

Stericycle®

**2023 Q4
INCINERATION
REPORT**



Stericycle, ULC

95 Deerhurst Drive

Brampton, ON

L6T 5R7

Tel.: (905) 789-6008

Fax: (905) 789-5549

January 30, 2024

District Manager
Ministry of the Environment, Conservation and Parks
Halton-Peel District Office
300-4145 North Service Road
Burlington, ON
L7L 6A3

Dear District Manager,

**Re: Stericycle, ULC.
Certificate of Approval for a Waste Disposal Site No. A680324**

As required by Condition 52 of the above-mentioned Certificate of Approval, please find attached the incinerator quarterly report for the fourth quarter of 2023.

During October 2023 there were 2 occurrences of the 4-hour CO alarm & 0 occurrences of the 12-hour CO alarm. In November 2023 there were 7 occurrences of the 4-hour CO alarm and 1 occurrence of the 12-hour CO alarm. In December 2023 there were 7 occurrences of the 4-hour CO alarm and 0 occurrences of the 12-hour CO alarm. Stericycle will continue to work with the incinerator operators to further reduce the number of CO alarms.

There were 0 occurrences of the 24-hour NOx alarm triggered in Q4 of 2023.

Throughout Q4 of 2023 the facility continued to have issues with the rotary atomizers. Newly built units are scheduled to arrive at the facility in Q2 of 2024. The facility will continue to operate on one rotary atomizer to ensure back-up units are in place until the new units arrive.

Details on the above noted alarms are available in the body of the attached report.

FOURTH QUARTER 2023 INCINERATOR QUARTERLY REPORT - SUPPLEMENTAL INFORMATION

- The Emergency Bypass stack was not used during Q4 2023.
- Throughout the quarter, minor issues with either the waste feed or the proper operation of certain pieces of equipment caused alarm conditions. In all cases, the problems were fixed, and normal operations resumed. Corrective actions included adjustments to the waste feed mix and rate and corrective maintenance on affected systems.
- Throughout the fourth quarter of 2023, the incinerator was run by trained Stericycle operators Raminderpal Singh, Said M. Said, Lamek Abraha, Nasif Ferdaus Ahad, Ndubuisi Fyeface, & Anuraj Singh.
- There were no complaints received regarding the operation of the incinerator during the fourth quarter of 2023.
- Stericycle Inc. operated the incinerator on the following days during the fourth quarter:

Start-up		Shutdown	
date	time	date	time
		10/4/2023	07:54
10/6/2023	08:28	10/9/2023	11:40
10/10/2023	18:24	10/12/2023	17:43
10/12/2023	22:03	10/13/2023	18:21
10/13/2023	22:34	10/14/2023	18:42
10/14/2023	23:58	10/15/2023	19:30
10/15/2023	23:45	10/16/2023	19:06
10/16/2023	23:22	10/17/2023	18:35
10/17/2023	22:51	10/18/2023	09:43
10/27/2023	19:50	10/30/2023	07:29
start-up		shutdown	
date	time	date	time
11/9/2023	08:59	11/12/2023	18:50
11/12/2023	18:57	11/16/2023	02:19
11/16/2023	16:17	11/17/2023	19:06
11/18/2023	01:31	11/18/2023	17:19
11/18/2023	21:48	11/19/2023	17:12
11/19/2023	21:20	11/20/2023	17:57
11/20/2023	22:10	11/21/2023	17:44
11/21/2023	21:57	11/22/2023	19:04
11/22/2023	23:20	11/23/2023	17:03
11/23/2023	21:31	11/24/2023	17:50
11/24/2023	22:01	11/25/2023	19:38
11/25/2023	23:55	11/26/2023	20:30
11/27/2023	01:38	11/28/2023	02:56
11/28/2023	09:56	11/29/2023	19:00
11/29/2023	22:11	11/30/2023	18:21
11/30/2023	22:35		

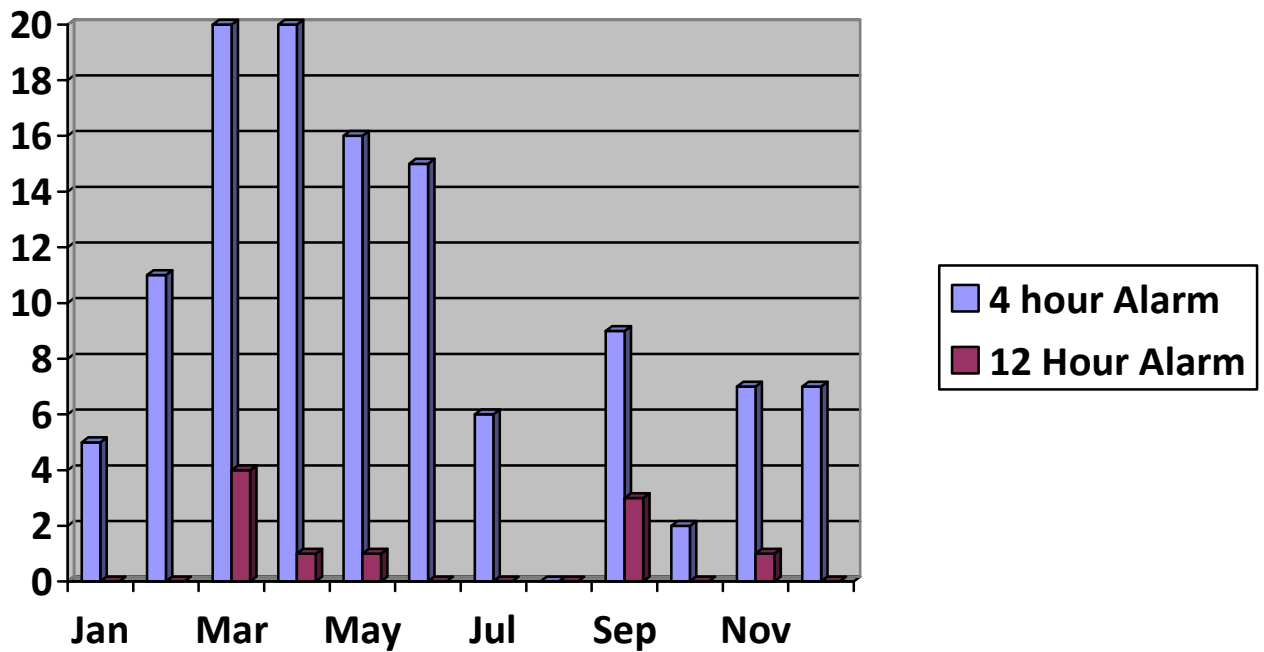
Startup		Shutdown	
Date	Time	Date	Time
		12/1/2023	01:58
12/1/2023	12:20	12/2/2023	07:25
12/2/2023	13:05	12/3/2023	16:16
12/3/2023	21:24	12/4/2023	16:57
12/4/2023	21:24	12/5/2023	18:47
12/5/2023	23:04	12/6/2023	07:57
12/6/2023	12:12	12/7/2023	18:35
12/7/2023	23:48	12/8/2023	02:24
12/8/2023	11:54	12/10/2023	18:48
12/11/2023	02:15	12/12/2023	18:14
12/12/2023	22:30	12/13/2023	17:59
12/13/2023	22:09	12/14/2023	19:04
12/14/2023	23:21	12/15/2023	17:36
12/15/2023	21:54	12/16/2023	16:14
12/16/2023	21:41	12/17/2023	17:55
12/17/2023	22:37	12/18/2023	19:46
12/18/2023	23:54	12/19/2023	18:07
12/19/2023	22:22	12/20/2023	14:01
12/20/2023	18:17	12/21/2023	11:35
12/21/2023	16:03	12/22/2023	17:02
12/22/2023	22:10	12/23/2023	00:18
12/24/2023	12:05	12/29/2023	18:59
12/29/2023	23:06	12/30/2023	18:14
12/30/2023	22:16	12/31/2023	17:49
12/31/2023	21:52		

During Q4 of 2023 routine maintenance was performed on the incinerator during the scheduled shutdowns along with the following:

- Repair of the I.D fan.
- Rebuilding of the rotary atomizers

CO Alarm Chart Q4 2023

Month	4 Hour CO average alarms	12 Hour CO average alarms
January	5	0
February	11	0
March	20	4
April	20	1
May	16	1
June	15	0
July	6	0
August	0	0
September	9	3
October	2	0
November	7	1
December	7	0



2022 CO alarms vs. 2023 CO alarms

	2022		2023	
Month	4 Hr. Alarm	12 Hr. Alarm	4 Hr. Alarm	12 Hr. Alarm
January	17	3	5	0
February	13	4	11	0
March	7	1	20	4
April	15	3	20	1
May	10	5	16	1
June	18	7	15	0
July	19	4	6	0
August	10	0	0	0
September	11	1	9	3
October	17	3	2	0
November	14	1	7	1
December	11	3	7	0

Stericycle warrants that it has exercised best efforts to adhere to all the applicable Terms & Conditions of its Waste Disposal Site Certificate of Approval including all inspection and reporting requirements through Q4 of 2023.

