

Monthly Operating Reports

February 2025

The following February 2025 operating report was sent to the Ministry of Environment and Parks on April 11, 2025

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

February 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	44.3	40.3	35.7
SO ₂	200	24 hr	107.8	104.2	99.8
NO _x	190	24 hr	137.6	138.3	139.1
THC	10	24 hr	0.14	0.55	0.38
			Monthly Average (mg/dscm)		
			Unit 1	Unit 2	Unit 3
Opacity (%)			1.40	0.62	0.78
CO			31.1	29.6	26.3
THC			0.03	0.31	0.24
SO ₂			74.1	56.1	38.3
NO _x			129.4	127.8	131.6

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, 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
11-Feb 15:00	30 min	114.7	Started gas burners, adjusted airflow, modified feed rate.
11-Feb 21:30	30 min	184.0	Lost overfire air control. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
12-Feb 09:30	30 min	105.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
12-Feb 20:00	30 min	134.3	Poor refuse quality. Started gas burners, adjusted airflow, modified feed rate.
16-Feb 23:30	30 min	121.5	Volatile fuel. Adjusted airflow.
17-Feb 15:30	30 min	265.7	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.
18-Feb 12:30	30 min	179.9	Volatile fuel. Adjusted airflow, modified feed rate.
20-Feb 20:00	30 min	157.0	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.
22-Feb 11:30	30 min	145	Adjusted airflow, modified feed rate, checked instrumentation.

24-Feb 06:00	30 min	104.9	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.
25-Feb 16:30	30 min	117.8	Started gas burners, adjusted airflow, modified feed rate.
26-Feb 17:30	30 min	117.0	Feed chute 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
8-Feb 15:30	30 min	100.6	Volatile fuel. Adjusted airflow.
14-Feb 08:30	30 min	103.8	Started gas burners, adjusted airflow, modified feed rate.
20-Feb 09:30	30 min	161.8	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.
26-Feb 08:30	60 min	591.5	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
6-Feb 20:30	30 min	128.0	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
7-Feb 09:00	30 min	137.1	Started gas burners, adjusted airflow, modified feed rate.
12-Feb 10:30	30 min	143.7	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
19-Feb 07:30	30 min	260.0	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.
20-Feb 05:30	30 min	142.0	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
24-Feb 22:00	30 min	102.7	Poor refuse quality. Started gas burners, adjusted airflow, modified feed rate.
26-Feb 22:00	60 min	290.6	Poor refuse quality. Started gas burners, adjusted airflow, modified feed rate.
27-Feb 13:00	30 min	103.3	Feed chute hang up. Started gas burners, adjusted airflow, modified feed rate.

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	94	97	97
CO	90	Hour	94	97	97
SO ₂	90	Hour	94	97	97
NOx	90	Hour	94	97	97
THC	90	Hour	94	97	96
Stack Flow	90	Hour	100	100	100

4. Shutdown Report

Unit 1

Duration in Hours	Reason	Date
1.50	Air pollution control inspection	February 1
35.70	Air pollution control maintenance	February 3-4
22.50	Air pollution control maintenance	February 7
82.40	Boiler tube leak repair	February 7-10
1.20	Ash discharger plugged	February 22
7.00	Air pollution control maintenance	February 26
2.20	Ash discharger plugged	February 27
1.30	Mechanical repair	February 27

Unit 2

Duration in Hours	Reason	Date
1.80	Air pollution control inspection	February 3
0.90	Air pollution control inspection	February 8
13.20	Ash discharger plugged	February 20
27.60	Boiler cleaning	February 22-24

Unit 3

Duration in Hours	Reason	Date
1.50	Air pollution control inspection	February 3
0.25	Ash discharger plugged	February 22

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	17,984		
Waste Processed	tonnes/day	204	217	23,729
Maximum Waste Processed	tonnes/day	267	260	266
		Units 1, 2, and 3		
Natural Gas Consumed	m ³ /day	6,907		
	m ³ /month	193,392		
Fly ash disposed	tonnes	489		
Bottom ash disposed	tonnes	2,295		

