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

July 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	30.1	37.2	42.2
SO_2	200	24 hr	91.7	101.0	111.2
NOx	190	24 hr	139.1	151.3	150.3
THC	10	24 hr	0.17	0.63	0.57
			Monthly Average (mg/dscm)		
			Unit 1	Unit 2	Unit 3
Opacity (%)			0.44	0.97	0.72
CO			23.3	29.8	31.2
THC			0.03	0.48	0.31
SO_2			60.9	71.3	77.3
NOx			131.7	132.0	137.5

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, 2028

b. SO_2 – 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-Jul 10:00	30 min	119.8	No action required.
8-Jul 12:30	30 min	153.9	Started gas burners, adjusted airflow, modified feed rate.
14-Jul 02:00	30 min	108.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
23-Jul 18:30	30 min	105.7	Volatile fuel. Adjusted airflow, modified feed rate.
24-Jul 11:00	30 min	107.2	Volatile fuel. 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
9-Jul 04:30	30 min	113.0	Feeder hang-up. Started gas burners, adjusted airflow, modified feed rate.
11-Jul 06:30	30 min	101.5	Volatile fuel. Started gas burners, adjusted airflow.
14-Jul 14:30	30 min	186.8	Volatile fuel. Adjusted airflow, modified feed rate.
15-Jul 08:30	30 min	106.5	Volatile fuel. Adjusted airflow, modified feed rate.
15-Jul 15:30	30 min	104.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
16-Jul 06:30	30 min	131.6	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
17-Jul 18:30	30 min	184.2	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
18-Jul 07:00	30 min	139.6	Adjusted airflow, modified feed rate.
21-Jul 08:30	30 min	105.3	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
21-Jul 15:00	30 min	134.6	Started gas burners, adjusted airflow, modified feed rate.
21-Jul 16:30	30 min	108.4	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
22-Jul 14:00	30 min	139.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
23-Jul 14:30	30 min	192.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
24-Jul 16:30	30 min	132.7	Started gas burners, adjusted airflow, modified feed rate
25-Jul 10:30	30 min	102.8	Feeder hang-up. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
25-Jul 13:30	30 min	131.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
25-Jul 18:30	30 min	109.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
27-Jul 03:30	30 min	136.3	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
28-Jul 05:00	30 min	122.5	Started gas burners, adjusted airflow, modified feed rate.
31-Jul 14:00	30 min	166.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
31-Jul 23:00	30 min	111.2	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
6-Jul 11:30	30 min	151.9	Started gas burners, adjusted airflow, modified feed rate.
6-Jul 12:30	30 min	111.8	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
7-Jul 16:00	30 min	101.6	Poor refuse quality. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
12-Jul 23:00	30 min	241.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
14-Jul 02:30	30 min	114.4	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
14-Jul 04:30	30 min	102.0	Volatile fuel. Started gas burners, adjusted airflow.

16-Jul 03:30	30 min	153.6	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
16-Jul 17:00	30 min	114.5	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
17-Jul 17:30	30 min	138.1	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
23-Jul 11:30	30 min	373.3	Started gas burners, adjusted airflow, modified feed rate.
24-Jul 11:00	30 min	103.2	Poor refuse quality. Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
24-Jul 07:00	30 min	175.2	Started gas burners, adjusted airflow, modified feed rate, checked instrumentation.
24-Jul 16:30	30 min	113.2	Started gas burners, adjusted airflow, modified feed rate.
27-Jul 00:00	30 min	136.8	Started gas burners, adjusted airflow, modified feed rate.
28-Jul 11:30	30 min	209.8	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
29-Jul 09:00	30 min	158.7	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
30-Jul 16:30	30 min	116.8	Started gas burners, adjusted airflow, modified feed rate.
31-Jul 17:30	30 min	251.9	Volatile fuel. Started gas burners, adjusted airflow, modified feed rate.
31-Jul 20:00	30 min	148.1	No action required.

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

Date / Time	Duration	Exceedance (mg/dscm)	Action Taken
3-Jul 11:30	30 min	5.4	Inspected fabric filter compartments.