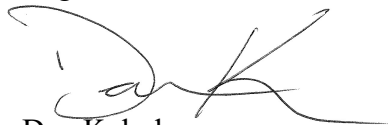
Stericycle is very committed to the full compliance with all conditions of its Provisional Certificate of Approval, throughout the year, whenever a situation of possible non-compliance was identified; immediate actions were taken to ensure full compliance. Stericycle has mechanisms in place to always ensure full compliance. Employees are aware of their responsibilities and are trained appropriately.

Stericycle believes that the current monitoring program is sufficient and enables both Stericycle and the MECP to have a good understanding of the Site operations and to assess its compliance with the Certificate of Approval and all the relevant regulations.

However, Stericycle is very committed to looking for ways to improve its operations through better procedures, training, inspections, and monitoring programs and will continue to do so.

I trust that this is the information required and that it meets with your approval. Should you have any questions or require additional information, please do not hesitate to contact me accordingly.

Regards,



Dan Kokol
Operational EHS Manager
Phone: 905-595-8532
Email: dkokol@stericycle.com



October 2023 Incineration Averaged Ranges

TheDate		OX6min	COmin	NOXmin	PrimTemp°C	SecTemp°C	SNCR	DemTemp°C	CarbTemp°C	DiffTemp°C	IDFanTemp°C	QuenchPH	CondPH	AtomPH	AtomA	AtomB	HEPADP	Op Mode
10/1/2023	Average	20.25	0.00	0.00	27.06	28.54	7.71	55.50	42.83	-12.67	24.78	11.57	8.24	6.77	0.00	0.00	0.00	Preheat
	Min	20.08	0.00	0.00	26.64	27.22	7.60	54.59	40.40	-14.25	23.33	11.50	8.20	6.72	0.00	0.00	0.00	
	Max	20.44	0.00	0.00	27.78	30.00	7.90	56.94	45.31	-10.96	27.00	11.65	8.30	6.80	0.02	0.00	0.00	
10/2/2023	Average	20.26	0.00	0.00	27.48	28.55	7.75	42.91	35.44	-7.46	24.84	11.90	8.15	6.75	0.00	0.00	0.00	Preheat
	Min	20.09	0.00	0.00	26.57	26.11	7.51	23.24	23.70	-16.41	21.67	11.60	8.10	6.70	0.00	0.00	0.00	
	Max	20.43	0.00	0.00	28.39	31.11	8.00	57.47	44.35	0.57	28.75	12.10	8.20	6.80	0.01	0.00	0.00	
10/3/2023	Average	20.24	0.00	0.00	28.67	30.99	8.05	55.34	44.51	-10.83	26.87	11.74	8.06	6.70	0.01	0.00	0.00	Preheat
	Min	20.04	0.00	0.00	27.76	28.87	7.87	52.73	41.01	-13.41	23.33	11.60	8.00	6.70	0.00	0.00	0.00	
	Max	20.42	0.00	0.00	30.00	33.37	8.40	57.45	49.01	-5.67	31.06	11.92	8.10	6.70	0.06	0.00	0.00	
10/4/2023	Average	20.25	0.00	0.00	29.49	30.91	8.19	55.73	63.82	8.09	28.72	11.96	8.01	6.70	0.01	0.00	0.00	Preheat/Shutdown/Off
	Min	20.07	0.00	0.00	28.35	28.71	8.00	42.72	49.05	-5.59	25.09	11.90	8.00	6.70	0.00	0.00	0.00	
	Max	20.42	0.00	0.00	30.42	32.66	8.40	58.11	73.70	30.99	35.46	12.00	8.07	6.70	0.06	0.00	0.00	
10/5/2023	Average	20.25	0.00	0.00	29.64	30.63	8.12	36.87	76.56	39.68	37.92	11.98	8.00	6.70	0.01	0.00	0.00	Off
	Min	20.07	0.00	0.00	29.03	28.33	8.00	34.04	73.76	31.15	34.43	11.90	8.00	6.70	0.00	0.00	0.00	
	Max	20.42	0.00	0.00	30.17	31.77	8.26	42.61	78.99	43.92	41.41	12.00	8.00	6.70	0.05	0.00	0.00	
10/6/2023	Average	20.26	0.00	0.00	138.68	463.12	7.91	34.03	81.19	47.15	35.03	11.96	7.98	6.70	0.00	0.00	0.00	Off/Preheat
	Min	20.09	0.00	0.00	28.18	24.44	7.80	27.53	75.25	40.56	33.33	11.90	7.91	6.70	0.00	0.00	0.00	
	Max	20.40	0.00	0.00	483.46	806.91	8.19	39.24	85.91	53.25	36.67	12.00	8.00	6.70	0.04	0.00	0.00	
10/7/2023	Average	20.25	0.00	0.00	59.32	135.41	7.58	30.29	82.70	52.41	35.27	11.95	8.01	6.70	0.00	0.00	0.00	Preheat
	Min	20.07	0.00	0.00	44.53	51.67	7.30	23.69	79.56	46.70	34.49	11.91	8.00	6.70	0.00	0.00	0.00	
	Max	20.44	0.00	0.00	82.75	717.29	7.86	39.16	85.87	56.67	35.90	12.01	8.10	6.70	0.01	0.00	0.00	
10/8/2023	Average	20.25	0.00	0.00	111.80	193.58	7.29	34.89	73.86	38.97	32.37	11.90	8.00	6.70	0.16	0.00	0.00	Preheat
	Min	20.05	0.00	0.00	34.96	34.44	7.22	24.14	31.72	-34.47	12.89	11.86	8.00	6.70	0.00	0.00	0.00	
	Max	20.43	0.00	0.00	516.32	789.79	7.31	72.09	83.34	56.84	37.79	11.94	8.00	6.70	3.63	0.00	0.00	
10/9/2023	Average	20.25	0.00	0.00	235.66	289.96	6.33	54.95	47.94	-7.02	20.85	11.84	8.01	6.70	0.36	0.00	0.00	Preheat/Shutdown/Off
	Min	20.10	0.00	0.00	103.14	88.33	4.80	26.33	28.76	-36.67	12.99	11.80	8.00	6.70	0.00	0.00	0.00	
	Max	20.42	0.00	0.00	472.60	775.51	7.25	71.79	83.81	53.67	35.34	11.90	8.07	6.70	3.63	0.00	0.00	
10/10/2023	Average	20.24	0.00	0.00	144.03	222.51	6.93	27.66	81.89	54.23	38.63	11.77	7.99	6.70	0.01	0.00	0.00	Off/Preheat
	Min	20.07	0.00	0.00	57.26	45.98	6.44	24.82	80.66	49.56	35.35	11.70	7.93	6.70	0.00	0.00	0.00	
	Max	20.39	0.00	0.00	541.89	835.80	7.20	34.21	83.79	57.00	40.36	11.80	8.00	6.70	0.03	0.00	0.00	
10/11/2023	Average	17.29	2.56	24.21	561.01	803.48	6.53	41.29	61.14	19.85	33.88	10.16	7.60	6.73	15.18	0.00	0.00	Off/Preheat/Normal(ON)
	Min	0.00	0.00	0.00	-17.78	-17.78	0.00	-17.78	-17.78	-35.37	-17.78	0.00	0.00	0.00	0.00	0.00	0.00	
	Max	20.41	252.06	163.45	763.92	1082.41	7.33	69.01	84.77	52.34	47.71	11.71	8.38	6.80	39.63	0.00	0.00	
10/12/2023	Average	13.37	7.89	67.44	896.53	1060.44	5.73	31.86	50.15	18.29	40.50	8.33	7.49	6.80	39.69	0.00	0.00	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	9.61	0.00	-4.40	584.63	712.59	5.20	23.33	46.77	13.98	34.29	7.54	6.78	6.79	39.20	0.00	0.00	
	Max	20.36	779.91	170.74	1079.80	1085.76	6.04	36.11	53.14	24.26	46.36	8.70	8.70	6.80	39.91	0.00	0.00	
10/13/2023	Average	13.30	4.68	31.24	964.81	1066.29	5.69	32.78	49.90	17.12	38.90	8.38	8.09	6.80	39.62	0.00	0.00	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	10.24	0.00	-3.30	588.00	824.14	5.20	24.07	46.53	12.17	34.39	8.06	7.83	6.79	39.32	0.00	0.00	
	Max	20.30	169.16	178.97	1054.99	1125.23	6.04	36.79	53.38	25.37	42.17	8.68	8.70	6.80	39.94	0.00	0.00	
10/14/2023	Average	13.35	4.31	32.25	995.20	1067.88	5.82	32.86	51.00	18.14	39.01	8.64	8.18	6.80	39.30	0.00	0.16	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	11.39	0.00	-1.22	589.00	973.90	5.47	24.43	49.44	14.82	35.05	8.50	7.93	6.77	39.19	0.00	0.00	
	Max	20.37	361.96	75.62	1097.93	1108.86	5.96	36.49	52.61	25.78	41.58	8.79	8.70	6.80	39.50	0.00	1.00	
10/15/2023	Average	13.13	4.18	40.38	969.28	1066.09	5.65	31.61	49.96	18.35	38.57	8.59	8.22	6.80	39.24	0.00	0.54	Normal(ON)/Shutdown/Off/Preheat
	Min	11.56	0.00	-0.33	870.00	949.98	5.41	24.04	48.14	14.66	35.12	8.50	8.06	6.80	39.10	0.00	0.00	
	Max	20.30	575.29	82.07	1050.22	1096.39	5.80	36.24	50.95	25.98	42.15	8.72	8.71	6.80	39.35	0.00	1.00	
10/16/2023	Average	13.00	4.42	50.66	930.47	1070.12	5.84	32.95	50.08	17.14	38.34	8.49	7.74	6.80	39.07	0.00	0.84	Preheat/Normal(ON)/Shutdown/Off/Preheat
	Min	5.94	0.00	-0.59	887.55	803.02	5.41	24.69	47.39	14.94	35.13	8.40	6.90	6.80	38.90	0.00	0.00	
	Max	20.29	552.60	154.09	1033.88	1104.56	6.06	36.29	51.65	23.72	40.35	8.60	8.51	6.80	39.28	0.00	1.00	
10/17/2023	Average	13.29	3.55	64.36	975.12	1067.46	5.90	34.01	51.01	17.01	39.28	8.60	7.20	6.80	39.39	0.00	0.89	Preheat/Normal(ON)/Shutdown/Off/Preheat
	Min	11.67	0.00	-0.92	863.61	917.92	5.46	24.40	47.21	13.59	34.51	8.57	6.79	6.80	38.79	0.00	0.00	
	Max	20.36	705.41	172.45	1041.99	1093.70	6.18	38.70	52.67	22.82	41.66	8.61	7.95	6.82	39.72	0.00	1.00	
10/18/2023	Average	16.24	2.29	27.04	754.98	712.61	6.17	38.14	58.16	20.02	37.33	8.69	8.50	6.78	26.29	0.00	0.56	Preheat/Normal(ON)/Shutdown/Off
	Min	11.44	0.00	-2.59	305.37	63.33	5.66	25.55	40.34	-8.74	23.38	8.50	7.27	6.70	0.10	0.00	0.00	
	Max	20.41	544.96	101.65	1053.25	1087.59	7.01	55.38	84.50	46.63	44.77	9.83	9.90	6.82	39.54	0.00	1.00	



