl and SO₂ to 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
1-Mar 09:30	30 min	155.8	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
3-Mar 08:00	30 min	147.1	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.
6-Mar 09:30	30 min	152.8	Started gas burners, adjusted airflow, modified feed rate.
8-Mar 12:30	30 min	103.0	Ash discharger plugged. No action required.
10-Mar 10:00	60 min	317.2	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
12-Mar 05:30	30 min	170.0	Started gas burners, adjusted airflow.
13-Mar 13:30	30 min	139.0	Adjusted airflow.
25-Mar 08:30	30 min	172.2	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
25-Mar 17:30	60 min	139.7	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.

27-Mar 10:00	30 min	197.6	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
31-Mar 09:00	30 min	104.1	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
4-Mar 12:30	30 min	207.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
11-Mar 17:00	30 min	142.0	Started gas burners, adjusted airflow, modified feed rate.
20-Mar 20:00	30 min	116.6	Started gas burners, adjusted airflow, modified feed rate.
29-Mar 13:00	30 min	150.6	Volatile fuel. No action required.
30-Mar 12:00	30 min	192.0	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
2-Mar 10:30	30 min	115.2	Feed chute hang up. Started gas burner, adjusted airflow, modified feed rate.
2-Mar 11:30	30 min	118.4	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
3-Mar 08:00	30 min	158.6	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.
3-Mar 09:30	30 min	180.3	Started gas burners, adjusted airflow, modified feed rate.
11-Mar 18:00	30 min	107.8	Started gas burners, adjusted airflow, modified feed rate.
13-Mar 20:30	30 min	150.6	Volatile fuel. Started gas burners, adjusted airflow.
18-Mar 08:00	30 min	100.5	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.
19-Mar 09:00	30 min	169.2	Volatile fuel. Started gas burners, adjusted airflow.

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	99	100	99
Oxygen	90	Hour	97	99	97
CO	90	Hour	97	99	97
SO ₂	90	Hour	97	99	97
NOx	90	Hour	97	99	96
THC	90	Hour	97	97	96
Stack Flow	90	Hour	100	100	100

4. Shutdown Report

Unit 1

Duration in Hours	Reason	Date
2.39	Ash discharger plug	March 3
0.40	BC Hydro power interruption	March 11
3.29	Air pollution control maintenance	March 12
45.57	Boiler wash	March 20-22
3.00	Mechanical repair	March 27
6.06	Air pollution control maintenance	March 28

Unit 2

Duration in Hours	Reason	Date
1.83	Ash discharger plug	March 7
0.34	BC Hydro power interruption	March 11
135.75	Boiler wash	March 14-19
3.50	Mechanical repair	March 27

Unit 3

Duration in Hours	Reason	Date
0.33	BC Hydro power interruption	March 11
0.83	Air pollution control maintenance	March 16
0.72	Feed chute plug	March 16
3.13	Mechanical repair	March 27
3.29	Air pollution control maintenance	March 30
1.16	Ash discharger plug	March 30
3.15	Ash discharger plug	March 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	17,377		
Waste Processed	tonnes/day	218	196	224
Maximum Waste Processed	tonnes/day	263	258	249
		Units 1, 2, and 3		
Natural Gas Consumed	m ³ /day	9,548		
	m ³ /month	295,989		
Fly ash disposed	tonnes	356		
Bottom ash disposed	tonnes	2,896		