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

Analyser	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	99	97
CO	90	Hour	98	99	97
SO_2	90	Hour	98	99	97
NOx	90	Hour	98	99	97
THC	90	Hour	98	99	97
Stack Flow	90	Hour	100	99	100

4. Shutdown Report

Unit 1

Duration in Hours	Reason	Date
15.36	Fabric filter baghouse inspection/replacement	July 2-3
3.75	Fabric filter baghouse inspection/replacement	July 3
1.28	Refuse crane malfunction	July 7
0.28	Volatile fuel	July 8
0.48	BC Hydro power interruption	July 9
0.65	BC Hydro power interruption	July 9
7.77	Boiler water wash	July 10
0.53	Volatile fuel	July 12
0.63	BC Hydro power interruption	July 16
45.04	Grate bar replacement	July 19-21
1.18	Grate bar replacement	July 21

Unit 2

Duration in Hours	Reason	Date
4.90	Fabric filter baghouse inspection/replacement	July 3
5.17	Fabric filter baghouse inspection/replacement	July 4
1.35	Refuse crane malfunction	July 7
1.47	BC Hydro power interruption	July 9
0.73	BC Hydro power interruption	July 9
0.60	Volatile fuel	July 12
0.50	BC Hydro power interruption	July 16
0.53	Volatile fuel	July 16
0.88	Fabric filter baghouse inspection/replacement	July 19
0.98	BC Hydro power interruption	July 21
0.45	Induced draft fan trip	July 28
49.14	Economizer repair	July 29-31
0.17	Volatile fuel	July 31

Unit 3

Duration in Hours	Reason	Date
130.92	Tube leak	July 1-6
1.35	Refuse crane malfunction	July 7
0.47	BC Hydro power interruption	July 9
0.75	BC Hydro power interruption	July 9
0.40	BC Hydro power interruption	July 12
0.47	BC Hydro power interruption	July 16
0.83	BC Hydro power interruption	July 21
2.67	Grate bar replacement	July 28
2.47	Volatile fuel	July 29

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	**18,617**		
Waste Processed	tonnes/day	**221**	**226**	**215**
Maximum Waste Processed	tonnes/day	**238**	**262**	**263**
Natural Gas Consumed	m^3/day	**247**		
	m^3/month	**7,655**		
Fly ash disposed	tonnes	**722**		
Bottom ash disposed	tonnes	**3,212**		