October 2023 Incineration Averaged Ranges

TheDate		OX6min	COmin	NOXmin	PrimTemp°C	SecTemp°C	SNCR	DemTemp°C	CarbTemp°C	DiffTemp°C	IDFanTemp°C	QuenchPH	CondPH	AtomPH	AtomA	AtomB	HEPADP	Op Mode
10/19/2023	Average	20.25	0.00	0.00	120.24	51.16	7.41	34.70	84.15	49.44	39.26	12.14	9.80	6.70	0.09	0.00	0.00	Off
	Min	20.07	0.00	0.00	67.15	42.43	7.02	27.00	82.09	44.77	38.37	9.85	9.80	6.70	0.05	0.00	0.00	
	Max	20.42	0.00	0.00	305.04	63.32	7.50	39.95	86.69	55.47	40.22	12.72	9.80	6.70	0.10	0.00	0.00	
10/20/2023	Average	20.25	0.00	0.00	53.15	36.61	7.58	36.31	84.44	48.13	39.79	12.86	9.81	6.70	0.08	0.00	0.00	Off
	Min	20.10	0.00	0.00	42.74	31.71	7.50	30.43	83.67	46.52	39.24	12.72	9.80	6.70	0.05	0.00	0.00	
	Max	20.40	0.00	0.00	67.13	43.33	7.63	38.96	85.69	53.30	40.58	12.90	9.90	6.70	0.10	0.00	0.00	
10/21/2023	Average	20.25	0.00	0.00	36.05	28.83	7.53	29.42	82.83	53.41	41.24	13.02	9.90	6.70	0.06	0.00	0.00	Off
	Min	20.07	0.00	0.00	30.72	26.11	7.38	24.25	81.00	46.66	39.49	12.90	9.90	6.70	0.04	0.00	0.00	
	Max	20.44	0.00	0.00	42.73	32.60	7.60	38.35	85.42	56.94	42.72	13.10	9.90	6.70	0.10	0.00	0.00	
10/22/2023	Average	20.25	0.00	0.00	27.90	24.76	7.21	26.31	81.13	54.83	41.34	13.10	9.97	6.69	0.04	0.00	0.00	Off
	Min	20.05	0.00	0.00	25.98	23.36	7.10	23.15	78.40	52.11	39.90	13.10	9.90	6.60	0.01	0.00	0.00	
	Max	20.43	0.00	0.00	30.72	26.11	7.38	29.93	82.33	57.23	42.79	13.10	10.00	6.70	0.07	0.00	0.00	
10/23/2023	Average	20.25	0.00	0.00	24.64	23.56	7.11	31.82	82.07	50.26	40.03	13.10	10.00	6.60	0.01	0.00	0.00	Off
	Min	20.10	0.00	0.00	23.90	22.24	7.09	25.91	80.75	47.32	39.22	13.10	10.00	6.60	0.00	0.00	0.00	
	Max	20.42	0.00	0.00	25.97	24.71	7.20	35.15	82.84	55.18	40.97	13.10	10.00	6.60	0.03	0.00	0.00	
10/24/2023	Average	20.25	0.00	0.00	25.17	25.30	7.28	36.65	84.25	47.60	40.61	13.10	10.00	6.60	0.03	0.00	0.00	Off
	Min	20.07	0.00	0.00	24.92	24.44	7.13	34.15	82.58	46.19	39.61	13.10	10.00	6.60	0.00	0.00	0.00	
	Max	20.41	0.00	0.00	25.60	26.11	7.50	39.69	85.88	50.16	42.61	13.10	10.00	6.60	0.09	0.00	0.00	
10/25/2023	Average	20.25	0.00	0.00	26.29	26.41	7.62	35.68	85.00	49.32	42.83	13.10	10.00	6.60	0.07	0.00	0.00	Off
	Min	20.09	0.00	0.00	25.55	25.87	7.50	29.39	84.03	45.61	40.15	13.10	10.00	6.60	0.04	0.00	0.00	
	Max	20.41	0.00	0.00	26.72	27.22	7.70	40.30	85.92	55.06	44.96	13.10	10.00	6.60	0.09	0.00	0.00	
10/26/2023	Average	20.25	0.00	0.00	26.64	26.92	7.66	38.37	85.23	46.86	41.73	13.07	10.00	6.61	0.03	0.00	0.00	Off
	Min	20.04	0.00	0.00	26.46	25.56	7.60	35.24	84.09	46.06	41.00	13.00	9.99	6.60	0.00	0.00	0.00	
	Max	20.42	0.00	0.00	26.71	27.22	7.70	39.45	86.31	49.08	43.76	13.10	10.00	6.70	0.06	0.00	0.00	
10/27/2023	Average	20.24	0.00	0.00	66.62	132.46	7.66	32.63	84.25	51.63	44.36	13.00	9.96	6.63	0.03	0.00	0.00	Off/Preheat
	Min	20.02	0.00	0.00	26.34	26.16	7.60	28.12	83.41	47.66	42.25	13.00	9.90	6.60	0.01	0.00	0.00	
	Max	20.42	0.00	0.00	463.06	765.29	7.80	37.29	85.32	55.57	46.76	13.01	10.00	6.70	0.09	0.00	0.00	
10/28/2023	Average	19.87	1.38	2.82	565.21	853.03	6.70	35.55	65.22	29.67	35.35	13.00	10.05	6.63	5.57	0.00	0.00	Off/Preheat
	Min	12.53	0.00	0.00	463.55	765.61	4.50	26.24	32.73	-26.51	16.98	12.62	9.38	6.60	0.01	0.00	0.00	
	Max	20.45	774.78	58.79	587.31	1063.44	7.80	68.84	86.06	56.34	47.00	13.12	10.93	6.70	32.13	0.00	0.00	
10/29/2023	Average	19.65	0.14	3.78	572.76	853.36	5.94	37.64	76.23	38.59	35.44	10.22	7.71	6.61	5.66	0.00	0.00	Preheat
	Min	13.11	0.00	0.00	569.71	809.56	4.89	21.00	51.48	-21.47	16.31	8.26	7.60	6.54	0.00	0.00	0.00	
	Max	20.44	10.97	57.14	585.42	1062.21	6.73	73.28	89.44	62.79	43.22	12.59	9.36	6.70	39.80	0.00	0.00	
10/30/2023	Average	20.25	0.00	0.00	193.33	166.19	7.10	25.23	86.72	61.49	47.84	11.99	10.31	6.73	0.03	0.00	0.00	Preheat
	Min	20.04	0.00	0.00	58.74	42.30	6.73	22.14	84.20	55.14	43.00	11.60	7.70	6.70	0.00	0.00	0.00	
	Max	20.43	0.00	0.00	570.77	850.69	7.30	34.18	89.68	63.80	49.35	12.50	12.00	6.80	0.06	0.00	0.00	