7. Complaints and Responses

Date/Time	Complaint	Action Taken

March 2025 - Monthly CEMS Data

	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
3/1/25	155.7	9.7	70.7	124.9	24.1	0.02	2.38	934	151.2	10.7	94.4	130.8	23.6	0.30	0.61	914	154.8	10.3	30.3	128.2	27.9	0.21	0.77	885
3/2/25	155.3	9.9	92.1	127.3	21.5	0.00	1.96	931	152.2	11.2	99.9	130.2	28.1	0.33	0.59	914	154.5	10.4	42.7	130.2	29.2	0.22	0.79	880
3/3/25	155.3	10	74.5	129.2	26.6	0.01	1.48	942	151.7	10.7	86.8	138.7	23.2	0.30	0.67	916	155	10.4	38.1	136.9	27.4	0.25	0.73	892
3/4/25	157.1	11.9	82.6	127.2	27.5	0.24	1.79	929	149.5	10.6	89.8	131	24.5	0.33	0.85	940	155	10.5	51.6	137.1	13.7	0.18	0.70	887
3/5/25	156.3	13	55.6	127.2	34.3	2.23	1.82	935	150.1	10.7	61.5	129.6	27.7	0.38	1.26	922	154.8	10.6	29.1	148.4	21.2	0.21	0.65	883
3/6/25	155	9.9	61.7	127.1	34	0.00	1.08	947	150	10.7	82.5	127.5	33.3	0.49	1.95	948	154.5	10.7	25.6	151	20.3	0.28	0.66	866
3/7/25	155.6	10.2	58.5	129	27.8	0.00	1.13	934	152.5	10.9	60.9	133.3	29.8	0.56	2.34	923	154.4	11.1	26.9	135.9	24.5	0.14	0.70	870
3/8/25	154.3	9.9	69.2	129.9	25.2	0.01	1.16	944	149.9	10.9	75.6	135.9	26.8	0.59	1.41	941	153.6	10.4	58.8	135.4	26.2	0.30	0.70	879
3/9/25	156.1	9.2	79.6	127.7	21.4	0.00	1.11	966	149.1	10.7	93.5	131.5	26.8	0.50	0.91	949	154.6	10	61.5	135.7	19.4	0.22	0.70	892
3/10/25	155.7	9.7	44.3	126.7	36.4	0.01	1.10	935	150.6	11.2	52.8	129.9	28.7	0.68	1.63	923	153.3	9.9	36.3	132.8	28.6	0.22	0.68	883
3/11/25	154	9.7	75.8	131.8	29	0.04	1.11	942	147.7	11.4	57	135.2	31.9	1.53	2.05	913	153	9.6	81.1	138.6	32.5	0.28	0.68	898
3/12/25	155.3	10.1	52.2	131	32.2	0.01	1.15	918	147.8	11.8	50.8	132.9	29.7	1.17	1.40	900	152.7	9.8	28.1	137.7	24.9	0.31	0.71	877
3/13/25	155.9	10.5	53.8	134.3	33.3	0.01	1.16	909	145.8	12.1	56.1	128.1	34.5	0.91	0.72	897	153.3	10.3	34.3	141	28.4	0.28	0.68	881
3/14/25	155.1	10.1	51.2	127	37.4	0.01	0.79	929									153.3	10.1	38	129.3	27.5	0.22	0.66	883
3/15/25	155.4	9.7	59.4	128.6	16	0.00	0.17	964									153.3	9.9	44.5	129.4	21	0.11	0.55	904
3/16/25	155.4	9.7	88.5	126.1	20.7	0.01	0.18	972									151.4	10.5	58.7	129.5	19.9	0.50	0.57	887
3/17/25	155.7	10.2	99.9	126.2	20.2	0.01	0.21	961									153.8	10.3	58.8	128.8	21.8	0.18	0.63	883
3/18/25	152.8	10.6	137.5	125.9	20.8	0.00	0.22	947									153.5	10.3	95.3	130.8	25.7	0.24	0.57	889
3/19/25	153.9	10.7	65.1	128.1	26.6	0.06	0.23	936									154.1	10.4	46.5	131.5	28.6	0.36	0.99	873
3/20/25	150	11.1	63.9	125.8	25.8	0.00	0.22	937	151.2	10.7	92	137.8	30.9	0.57	0.41	903	153.7	10.2	49.1	131.7	30.2	0.21	1.29	883
3/21/25									149.3	10.1	117.1	127.7	30	0.46	0.40	917	153.1	10.1	72.6	130.9	23.4	0.21	0.48	880
3/22/25									150	10.1	159	136	20.1	0.41	0.42	932	154.1	10.3	98.9	138.4	22.7	0.20	0.54	877
3/23/25	156.4					0.02	0.21	909	152.8	10.6	132.9	140.2	19.3	0.44	0.45	905	154.1	10.3	72.8	137.6	21.8	0.26	0.58	866
3/24/25	155.5	10.3	89.1	126	30.3	0.02	0.17	927	153.3	10.3	95.9	135.1	21.4	0.47	0.39	915	154.3	9.9	31.3	136.6	22.6	0.15	0.48	875
3/25/25	156	10.1	92.3	128.3	38.5	0.01	0.16	928	152.8	10.4	104.1	132.6	28.2	0.53	0.35	909	154.3	10.2	37.7	139.6	21.2	0.18	0.42	878
3/26/25	156	10.3	90.1	130.5	30.7	0.00	0.50	891	152.9	10.4	84	134.5	30.7	0.46	0.45	902	154.5	10.3	41.9	141.3	22.6	0.18	0.50	866
3/27/25	155	10.4	82.3	131	38.6	0.01	0.53	902	151.1	10.4	76.7	126.7	30.7	0.59	0.60	913	154.3	10.1	37.6	131	26.8	0.20	0.59	887
3/28/25									151.7	10.6	90.5	127.5	30.1	0.60	0.89	898	154.3	10	38.8	126.7	25.8	0.27	0.87	884
3/29/25	155.1	10.6	86.2	126	28.3	0.01	0.50	908	151.5	10.6	81.8	126.6	38.4	0.56	1.27	896	154.3	10.5	35.9	125.7	26.1	0.32	1.31	857
3/30/25	157.1	11.1	78.4	127.4	24.8	0.05	0.25	825	151	11.1	75.3	126.3	25.6	0.56	1.34	872	154	10.6	30	125.1	24.1	0.34	1.62	855
3/31/25	157	10.4	107.9	126.3	28.9	0.01	0.68	910	151.3	10.2	105.1	125.3	29.4	0.57	0.88	916	154.3	10.4	46	129.5	26.9	0.46	1.73	871
Average	155	10.3	76.4	128.0	28.2	0.10	0.84	929	150.7	10.8	87.0	131.6	28.1	0.57	0.97	915.1	153.9	10.3	47.7	134.3	24.6	0.25	0.76	879.7
Min	150	9.2	44.3	124.9	16.0	0.00	0.16	825	145.8	10.1	50.8	125.3	19.3	0.30	0.35	872.0	151.4	9.6	25.6	125.1	13.7	0.11	0.42	855.0
Max	157	13.0	137.5	134.3	38.6	2.23	2.38	972	153.3	12.1	159.0	140.2	38.4	1.53	2.34	949.0	155.0	11.1	98.9	151.0	32.5	0.50	1.73	904.0
St Dev	1.4	0.77	20.43	2.21	6.06	0.42	0.64	28.3	1.81	0.49	25.25	4.22	4.46	0.27	0.57	17.71	0.77	0.30	19.45	6.14	3.91	0.09	0.32	10.83

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.