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

June 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	38.1	31.2	40.8
SO_2	200	24 hr	149.6	114.0	85.3
NOx	190	24 hr	144.2	135.5	134.6
THC	10	24 hr	0.19	0.80	0.87
			Monthly Average (mg/dscm)		
			Unit 1	Unit 2	Unit 3
Opacity (%)			0.4	0.84	0.76
CO			25.4	24.7	29.8
THC			0.04	0.51	0.24
SO_2			91.2	97.6	52.4
NOx			133.4	130.6	130.1

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. SO_2 – March 3, 2025

* Metro Vancouver has confirmed with Covanta that the equipment is calibrated on a daily basis, and is within range.

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
3-Jun 15:00	30 min	139.3	Started gas burners, adjusted airflow, modified feed rate.
4-Jun 13:00	30 min	213.7	ID Fan tripped. Started gas burners, adjusted airflow, modified feed rate.
16-Jun 06:30	30 min	116.3	Started gas burners, adjusted airflow, modified feed rate.
20-Jun 16:00	30 min	114.8	Adjusted airflow.
24-Jun 14:00	30 min	110.9	Started gas burners, adjusted airflow, modified feed rate.
25-Jun 18:00	30 min	101.9	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
25-Jun 05:00	30 min	112.9	No action required.

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-Jun 16:30	30 min	229.7	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
3-Jun 17:00	30 min	129.6	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
4-Jun 06:30	30 min	230.9	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
8-Jun 09:00	30 min	163.0	Started gas burners, adjusted airflow, modified feed rate.
11-Jun 05:30	30 min	185.6	Started gas burners, adjusted airflow, modified feed rate.
12-Jun 19:30	30 min	182.6	Adjusted airflow, modified feed rate, checked instrumentation.
28-Jun 08:00	30 min	101.2	Feeder hang-up. Started gas burners, adjusted airflow, modified feed rate.
30-Jun 10:30	30 min	112.6	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. 3

Date / Time	Duration	Exceedance (mg/dscm)	Action Taken
1-Jun 15:00	30 min	114.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
3-Jun 17:00	30 min	156.9	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
4-Jun 09:00	30 min	176.1	Adjusted airflow, modified feed rate, checked instrumentation.
7-Jun 14:30	30 min	157.0	Started gas burners, adjusted airflow, modified feed rate.
10-Jun 10:30	60 min	109.6	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
14-Jun 14:30	30 min	240.0	Started gas burners, adjusted airflow, modified feed rate.
15-Jun 18:00	30 min	122.9	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
17-Jun 15:30	30 min	242.0	Started gas burners, adjusted airflow, modified feed rate.
18-Jun 15:00	30 min	113.2	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
18-Jun 14:00	30 min	116.5	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
20-Jun 18:00	30 min	228.5	Started gas burners, adjusted airflow, modified feed rate.
20-Jun 17:00	30 min	106.9	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
23-Jun 15:00	30 min	106.9	Started gas burners, adjusted airflow, modified feed rate.
23-Jun 22:30	60 min	134.5	Feed chute hang up. Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
25-Jun 20:00	30 min	102.5	Started gas burners, adjusted airflow, modified feed rate.
26-Jun 00:00	30 min	107.8	Started gas burners, adjusted airflow, modified feed rate.
29-Jun 13:30	30 min	218.0	Started gas burners, adjusted airflow.
29-Jun 08:00	30 min	109.5	Started gas burners, adjusted airflow, modified feed rate,.
30-Jun 12:30	30 min	105.9	No action required.