October 2023 CEM Calibration Log

[illegible]



Stericycle®

O2 6 minute average < 7.5

O2 < 7.5

	Start	Stop		Op.	Stack		Actions
Date	Time	Time	Duration	Mode	O2 %	Explanation	Taken
10/16/2023	12:25	12:28	00:03	Normal	6.7	Low O2% was caused by a spike in CO levels.	No waste was fest until the O2% returned to the normal operating range.

Carbon Monoxide > 8ppm 4 hour alarm



Carbon Monoxide > 8ppm 4 hour alarm

	Start	Stop		Op.	Stack CO	Stack CO		Actions
Date	Time	Time	Duration	Mode	@ 11% O2	as mg/m ³	Explanation	Taken
10/12/2023	23:31	5:00	05:29	Normal	22.6	26.1	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
10/16/2023	12:30	17:00	04:30	Normal	19.6	22.6	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.



November 2023 Incineration Averages and Ranges

TheDate	OX6min	COmin	NOXmin	PrimTemp°C	SecTemp°C	SNCR	DemTemp°C	CarbTemp°C	DiffTemp	IDFanTemp°C	QuenchPH	CondPH	AtomPH	AtomA	AtomB	HEPADP	OpMode
11/1/2023	Average	20.25	0.00	0.00	45.92	35.12	7.18	23.40	84.71	61.31	48.84	11.60	11.90	6.70	0.02	0.00	0.00
	Min	20.09	0.00	0.00	37.71	30.56	7.10	21.07	82.09	59.68	48.16	11.60	11.90	6.70	0.00	0.00	0.00
	Max	20.44	0.00	0.00	58.71	42.28	7.30	25.31	87.26	62.97	49.54	11.60	11.90	6.70	0.05	0.00	0.00
11/2/2023	Average	20.25	0.00	0.00	33.21	27.86	7.20	23.94	74.48	50.55	45.98	11.60	11.92	6.70	0.02	0.00	0.00
	Min	20.05	0.00	0.00	29.93	25.56	7.11	21.29	23.38	2.07	32.06	11.60	11.90	6.70	0.00	0.00	0.00
	Max	20.45	0.00	0.00	37.71	30.57	7.20	25.47	86.49	62.02	49.68	11.60	12.00	6.70	0.05	0.00	0.00
11/3/2023	Average	20.25	0.00	0.00	28.44	26.42	7.30	25.67	81.93	56.26	47.48	11.59	11.91	6.65	0.07	0.00	0.00
	Min	20.03	0.00	0.00	27.54	25.56	7.20	23.76	63.42	39.48	37.30	11.50	11.90	6.60	0.02	0.00	0.00
	Max	20.44	0.00	0.00	29.93	27.74	7.52	28.02	90.76	64.99	51.29	11.60	11.96	6.70	0.10	0.00	0.00
11/4/2023	Average	20.25	0.00	0.00	27.39	26.86	7.54	26.20	90.63	64.43	50.76	11.50	11.99	6.60	0.06	0.00	0.00
	Min	20.09	0.00	0.00	26.70	25.54	7.40	24.73	82.67	55.11	49.63	11.50	11.90	6.60	0.01	0.00	0.00
	Max	20.41	0.00	0.00	28.33	27.22	7.60	27.57	94.25	68.24	51.69	11.50	12.10	6.60	0.10	0.00	0.00
11/5/2023	Average	20.25	0.00	0.00	26.25	26.05	7.40	25.54	93.36	67.82	51.58	11.49	12.00	6.60	0.07	0.00	0.00
	Min	20.07	0.00	0.00	26.07	25.19	7.40	24.53	92.16	67.56	51.26	11.40	11.97	6.60	0.04	0.00	0.00
	Max	20.42	0.00	0.00	26.73	26.68	7.40	26.66	94.35	68.25	51.68	11.50	12.00	6.60	0.10	0.00	0.00
11/6/2023	Average	20.25	0.00	0.00	24.64	24.36	7.32	24.11	88.68	64.56	50.23	11.40	12.00	6.60	0.04	0.00	0.00
	Min	20.07	0.00	0.00	23.59	19.44	7.10	21.71	80.89	59.00	47.34	11.40	11.97	6.60	0.00	0.00	0.00
	Max	20.46	0.00	0.00	26.13	26.03	7.50	27.34	94.24	67.92	52.37	11.40	12.00	6.60	0.10	0.00	0.00
11/7/2023	Average	20.24	0.00	0.00	24.75	25.28	7.22	24.40	81.15	56.76	47.97	11.40	11.95	6.60	0.04	0.00	0.00
	Min	20.08	0.00	0.00	24.38	24.31	7.14	22.89	72.74	48.96	43.30	11.40	11.90	6.60	0.01	0.00	0.00
	Max	20.42	0.00	0.00	25.56	26.11	7.30	27.01	88.16	62.00	51.92	11.40	12.00	6.60	0.08	0.00	0.00
11/8/2023	Average	20.24	0.00	0.00	23.90	24.15	7.07	22.54	47.06	24.52	34.66	11.04	11.97	6.60	0.03	0.00	0.00
	Min	20.08	0.00	0.00	23.33	22.22	6.90	20.46	24.01	2.72	26.82	10.37	11.91	6.60	0.00	0.00	0.00
	Max	20.43	0.00	0.00	24.68	25.32	7.22	24.28	73.59	49.82	43.29	11.40	12.00	6.60	0.08	0.00	0.00
11/9/2023	Average	20.25	0.00	0.00	336.60	536.92	6.92	22.56	24.94	2.38	26.65	10.44	11.92	6.60	0.01	0.00	0.00
	Min	20.07	0.00	0.00	23.40	21.27	6.89	20.56	22.78	1.45	25.56	10.37	11.90	6.60	0.00	0.00	0.00
	Max	20.41	0.00	0.00	584.86	893.02	7.04	24.99	26.59	3.00	27.68	10.59	12.00	6.60	0.04	0.00	0.00
11/10/2023	Average	20.16	0.16	0.67	558.05	844.09	6.67	40.42	41.29	0.86	27.20	10.14	11.39	6.61	0.61	0.00	0.00
	Min	13.79	0.00	0.00	433.66	361.76	5.00	24.17	21.74	-48.92	9.61	8.72	9.95	6.60	0.02	0.00	0.00
	Max	20.42	25.78	44.11	588.46	1003.58	7.31	78.33	70.13	45.37	41.07	10.78	11.90	6.70	8.34	0.00	0.00
11/11/2023	Average	16.44	2.36	20.67	688.66	975.13	5.43	46.70	45.25	-1.45	27.62	7.10	7.47	6.65	17.74	0.00	0.27
	Min	10.21	0.00	0.00	562.78	859.77	4.90	21.11	17.81	-50.33	5.94	5.90	6.43	6.58	0.10	0.00	0.00
	Max	20.41	461.70	108.61	1036.16	1089.96	6.38	72.72	59.01	36.85	45.85	8.71	9.93	6.70	35.90	0.00	1.00
11/12/2023	Average	15.29	5.79	28.33	819.48	1007.25	5.04	34.52	49.66	15.13	32.99	8.19	8.07	6.33	25.23	0.00	0.52
	Min	10.15	0.00	0.00	3.27	149.36	0.37	-13.02	-14.12	-46.54	-16.11	0.57	0.51	0.33	0.01	0.00	0.00
	Max	20.39	761.98	113.41	1114.03	1101.17	6.70	72.09	59.26	35.25	43.80	12.12	10.29	6.70	35.84	0.00	1.00
11/13/2023	Average	19.94	0.36	1.59	553.49	787.81	6.03	50.81	51.05	0.24	24.04	10.62	9.11	6.70	2.06	0.00	0.00
	Min	12.65	0.00	-0.62	420.23	68.77	4.47	28.02	15.00	-51.67	6.14	9.22	8.10	6.67	0.00	0.00	0.00
	Max	20.42	28.64	49.31	577.94	1011.46	7.10	73.53	94.88	66.33	44.43	12.30	10.47	6.70	10.56	0.00	0.00
11/14/2023	Average	18.61	0.37	12.22	599.60	889.34	7.03	37.69	85.98	48.32	40.63	10.86	8.11	6.79	4.84	0.00	0.11
	Min	8.16	0.00	0.00	446.00	335.22	5.16	28.83	52.22	-0.60	22.03	8.20	6.96	6.70	0.10	0.00	0.00
	Max	20.42	85.85	123.44	948.45	1086.49	7.53	73.53	96.46	66.33	46.47	12.30	10.47	6.80	34.72	0.00	1.00
11/15/2023	Average	12.96	4.09	70.83	987.04	1057.99	5.46	34.10	55.59	21.49	45.01	8.56	7.39	6.79	33.73	0.00	0.98
	Min	10.63	0.00	0.00	736.25	566.20	5.06	19.26	52.51	18.95	41.00	8.10	6.94	6.76	31.25	0.00	0.00
	Max	20.37	650.73	181.50	1156.19	1101.26	5.86	40.81	61.90	37.41	48.59	9.43	8.53	6.80	35.25	0.00	1.00
11/16/2023	Average	16.75	4.48	25.81	662.84	705.05	5.83	42.56	63.99	21.43	35.96	8.88	8.46	6.76	18.32	0.00	0.49
	Min	9.92	0.00	-3.30	308.24	205.92	5.00	23.25	34.54	-39.09	12.34	7.10	7.09	6.70	0.10	0.00	0.00
	Max	20.41	605.69	149.61	1002.78	1083.70	6.90	73.84	95.58	54.00	48.18	11.24	10.01	6.80	35.11	0.00	1.00
11/17/2023	Average	12.99	3.33	66.38	985.67	1062.53	5.76	37.40	60.21	22.81	46.55	7.87	7.43	6.80	34.25	0.00	1.00
	Min	11.07	0.00	0.00	888.41	918.50	5.00	27.52	54.75	20.01	40.00	7.18	7.00	6.80	33.80	0.00	1.00
	Max	20.37	356.84	174.26	1069.89	1109.77	6.41	43.11	66.23	28.17	50.61	8.60	8.07	6.80	35.09	0.00	1.00
11/18/2023	Average	13.45	4.55	50.76	1020.16	1063.99	5.08	32.00	54.52	22.52	41.20	7.78	7.54	6.79	33.34	0.00	1.03
	Min	11.44	0.00	-1.59	811.69	967.39	5.00	22.84	52.69	16.94	37.56	7.56	7.23	6.77	30.51	0.00	0.00
	Max	20.33	453.44	129.42	1100.15	1095.27	5.31	37.90	56.56	32.75	44.60	7.97	8.08	6.80	34.99	0.00	2.00