7. Complaints and Responses

Date/Time	Complaint	Action Taken

ATTACHMENT 2

February 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/m ³)	(mg/m ³)	(mg/m ³)	(mg/m ³)	(%)	Temp	Temp	(%)	(mg/m ³)	(mg/m ³)	(mg/m ³)	(mg/m ³)	(%)	Temp	Temp	(%)	(mg/m ³)	(mg/m ³)	(mg/m ³)	(mg/m ³)	(%)	Temp
2/1/25	156	10.4	66.7	133.7	34.2	0.00	1.34	919	150.6	10.9	61.8	128.3	36	0.18	0.65	916	154.9	10.1	54	131.5	24	0.20	0.72	891
2/2/25	156	10.1	107.8	131	26.7	0.00	1.46	926	151	10.7	88.2	127.3	34.7	0.23	0.72	910	154.3	9.7	99.8	130.5	21.4	0.11	0.80	902
2/3/25	154.5						1.60	927	148.7	11	67.8	128.4	37.1	0.18	0.69	934	153.7	10.3	58.1	131.6	23.9	0.21	0.83	883
2/4/25	150						1.54	924	147.2	11.3	92.2	127	34.8	0.22	0.64	935	152.2	10.1	59.2	129.9	20.7	0.30	0.82	899
2/5/25	152.7	10.2	55.9	125	30.9	0.01	1.65	922	147.8	11.3	49.4	126.4	33.8	0.23	0.64	926	152.4	10.7	34.3	129.5	25.6	0.33	0.82	877
2/6/25	153.8	10.1	47.7	127.7	33.3	0.01	1.56	916	148.2	11.2	42.2	126.2	35.9	0.24	0.63	914	154	10.2	33.1	131	29.5	0.38	0.83	898
2/7/25									147.1	11.1	43.8	124.1	30.9	0.12	0.64	919	154	10.2	39.7	129.9	35.1	0.25	0.82	897
2/8/25									151.9	10.9	52.7	128.3	30	0.22	0.63	953	156	10	59.7	132.2	30.6	0.30	0.80	907
2/9/25									154	10.9	59.2	126.4	27.3	0.20	0.64	961	158	9.8	70.7	131.3	24.9	0.27	0.82	911
2/10/25									152.7	11	43.2	125.9	26.5	0.14	0.65	958	156.7	10.4	34.6	129.8	22.9	0.30	0.83	890
2/11/25	156.8	10.9	100.8	133.1	44.3	0.02	1.44	906	151.1	11.5	45.5	127.4	32.2	0.15	0.69	954	154.3	10.3	41.2	128.5	28.1	0.25	0.89	880
2/12/25	156	10.8	81.4	134.9	31	0.03	1.50	911	151	11.3	36	126.6	28.4	0.21	0.71	925	155.5	10.4	23.6	131	33.1	0.31	0.87	877
2/13/25	156	10.6	88	137.6	19.9	0.01	1.46	927	151	11.1	49.9	126.7	28.8	0.33	0.69	921	154	10.1	34.1	135.1	28.5	0.35	0.83	896
2/14/25	154.1	10.4	83.1	128.4	29	0.00	1.38	974	151.4	10.4	39.8	127.1	26.9	0.33	0.69	947	154.1	10.5	33.1	131.1	26.5	0.19	0.80	897
2/15/25	148.8	11.1	84.1	129.9	28.2	0.00	1.30	958	150.9	10.5	41.8	128.4	22.7	0.37	0.61	944	155.5	10.2	34.7	130.1	24.8	0.23	0.78	902
2/16/25	153.1	11.4	70.6	129.5	27.7	0.11	1.37	958	154	10.6	37.5	127	23.7	0.39	0.61	933	158.1	10	27.3	132.7	28.9	0.15	0.77	895
2/17/25	152.9	11.6	68.2	125.7	30.5	0.05	1.30	937	152.7	11	38.3	122.8	25.7	0.43	0.57	921	156.3	10.3	21.2	129.3	24.6	0.32	0.72	873
2/18/25	152.8	11.3	74.5	128.6	30.4	0.02	1.28	940	153	11.1	52.4	126.6	20	0.46	0.58	919	156.8	10	31.2	131.4	24.2	0.13	0.72	909
2/19/25	156.7	11.6	64.6	135.1	28	0.01	1.27	912	151.1	11.2	38.5	127.8	24.1	0.46	0.58	931	156.9	9.8	35.3	139.1	35.7	0.22	0.74	893
2/20/25	158.9	13.1					1.30	926	149.4	11.6	37.2	126.3	28.8	0.55	0.55	925	157.1	10.1	31.2	136.4	29.2	0.08	0.74	893
2/21/25	159.3	11.3	71.3	130.4	32.5	0.14	1.24	924	149.8	11.6	37.6	126.4	29	0.52	0.53	912	156.4	10.2	25.9	133.4	19.7	0.21	0.71	889
2/22/25	159.4	10.4	66.3	128.8	37.7	0.03	1.21	925									156.6	10.6	30.9	129.7	28.1	0.24	0.73	886
2/23/25	159.5	10.2	72.6	127.4	32.9	0.00	1.21	936									156.6	10.5	30.3	130.4	21.7	0.20	0.71	880
2/24/25	159.4	10.8					1.22	914	154	11	61.4	133.8	24.7	0.40	0.51	887	155.1	10.6	26	130.6	26.4	0.37	0.72	892
2/25/25	159.7	10.6	100.2	128.9	33	0.04	1.25	903	152.5	11.1	104.2	138.3	34.2	0.36	0.57	905	154.7	10.6	27.2	131.7	26.1	0.18	0.79	880
2/26/25	156.8	10.1	60	122.7	38.8	0.07	1.34	935	149.6	10.6	74.9	133.4	40.3	0.49	0.52	920	155	10.4	21.9	133.5	29.8	0.34	0.76	886
2/27/25	155	9.9	53	122.9	29	0.00	1.56	948	151.7	10.2	75.1	127.8	25.2	0.41	0.58	947	154.8	10.1	22.9	130.4	21.2	0.15	0.77	903
2/28/25	155.2	9.5	65.4	125.9	24.6	0.00	1.79	951	150.8	10	88	129.2	28.1	0.31	0.53	924	155.3	10.1	31.7	131.9	20.5	0.13	0.75	897
Average	156	10.7	74.1	129.4	31.1	0.03	1.40	930	150.9	11.0	56.1	127.8	29.6	0.31	0.62	928.5	155.3	10.2	38.3	131.6	26.3	0.24	0.78	892.3
Min	149	9.5	47.7	122.7	19.9	0.00	1.21	903	147.1	10.0	36.0	122.8	20.0	0.12	0.51	887.0	152.2	9.7	21.2	128.5	19.7	0.08	0.71	873.0
Max	160	13.1	107.8	137.6	44.3	0.14	1.79	974	154.0	11.6	104.2	138.3	40.3	0.55	0.72	961.0	158.1	10.7	99.8	139.1	35.7	0.38	0.89	911.0
St Dev	3.0	0.78	16.17	4.02	5.26	0.04	0.16	17.8	1.99	0.40	19.86	3.10	5.07	0.13	0.06	17.75	1.51	0.26	17.56	2.28	4.28	0.08	0.05	10.17

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.