Compliance Parameter: Opacity
Response Limit: 5% 1/2 hour average
Unit No. 1

Date / Time	Duration	Exceedance (mg/dscm)	Action Taken
29-Jun 06:00	30 min	7.9	Inspected/replaced fabric filter bags

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	96	94	97
CO	90	Hour	96	94	97
SO_2	90	Hour	96	94	97
NOx	90	Hour	96	94	97
THC	90	Hour	96	94	97
Stack Flow	90	Hour	100	100	100

4. Shutdown Report

Unit 1

Duration in Hours/Min	Reason	Date
4.36	Refuse crane outage	June 2
1.22	Furnace pressure trip	June 3
1.25	Volatile fuel	June 4
11.26	Capital project work - fire suppression	June 6-7
10.07	Capital project work - fire suppression	June 7-8
12.24	BC Hydro power interruption	June 8-9
2.07	Refuse crane outage	June 13
2.27	Fabric filter inspection	June 15
19.26	Fabric filter inspection/bag replacement	June 16-17
0.41	Fabric filter inspection	June 29

Unit 2

Duration in Hours/Min	Reason	Date
5.57	Refuse crane outage	June 2
21.48	Boiler wash	June 4-5
1.59	MI inspection	June 6
10.46	Capital project work - fire suppression	June 6-7
10.58	Capital project work - fire suppression	June 7-8
8.41	BC Hydro power interruption	June 8
2.18	Ash discharger plug	June 10
0.12	Volatile fuel	June 12
317.57	Boiler tube leak inspection/repair	June 14-27
1.51	Fabric filter inspection	June 28
1.50	Fabric filter bag replacement	June 30

Unit 3

Duration in Hours/Min	Reason	Date
5.48	Refuse crane outage	June 2
10.43	Capital project work - fire suppression	June 6-7
10.58	Capital project work - fire suppression	June 7-8
7.13	BC Hydro power interruption	June 8
2.27	Ash discharger plug	June 13
0.30	No report available	June 23-24
1.46	Tube leak	June 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	**15,716**		
Waste Processed	tonnes/day	**219**	**159**	**234**
Maximum Waste Processed	tonnes/day	**262**	**257**	**267**
		Units 1, 2, and 3		
Natural Gas Consumed	m^3/day	**10,888**		
	m^3/month	**326,639**		
Fly ash disposed	tonnes	**483**		
Bottom ash disposed	tonnes	**2,683**		