November 2023 Incineration Averages and Ranges

TheDate		OX6min	COmin	NOXmin	PrimTemp°C	SecTemp°C	SNCR	DemTemp°C	CarbTemp°C	DiffTemp	IDFanTemp°C	QuenchPH	CondPH	AtomPH	AtomA	AtomB	HEPADP	OpMode
11/19/2023	Average	13.06	7.24	46.47	966.92	1069.87	5.04	30.30	54.71	24.41	41.10	7.68	7.44	6.80	35.91	0.00	0.99	Normal(ON)/Shut
	Min	10.80	0.00	-2.00	804.24	968.72	4.93	22.64	52.62	19.76	37.56	7.48	7.11	6.80	31.05	0.00	0.00	down/Off/Preheat
	Max	20.28	722.51	103.59	1065.67	1119.42	5.14	34.90	55.85	32.90	43.74	7.94	8.80	6.80	37.02	0.00	1.00	/Normal(ON)
11/20/2023	Average	13.55	5.97	52.09	951.67	1065.70	5.00	32.67	55.40	22.73	41.45	7.74	7.50	6.80	35.15	0.00	1.33	Normal(ON)/Shut
	Min	11.61	0.00	-4.40	594.45	845.14	5.00	23.02	53.62	17.85	36.48	7.20	7.27	6.78	31.90	0.00	1.00	down/Off/Preheat
	Max	20.36	722.51	174.40	1071.60	1119.42	5.14	37.34	56.71	32.90	44.33	7.97	8.80	6.80	37.02	0.00	2.00	/Normal(ON)
11/21/2023	Average	13.42	5.14	33.21	907.79	1063.04	5.07	32.87	55.94	23.07	41.82	7.45	8.22	6.80	34.06	0.00	1.47	Normal(ON)/Shut
	Min	10.64	0.00	-5.50	593.50	798.63	5.00	26.62	55.02	19.66	37.89	7.41	8.11	6.78	31.89	0.00	1.00	down/Off/Preheat
	Max	20.30	159.23	109.93	1004.88	1085.46	5.37	35.54	58.44	30.09	43.68	7.57	8.45	6.80	35.40	0.00	2.00	/Normal(ON)
11/22/2023	Average	12.98	2.70	48.73	870.86	1060.83	5.35	34.32	57.90	23.59	43.37	7.77	7.37	6.80	34.87	0.00	1.82	Normal(ON)/Shut
	Min	11.29	0.00	-1.08	624.77	834.76	4.91	19.75	54.08	19.16	38.65	7.19	7.14	6.79	34.35	0.00	1.00	down/Off/Preheat
	Max	20.36	434.87	110.99	1047.13	1096.11	5.71	40.81	59.99	34.44	47.71	8.30	8.15	6.80	35.38	0.00	2.00	/Normal(ON)
11/23/2023	Average	13.86	8.30	53.50	826.04	1055.46	5.15	31.90	57.02	25.12	42.57	7.86	7.31	6.80	34.35	0.00	1.81	Normal(ON)/Shut
	Min	9.36	0.00	-4.40	583.33	613.34	4.99	20.94	55.25	18.89	37.78	7.10	7.07	6.79	34.13	0.00	1.00	down/Off/Preheat
	Max	20.36	83.60	162.55	933.98	1092.92	5.32	37.78	58.25	34.52	45.00	8.49	7.56	6.80	34.73	0.00	2.00	/Normal(ON)
11/24/2023	Average	13.43	2.95	57.55	886.28	1061.95	5.00	33.29	57.55	24.27	42.65	7.55	7.31	6.80	34.53	0.00	1.86	Normal(ON)/Shut
	Min	10.94	0.00	-3.30	588.92	821.32	4.90	22.21	55.53	19.57	38.15	7.20	7.06	6.79	33.97	0.00	1.00	down/Off/Preheat
	Max	20.28	81.40	142.67	973.76	1091.91	5.03	38.22	59.63	34.17	46.15	7.73	7.56	6.80	34.81	0.00	2.00	/Normal(ON)
11/25/2023	Average	13.19	1.69	67.40	973.77	1066.10	5.00	33.29	56.68	23.39	42.65	7.50	7.30	6.80	34.38	0.00	1.95	Normal(ON)/Shut
	Min	10.61	0.00	-1.86	662.07	777.31	4.99	24.08	55.51	17.88	38.92	7.30	6.93	6.79	34.28	0.00	1.00	down/Off/Preheat
	Max	20.36	667.48	172.71	1128.89	1100.36	5.00	37.91	58.16	31.87	44.32	7.58	8.52	6.80	34.61	0.00	3.00	
11/26/2023	Average	13.16	1.65	87.58	1010.76	1072.52	5.05	34.06	57.13	23.07	42.90	7.49	7.33	6.80	34.68	0.00	2.58	Preheat/Normal(O
	Min	11.11	0.00	-2.20	763.47	811.19	5.00	26.68	55.69	20.20	39.96	7.33	7.05	6.80	34.27	0.00	1.00	N)/Shutdown
	Max	19.92	375.10	223.02	1108.90	1117.90	5.29	37.58	59.38	29.46	44.84	7.74	7.43	6.80	35.18	0.00	3.00	
11/27/2023	Average	13.35	1.59	70.09	971.19	1067.77	5.01	34.69	58.14	23.45	42.94	7.42	7.27	6.80	34.60	0.00	2.89	Shutdown/Off/Pre
	Min	10.76	0.00	-0.43	826.87	999.50	4.97	24.81	52.59	21.16	36.36	7.28	7.09	6.80	34.49	0.00	1.00	heat/Normal(ON)
	Max	20.37	175.12	201.70	1081.30	1107.30	5.08	38.86	60.88	28.53	45.48	7.68	7.37	6.80	34.74	0.00	3.00	
11/28/2023	Average	14.21	5.68	53.01	875.88	982.43	5.13	37.02	52.32	15.29	38.76	7.24	7.37	6.80	29.99	0.00	2.34	Normal(ON)/Shut
	Min	10.94	0.00	0.00	652.18	363.82	4.90	20.88	29.65	-43.59	21.43	6.14	6.21	6.78	0.10	0.00	0.00	down/Off/Preheat
	Max	20.37	850.11	162.63	982.49	1102.13	6.02	73.24	58.37	30.76	44.32	7.53	8.11	6.80	36.84	0.00	4.00	/Normal(ON)
11/29/2023	Average	13.64	3.97	64.06	829.81	1065.09	5.00	30.70	54.12	23.42	40.39	7.63	8.34	6.80	36.01	0.00	3.19	Normal(ON)/Shut
	Min	12.03	0.00	-7.70	591.55	762.32	4.99	20.45	52.26	21.20	37.22	7.22	8.07	6.80	35.52	0.00	1.00	down/Off/Preheat
	Max	20.30	90.20	158.17	941.66	1088.91	5.01	33.93	55.74	33.60	42.43	8.81	9.30	6.80	36.67	0.00	4.00	/Normal(ON)
11/30/2023	Average	13.35	2.17	53.83	930.53	1067.14	5.21	31.21	54.93	23.71	41.33	8.11	8.39	6.80	35.25	0.00	3.63	Normal(ON)/Shut
	Min	10.47	0.00	-6.60	591.47	746.60	4.99	20.20	52.07	19.44	37.08	7.46	8.19	6.80	34.31	0.00	1.00	down/Off/Preheat
	Max	20.30	245.57	155.88	1064.32	1119.06	5.53	36.16	58.96	36.13	44.44	8.70	9.20	6.80	35.72	0.00	5.00	/Normal(ON)