7. Complaints and Responses

Date/Time	Complaint	Action Taken

ATTACHMENT 2

July 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
7/1/25	155.9	10.3	78.9	129.7	25.3	0.09	0.30	867	152.8	10.1	90.9	131.6	27.8	0.61	0.69	895								
7/2/25									152.3	10	78.2	129.1	29.8	0.48	0.75	889								
7/3/25	155.3	10.4	70.5	131.2	26.8	0.03	0.98	922	152.3	10	97	132.3	25.8	0.52	1.24	893								
7/4/25	156.2	10.3	91.7	128	22.5	0.01	0.36	936	150.6	10	101	127.9	24.3	0.40	1.39	920								
7/5/25	156.3	10.2	57.7	129.5	20.2	0.00	0.41	959	153.7	9.4	85.7	128.6	24.8	0.41	1.04	932								
7/6/25	156.1	9.9	71.9	125.6	22.1	0.00	0.40	947	155.6	9.6	74.2	127.7	27.3	0.44	1.03	914								
7/7/25	155.9	10.4	70.3	129.7	25.4	0.01	0.32	908	155.6	10.2	82.1	128.8	33.5	0.47	1.02	890	142	9.4	85.4	134.5	40.1	0.25	0.54	863
7/8/25	155.9	10.6	61.2	130.3	30.1	0.07	0.33	946	156.5	10.2	89.6	135.7	30.7	0.45	0.96	897	142.2	9.4	92.6	140	33.4	0.27	0.58	864
7/9/25	156.9	10.3	55.3	128.1	23.1	0.00	0.38	917	154.2	10.4	70.4	133.5	30.6	0.46	0.91	893	151.3	9.9	83	135.6	28.9	0.13	0.61	869
7/10/25									151.6	10.1	77.2	139.2	31.4	0.51	0.93	911	154.9	9.9	88.5	136	29.8	0.20	0.63	881
7/11/25	159.2	10.1	58	130	24.5	0.02	0.39	947	153.5	10	76.5	138.9	25.5	0.45	0.96	917	155.5	9.9	85.2	134.3	24.9	0.21	0.60	888
7/12/25	159.8	10.1	56.4	133.6	25.2	0.01	0.40	881	153.2	10.1	81.7	130.1	35.4	0.50	0.96	908	155.4	9.4	111.2	132.1	39	0.37	0.61	890
7/13/25	160.2	10.3	41.1	130.6	28.4	0.03	0.39	926	153.7	10.3	69.4	144.4	26.5	0.53	1.00	898	154.1	9.8	85.9	130.9	28.7	0.22	0.62	879
7/14/25	157.9	9.7	46.3	132.2	18.5	0.07	0.37	963	151.5	10	61	137.4	29	0.53	0.89	918	153.8	10.1	70.8	130	34.9	0.33	0.57	895
7/15/25	158.2	9.9	57.5	137.2	21.7	0.00	0.37	950	151.5	9.9	84.5	140.5	28.9	0.47	0.94	909	154.1	10.1	90.1	139.1	30.6	0.22	0.58	894
7/16/25	158.7	10	45.5	130.9	27.1	0.08	0.38	963	153.5	10	56.6	151.3	36.7	0.57	0.88	891	155.6	9.7	66.4	146.5	39.9	0.40	0.60	897
7/17/25	157.2	9.9	64.5	131.7	18.5	0.00	0.35	911	153.9	9.7	74.9	138.4	31.2	0.51	0.93	921	154.4	9.9	86.7	150.3	30.8	0.21	0.62	907
7/18/25	158.9	9.9	50.1	131.7	20.2	0.02	0.46	927	156.5	10.3	58	129.5	32.3	0.40	0.92	908	155.8	10	72.4	140.6	30.6	0.28	0.63	892
7/19/25									154.4	10.5	70.6	124.3	33.6	0.44	1.34	909	154.2	10.2	84	140.3	22.5	0.33	0.67	885
7/20/25									153.5	10.8	66.3	128.4	31.7	0.42	0.99	904	149.6	9.9	79	130.8	25.9	0.30	0.69	898
7/21/25									152	10	47.7	128.9	37.2	0.40	0.92	909	152.2	9.5	62.8	135.1	27.4	0.26	0.66	907
7/22/25	155.9	10.1	84.4	134.8	19.9	0.00	0.64	977	151.9	10	67.9	126.9	23.6	0.40	0.92	923	152.5	9.7	82.4	132.8	33.5	0.32	0.63	897
7/23/25	152.9	9.6	42.7	132.4	24	0.17	0.57	949	152.7	9.7	44	128.3	30	0.48	0.93	926	148.1	9.7	46	135.6	34	0.35	0.64	884
7/24/25	156	9.6	44.4	130.1	22.6	0.10	0.40	933	154.2	9.8	45.4	125.4	30.4	0.38	0.91	918	153.1	9.7	46	135.1	33.9	0.36	0.64	885
7/25/25	153.1	10	57.6	132.3	18.2	0.01	0.43	923	152.6	10.2	56	129	32.6	0.52	0.89	905	150.7	9.8	61.4	136.1	23.2	0.35	0.68	863
7/26/25	156.6	9.7	73	129.8	24.8	0.01	0.53	902	153.1	9.9	62.3	125.9	30.4	0.43	0.94	884	154.2	9	81	134.3	22.1	0.31	0.72	855
7/27/25	155.8	9.9	72.5	133.1	19.4	0.00	0.50	908	151.9	10.1	62.9	125.5	25.8	0.52	0.94	892	154.2	9.3	83.9	142.5	25.1	0.32	0.72	847
7/28/25	156.5	10.5	63.6	139.1	24.5	0.01	0.46	927	152.5	10.4	65.4	127.8	28.6	0.63	0.90	893	153.9	9.3	78.3	141.1	33.7	0.35	0.83	874
7/29/25																	155.5	9.7	75.2	142.2	32.3	0.40	1.06	882
7/30/25	153.7	10.7	49.5	136.9	23.7	0.01	0.46	888									154.7	9.8	62.8	141.3	32.6	0.39	1.30	884
7/31/25	153.1	10.3	59	133.3	25.7	0.06	0.47	962									154.8	9.7	71.2	140.2	42.2	0.57	1.53	890
Average	156	10.1	60.9	131.7	23.3	0.03	0.44	930	153.3	10.1	71.3	132.0	29.8	0.48	0.97	906.0	152.7	9.7	77.3	137.5	31.2	0.31	0.72	882.8
Min	153	9.6	41.1	125.6	18.2	0.00	0.30	867	150.6	9.4	44.0	124.3	23.6	0.38	0.69	884.0	142.0	9.0	46.0	130.0	22.1	0.13	0.54	847.0
Max	160	10.7	91.7	139.1	30.1	0.17	0.98	977	156.5	10.8	101.0	151.3	37.2	0.63	1.39	932.0	155.8	10.2	111.2	150.3	42.2	0.57	1.53	907.0
St Dev	2.0	0.30	13.25	3.03	3.20	0.04	0.14	27.7	1.50	0.29	14.82	6.47	3.62	0.06	0.15	12.98	3.72	0.29	14.41	5.01	5.56	0.09	0.24	15.53

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.