7. Complaints and Responses

Date/Time	Complaint	Action Taken

ATTACHMENT 2

June 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
6/1/25	152.7	10.6	123.9	132.3	27.9	0.01	0.19	921	152.2	10.7	100.1	126.8	23.4	0.55	2.35	907	154.9	10.1	77.5	130.7	28.4	0.26	0.41	876
6/2/25	152	10.7	95.4	135.5	27.8	0.01	0.18	949	151.4	11.3	78	126	31.2	0.80	1.10	878	154.2	9.9	60.2	128.5	23.5	0.11	0.39	894
6/3/25	151.2	10.3	126.8	137.2	22.7	0.01	0.24	930	145.6	12.1	71	132.8	22.2	0.74	0.53	879	154.8	9.9	57.7	134.6	40.8	0.24	0.46	880
6/4/25	153.2	10.8	74.3	138.4	38.1	0.19	0.20	950									154.7	9.8	34.8	130.6	31.1	0.24	0.53	857
6/5/25	154.1	10.3	120.3	141.7	18.2	0.00	0.16	960									154.8	9.9	69.3	130.6	28.9	0.11	0.70	886
6/6/25																								
6/7/25																								
6/8/25																								
6/9/25	154.9	10.1	100.1	136.7	21.8	0.00	0.15	968	154.9	9.7	110.7	131.2	21.8	0.43	0.58	909	156.5	9.9	59.7	131	23.9	0.28	1.47	876
6/10/25	151.9	10.3	137	131	32.6	0.03	0.17	945	152	9.7	114	130.5	21.5	0.46	0.64	911	155.5	9.9	85.3	130.6	35.1	0.35	1.82	872
6/11/25	153	10.1	92.8	133.3	29	0.03	0.15	936	151	9.4	110	129.4	24	0.48	0.63	915	154.7	9.5	65.9	128.2	23.8	0.13	2.21	873
6/12/25	152	10.5	75.5	131.4	26.5	0.03	0.18	978	151.5	9.8	91.2	134.9	27.1	0.43	0.61	886	154.1	9.8	52.7	127.8	27.1	0.17	2.50	871
6/13/25	154.9	10.7	89	144.2	24.3	0.02	0.29	918	152	9.4	107.1	130.4	23.8	0.42	0.66	913	155.2	9.8	66.7	130.3	29.7	0.14	1.44	883
6/14/25	155.2	10.1	149.6	138.1	21.3	0.14	0.83	953									155.2	9.5	66.8	131.6	32.2	0.26	0.40	862
6/15/25	153.2	10.3	95.8	133.4	16.4	0.00	2.01	962									154.8	10	64.7	132.1	24.7	0.10	0.42	877
6/16/25																	154.9	9.5	39.4	132.3	25.3	0.13	0.41	886
6/17/25	156.2	10.5	113	131	26.8	0.00	0.33	961									155	9.5	67.1	130.4	26.9	0.28	0.45	892
6/18/25	156.3	10.1	64.4	133.8	28.6	0.04	0.32	970									154.8	9.4	31.4	130.2	34.4	0.18	0.42	869
6/19/25	156.5	10.7	83.4	129	33.9	0.00	0.30	943									155.3	9.6	52.9	129.5	25.2	0.16	0.41	898
6/20/25	156.3	10.1	73.5	133	28.7	0.09	0.28	949									154.6	9.6	44.4	131.9	38.4	0.19	0.44	883
6/21/25	156.5	10.0	113.9	132.3	18.3	0.00	0.30	937									154.6	9.6	66.7	130.8	23.9	0.15	0.46	882
6/22/25	156.8	10.0	104.5	132.2	18.9	0.00	0.30	905									155.2	9.7	64.4	131	25.2	0.23	0.42	886
6/23/25	156.7	10.3	61.2	129.8	28.7	0.10	0.16	938									155.1	9.5	33	131.1	30.1	0.13	0.41	877
6/24/25	156.8	10.1	71.1	132.1	28	0.00	0.00	954									156.5	9.7	42.8	131.8	29.9	0.17	0.41	875
6/25/25	156.7	10.5	67.7	132.1	30.9	0.03	0.00	904									156.6	9.5	34.5	129.6	32.5	0.22	0.81	877
6/26/25	156.4	10.5	54.3	130	23.8	0.07	0.82	917									157	9.5	25.5	127.5	39	0.17	0.72	865
6/27/25	156.4	10.7	54	130.5	26.3	0.01	1.06	915									154.7	9.3	34	128.6	34.9	0.15	0.62	866
6/28/25	155.9	10.5	74.2	128.5	14.8	0.04	1.09	890	150.6	10.1	87	129.4	27.1	0.46	0.70	886	155.1	9.4	37.5	129.4	26.2	0.55	0.61	852
6/29/25	151.9	10.9	78.9	129.8	21.4	0.05	0.87	897	148.7	10	100.9	135.5	25.9	0.43	0.70	883	155	9.2	48.8	125.6	35.2	0.87	0.62	858
6/30/25	156.5	10.6	77.6	129.9	24.7	0.04	0.26	886	150.1	10.2	103.4	130	24.2	0.43	0.69	883	155.3	10	30.8	127	28.4	0.49	0.60	864
Average	154.8	10.4	91.2	133.4	25.4	0.04	0.42	936	150.9	10.2	97.6	130.6	24.7	0.51	0.84	895	155.2	9.7	52.4	130.1	29.8	0.24	0.76	875
Min	151.2	10.0	54.0	128.5	14.8	0.00	0.00	886	145.6	9.4	71.0	126.0	21.5	0.42	0.53	878	154.1	9.2	25.5	125.6	23.5	0.10	0.39	852
Max	156.8	10.9	149.6	144.2	38.1	0.19	2.01	978	154.9	12.1	114.0	135.5	31.2	0.80	2.35	915	157.0	10.1	85.3	134.6	40.8	0.87	2.50	898
St Dev	2.0	0.27	25.95	3.93	5.58	0.05	0.45	25.8	2.33	0.84	14.07	2.94	2.89	0.13	0.52	15.21	0.71	0.24	16.39	1.89	5.06	0.17	0.59	11.49

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.