November 2023 Incineration Feed Data

TheDate	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DailySum	Monthly Sum
01-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	163069.10
02-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
03-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
04-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
05-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
06-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
07-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
08-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
09-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
10-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
11-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	59.20	0.00	0.00	405.00	402.70	416.20	505.60	500.50	504.20	505.40	501.30	3800.10	
12-Nov-23	504.60	514.20	509.20	522.20	501.40	521.00	500.10	356.10	305.60	62.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4297.20	
13-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
14-Nov-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	147.90	503.60	555.40	565.40	1772.30	
15-Nov-23	558.60	550.30	553.10	554.70	559.40	555.10	553.50	552.30	552.70	558.80	551.60	0.00	0.00	0.00	0.00	555.60	555.00	552.40	393.10	558.30	554.50	626.40	104.60	0.00	10000.00	
16-Nov-23	551.60	551.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	506.70	556.40	555.30	518.30	560.00	573.20	4372.50	
17-Nov-23	553.90	541.20	558.80	584.00	544.00	516.60	446.60	185.30	165.60	602.60	503.10	550.60	601.40	585.60	570.60	550.10	550.80	556.50	556.60	276.10	0.00	0.00	0.00	0.00	10000.00	
18-Nov-23	503.10	519.00	507.50	509.50	510.80	510.20	509.20	602.80	600.00	604.60	629.80	601.00	602.50	602.90	600.80	602.80	599.20	384.30	0.00	0.00	0.00	0.00	0.00	0.00	10000.00	
19-Nov-23	551.80	550.00	555.10	559.40	549.60	559.40	556.80	551.00	555.00	605.70	607.00	601.30	603.50	601.40	606.20	603.60	601.20	0.00	0.00	0.00	0.00	0.00	0.00	182.00	10000.00	
20-Nov-23	549.20	540.60	575.20	557.60	553.20	554.40	552.00	555.40	550.40	554.80	551.40	572.30	530.60	555.40	551.10	557.30	552.60	586.50	0.00	0.00	0.00	0.00	0.00	0.00	10000.00	
21-Nov-23	605.40	601.80	603.20	602.80	602.80	613.00	602.40	613.40	555.80	574.50	601.60	564.10	574.90	551.00	568.60	610.00	500.70	54.00	0.00	0.00	0.00	0.00	0.00	0.00	10000.00	
22-Nov-23	602.60	606.90	610.40	606.20	607.10	603.70	602.60	604.30	608.50	170.40	0.00	520.80	611.10	602.30	559.10	551.50	556.10	550.60	425.80	0.00	0.00	0.00	0.00	0.00	10000.00	
23-Nov-23	606.50	609.20	602.40	604.70	607.50	606.80	618.50	572.00	557.30	504.00	604.80	502.20	601.40	603.90	602.30	600.40	596.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10000.00	
24-Nov-23	608.40	603.20	603.20	606.60	600.80	604.30	606.20	67.20	569.00	619.60	551.80	556.80	552.60	602.20	605.70	602.40	600.90	439.10	0.00	0.00	0.00	0.00	0.00	0.00	10000.00	
25-Nov-23	604.40	507.60	515.00	509.30	501.00	507.30	514.20	510.50	530.90	511.00	511.70	511.70	522.40	396.30	513.60	540.40	530.30	518.60	517.50	226.30	0.00	0.00	0.00	0.00	10000.00	
26-Nov-23	609.30	600.70	626.40	608.30	604.90	603.70	507.40	214.80	0.00	0.00	510.20	504.30	520.80	505.00	513.20	511.40	516.00	554.50	553.70	607.80	327.60	0.00	0.00	0.00	10000.00	
27-Nov-23	0.00	101.40	62.90	258.30	196.10	470.90	116.60	654.10	654.40	650.60	651.30	655.20	650.40	654.80	658.50	650.60	659.40	651.40	650.40	652.60	300.10	0.00	0.00	0.00	10000.00	
28-Nov-23	649.30	650.50	651.40	0.00	0.00	0.00	0.00	553.20	0.00	0.00	0.00	0.00	0.00	502.20	562.40	500.20	506.00	601.80	605.70	607.20	602.80	600.60	616.60	617.10	8827.00	
29-Nov-23	599.80	604.10	601.30	608.70	604.10	601.90	600.40	553.00	508.10	504.50	504.40	508.80	503.60	504.60	500.90	467.90	502.60	605.00	116.30	0.00	0.00	0.00	0.00	0.00	10000.00	
30-Nov-23	601.70	603.80	598.60	449.30	601.10	607.40	600.10	507.00	532.40	477.10	506.80	501.20	509.30	535.60	515.10	518.80	503.70	538.40	292.60	0.00	0.00	0.00	0.00	0.00	10000.00	



November 2023 CEM Calibration Log

TheDate	COSpanRes	CO Calgas	COSpan%Drift	NOxSpanRes	NOX Calgas	NOxSpan%drift	O2SpanRes	O2 Calgas	O2SpanDrift	COZeroRes	COZero%Drift	NOxZeroRes	NOxZero%Drift	O2ZeroRes	O2 Zergas	O2ZeroDrift	Comment
11/23/2023 11:48	0	92.06	0	0	752	0	0	8.08	0	0	0	0	0	0.1	0	0.1	
11/23/2023 11:56	0	92.06	0	0	752	0	0	8.08	0	7	2.333333	0	0	0.6	0	0.6	
11/23/2023 12:51	0	92.06	0	0	752	0	0	8.08	0	1	0.333333	0	0	0.2	0	0.2	
11/23/2023 12:57	91	92.06	0.1059998	0	752	0	0	8.08	0	0	0	0	0	0	0	0	
11/23/2023 13:05	0	92.06	0	0	752	0	8.1	8.08	0.02000046	0	0	0	0	0	0	0	
11/23/2023 13:14	0	92.06	0	735	752	1.7	0	8.08	0	0	0	0	0	0	0	0	
11/23/2023 13:20	0	92.06	0	753	752	0.1	0	8.08	0	0	0	0	0	0	0	0	
11/23/2023 13:26	0	92.06	0	0	752	0	0	8.08	0	0	0	1	0.1	0.1	0	0.1	

Carbon Monoxide > 8ppm 12 hour alarm



Carbon Monoxide > 8ppm 12 hour alarm

	Start	Stop		Op.	Stack CO	Stack CO		Actions
Date	Time	Time	Duration	Mode	@ 11% O ₂	as mg/m ³	Explanation	Taken
11/15/2023	15:00	3:00	12:00	Normal	28.1	32.4	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.

Carbon Monoxide > 8ppm 4 hour alarm



Carbon Monoxide > 8ppm 4 hour alarm

	Start	Stop		Op.	Stack CO	Stack CO		Actions
Date	Time	Time	Duration	Mode	@ 11% O2	as mg/m ³	Explanation	Taken
11/19/2023	15:00	19:00	04:00	Normal	9.7	11.2	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
11/21/2023	0:00	4:00	04:00	Normal	19.9	23.0	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
11/22/2023	0:05	4:00	03:55	Normal	13.2	15.2	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
11/23/2023	1:29	2:00	00:31	Normal	15.6	18.0	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
11/24/2023	0:24	4:00	03:36	Normal	27.1	31.3	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
11/28/2023	14:05	17:00	02:55	Normal	28.6	33.0	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
11/30/2023	00:28	4:00	03:32	Normal	15.6	18.0	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.

Secondary Chamber Temperature < 1000°C

Date	Start Time	Stop Time	Duration	Op. Mode	Temp. °C	Explanation	Actions Taken
11/15/2023	14:22	15:14	00:52	Normal	721	Low secondary chamber temperature caused by an incorrect flame-port air setting while the unit was idle for an I.D. fan repair	The operator adjusted the flame-port air setting. No waste was fed until the secondary chamber temperature returned to the normal operating range.



December 2023 Incineration Averages Ranges

TheDate		OX6min	COmin	NOXmin	PrimTemp°C	SecTemp°C	SNCR	DemTemp°C	CarbTemp°C	DiffTemp°C	IDFanTemp°C	QuenchPH	CondPH	AtomPH	AtomA	AtomB	HEPADP	OpMode
12/1/2023	Average	15.04	2.98	41.35	747.06	904.45	5.46	36.43	61.18	24.75	38.95	8.34	8.38	6.77	25.23	0.00	2.04	Preheat/Shutdown/Preheat/Normal (ON)
	Min	10.00	0.00	-4.30	481.18	329.64	5.00	22.95	47.54	-6.57	23.57	6.44	7.61	6.70	0.10	0.00	0.00	
	Max	20.39	732.81	127.11	915.56	1085.57	6.62	58.29	88.46	55.14	45.26	9.10	9.20	6.80	35.46	0.00	4.00	
12/2/2023	Average	13.62	2.15	50.97	832.72	1028.59	5.07	34.19	58.81	24.62	37.97	8.34	7.83	6.80	33.09	0.00	2.53	Normal(ON)/Shutdown/Preheat/Normal (ON)
	Min	9.95	0.00	0.00	687.34	433.24	5.00	27.50	44.07	-3.27	23.10	7.89	7.42	6.80	15.56	0.00	0.00	
	Max	20.37	485.17	110.84	942.47	1098.68	5.45	48.16	63.26	34.42	42.32	9.97	8.39	6.80	36.47	0.00	5.00	
12/3/2023	Average	14.14	6.78	46.26	839.58	1046.98	5.01	30.36	60.14	29.78	36.51	8.10	8.01	6.80	34.34	0.00	0.92	Normal(ON)/Shutdown/Preheat
	Min	12.02	0.00	-8.80	670.57	638.59	4.99	18.22	58.16	26.60	32.79	7.73	7.75	6.80	33.91	0.00	0.00	
	Max	20.33	479.22	118.52	955.76	1089.99	5.07	33.64	62.08	43.61	38.04	9.00	8.25	6.80	34.70	0.00	1.00	
12/4/2023	Average	13.83	0.79	52.53	956.35	1004.79	5.02	32.32	60.31	27.98	41.16	8.45	7.80	6.80	35.37	0.00	0.93	Preheat/Normal(ON)/Shutdown/Preheat
	Min	9.63	0.00	-1.10	663.09	333.07	4.93	16.97	53.40	24.70	32.81	8.00	7.20	6.80	33.66	0.00	0.00	
	Max	20.37	53.90	194.49	1064.24	1094.33	5.15	36.11	62.25	43.66	43.58	10.52	9.02	6.80	36.03	0.00	1.00	
12/5/2023	Average	13.87	2.01	56.55	854.03	1044.49	4.99	32.52	63.02	30.50	42.38	8.88	8.30	6.80	34.82	0.00	1.02	Preheat/Normal(ON)/Shutdown/Preheat
	Min	0.00	0.00	-7.70	-17.78	-17.78	0.00	-17.78	-17.78	0.00	-17.78	0.00	0.00	0.00	0.00	0.00	0.00	
	Max	20.37	84.33	171.97	949.49	1094.12	5.01	37.32	64.75	43.85	44.75	10.95	9.02	6.80	35.54	0.00	2.00	
12/6/2023	Average	13.76	1.25	65.10	861.12	1064.05	5.00	35.20	62.78	27.58	43.04	8.36	8.33	6.80	35.08	0.00	1.28	Preheat/Normal(ON)/Shutdown/Preheat/Normal(ON)
	Min	11.02	0.00	-7.70	594.19	726.52	4.99	20.56	35.56	4.22	32.78	8.13	7.99	6.80	34.71	0.00	0.00	
	Max	20.37	216.82	150.75	949.44	1141.80	5.05	38.90	67.85	42.13	46.85	9.00	8.87	6.82	35.36	0.01	2.00	
12/7/2023	Average	13.33	1.22	64.28	913.92	1061.02	5.08	35.45	61.06	25.60	43.42	8.26	7.97	6.80	34.90	0.00	1.01	Preheat/Normal(ON)/Shutdown/Preheat
	Min	10.78	0.00	0.00	831.00	694.31	5.00	24.90	47.19	17.27	35.62	7.80	7.70	6.80	34.58	0.00	1.00	
	Max	20.37	851.20	140.04	999.05	1119.47	5.29	38.56	66.40	29.64	46.11	8.64	8.58	6.80	35.06	0.00	2.00	
12/8/2023	Average	16.86	5.31	27.66	606.62	765.69	5.72	48.11	42.30	-5.82	29.94	8.39	8.18	6.80	19.63	0.00	0.37	Preheat/Shutdown/Preheat/Normal(ON)
	Min	9.88	0.00	0.00	245.21	78.67	5.00	20.54	25.52	-45.56	11.65	7.32	7.34	6.80	0.07	0.00	0.00	
	Max	20.41	70.40	189.75	979.87	1090.68	6.73	74.60	56.89	25.84	43.89	9.27	8.77	6.80	36.22	0.00	1.00	
12/9/2023	Average	12.38	3.19	28.39	860.94	1067.41	5.76	37.48	54.64	17.16	42.65	7.60	8.23	6.79	34.16	0.00	1.00	Normal(ON)
	Min	9.41	0.00	-7.70	637.74	1017.07	5.45	33.16	51.60	15.53	41.03	7.28	7.34	6.70	33.36	0.00	1.00	
	Max	20.00	681.00	140.66	925.34	1098.61	6.14	41.54	58.78	22.48	45.70	8.29	8.79	6.80	36.14	0.00	1.00	
12/10/2023	Average	12.45	1.10	37.48	932.40	1064.81	5.32	35.28	56.93	21.65	42.04	7.64	7.95	6.79	33.51	0.00	1.00	Normal(ON)/Shutdown/Off
	Min	9.54	0.00	-6.60	588.43	981.76	5.00	27.34	47.48	8.24	38.92	7.31	7.35	6.70	33.29	0.00	0.00	
	Max	20.37	681.00	140.66	1021.31	1098.61	6.14	41.54	60.61	29.81	45.70	8.29	8.80	6.80	36.14	0.00	1.00	
12/11/2023	Average	13.12	0.18	54.66	955.61	1067.78	5.00	35.44	57.74	22.30	43.00	7.92	7.56	6.80	33.64	0.00	1.78	Off/Preheat/Normal(ON)
	Min	9.23	0.00	0.00	842.23	1006.97	4.99	25.22	56.16	17.79	38.06	6.91	7.06	6.80	33.45	0.00	1.00	
	Max	20.37	3.64	174.85	1041.12	1095.56	5.02	40.92	61.44	32.06	45.92	8.70	8.40	6.80	33.78	0.00	2.00	
12/12/2023	Average	12.72	2.49	57.43	920.44	1068.21	5.03	34.95	55.80	20.86	42.37	8.04	7.33	6.80	34.50	0.00	1.93	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	10.61	0.00	-7.70	809.81	822.34	4.99	24.18	48.33	17.21	36.18	7.37	7.08	6.80	32.91	0.00	1.00	
	Max	20.36	575.39	159.85	1024.79	1124.38	5.15	39.02	59.38	26.37	44.96	8.39	7.51	6.80	35.64	0.00	3.00	
12/13/2023	Average	13.22	3.94	65.05	947.91	1066.69	5.00	36.05	53.87	17.82	41.28	8.22	7.46	6.80	35.62	0.00	1.92	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	10.92	0.00	-8.80	644.78	747.37	4.99	23.46	49.30	11.67	35.56	7.57	7.20	6.80	35.55	0.00	1.00	
	Max	20.28	68.20	236.57	1030.33	1112.67	5.04	40.37	56.31	25.94	43.17	8.63	8.18	6.80	35.70	0.00	3.00	
12/14/2023	Average	12.95	2.85	45.49	977.46	1062.17	5.03	37.78	54.98	17.20	42.21	7.88	7.60	6.80	35.54	0.00	2.69	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	10.45	0.00	-7.70	635.06	748.77	4.90	24.58	49.63	15.46	35.52	7.18	7.30	6.80	35.43	0.00	1.00	
	Max	20.36	750.64	181.21	1052.37	1106.92	5.11	41.14	57.58	25.92	44.28	8.48	8.25	6.80	35.63	0.00	3.00	
12/15/2023	Average	13.42	5.31	45.94	868.10	1064.52	5.36	36.26	53.98	17.72	41.73	8.05	7.48	6.80	35.37	0.00	2.74	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	10.27	0.00	-11.00	610.29	736.90	5.00	23.21	48.73	15.04	35.28	7.58	7.33	6.80	35.16	0.00	1.00	
	Max	20.37	89.10	129.65	1008.23	1097.10	5.73	42.09	58.28	25.52	45.25	8.47	7.78	6.80	35.71	0.00	3.00	
12/16/2023	Average	13.44	4.16	37.43	908.93	1056.41	5.26	35.24	54.31	19.07	41.22	7.84	7.55	6.80	35.11	0.04	2.13	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	10.94	0.00	-7.70	592.31	747.82	5.00	21.31	48.41	10.89	35.26	7.52	7.34	6.80	34.91	0.00	1.00	
	Max	20.28	287.14	103.55	1024.85	1092.94	5.42	42.28	58.54	36.85	45.24	8.29	7.90	6.82	35.24	0.28	3.00	
12/17/2023	Average	12.88	3.11	34.97	1018.91	1064.18	5.38	37.33	56.70	19.38	43.13	7.70	7.59	6.80	34.98	0.00	2.45	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	9.79	0.00	-8.80	639.33	851.48	5.00	21.81	53.65	14.57	36.69	7.44	7.36	6.80	34.72	0.00	1.00	
	Max	20.33	80.82	88.75	1104.59	1097.99	5.56	42.11	58.62	36.79	46.35	8.13	7.86	6.80	35.26	0.00	3.00	
12/18/2023	Average	13.04	5.09	39.87	1009.55	1066.78	5.35	37.65	55.15	17.50	42.03	7.82	7.48	6.80	35.24	0.00	3.44	Preheat/Normal(ON)/Shutdown/Off/Preheat
	Min	10.61	0.00	-9.90	851.56	987.71	5.00	22.11	51.40	14.33	34.92	7.07	7.34	6.79	32.93	0.00	1.00	
	Max	20.00	792.71	130.25	1059.32	1123.12	5.69	43.02	57.93	31.23	45.87	8.31	7.89	6.80	36.11	0.00	5.00	



December 2023 Incineration Averages Ranges

TheDate		OX6min	COmin	NOXmin	PrimTemp°C	SecTemp°C	SNCR	DemTemp°C	CarbTemp°C	DiffTemp°C	IDFanTemp°C	QuenchPH	CondPH	AtomPH	AtomA	AtomB	HEPADP	OpMode
12/19/2023	Average	13.36	2.94	44.94	968.28	1066.67	5.00	37.61	55.14	17.54	40.90	7.71	7.51	6.80	35.98	0.00	2.93	Preheat/Normal(ON)/Shutdown/Off/Preheat
	Min	11.04	0.00	-7.70	707.18	761.08	4.90	25.91	51.34	12.96	35.87	7.48	7.29	6.80	35.83	0.00	2.00	
	Max	20.30	58.30	97.98	1043.95	1102.54	5.00	42.48	57.49	25.44	42.85	8.03	8.03	6.80	36.23	0.00	4.00	
12/20/2023	Average	13.58	4.39	41.70	880.10	1059.95	5.01	35.55	53.59	18.04	39.55	7.54	7.60	6.80	34.25	0.00	3.61	Preheat/Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	8.97	0.00	-7.70	647.75	738.94	4.99	22.78	48.17	12.17	33.72	7.21	7.05	6.80	29.14	0.00	1.00	
	Max	20.37	886.66	103.14	972.96	1087.73	5.08	40.00	57.22	27.76	42.37	7.94	8.10	6.80	35.89	0.00	5.00	
12/21/2023	Average	14.10	1.21	48.33	906.66	1028.86	5.10	37.97	48.55	10.59	35.66	7.78	7.31	6.80	32.76	0.00	2.76	Normal(ON)/Shutdown/Off/Preheat/Normal(ON)
	Min	10.74	0.00	-2.20	581.28	672.11	4.99	24.67	28.46	-34.86	13.91	7.36	7.07	6.80	0.10	0.00	0.00	
	Max	20.37	101.44	123.93	1028.74	1099.61	5.77	63.33	53.00	24.39	41.49	8.82	7.55	6.80	40.90	0.00	4.00	
12/22/2023	Average	13.49	0.15	57.80	819.33	1038.77	5.00	31.48	51.47	20.00	34.83	7.43	7.57	6.80	39.90	0.00	0.47	Normal(ON)/Shutdown/Off/Preheat
	Min	10.94	0.00	0.00	672.68	533.83	4.99	19.33	47.02	17.91	29.61	7.33	7.25	6.80	38.31	0.00	0.00	
	Max	20.37	6.04	138.92	899.82	1166.19	5.00	36.55	54.75	27.75	37.85	7.84	8.32	6.80	40.79	0.00	1.00	
12/23/2023	Average	20.25	0.00	0.00	258.08	118.98	5.35	61.17	25.79	-35.38	10.76	7.62	7.44	6.80	3.55	0.00	0.00	Preheat/Shutdown/Off
	Min	20.08	0.00	0.00	108.46	27.78	3.97	18.20	19.44	-44.14	5.80	7.24	7.39	6.79	0.08	0.00	0.00	
	Max	20.41	0.00	0.00	670.87	861.46	6.50	69.96	47.08	28.77	29.59	8.07	8.14	6.80	38.30	0.00	0.00	
12/24/2023	Average	18.11	0.02	9.76	272.00	432.56	5.97	54.11	34.60	-19.51	17.03	7.65	7.37	6.80	10.26	0.00	0.00	Off/Preheat/Normal(ON)
	Min	10.02	0.00	0.00	58.29	21.62	4.65	24.29	24.95	-42.27	9.30	7.18	7.19	6.80	0.08	0.00	0.00	
	Max	20.42	11.19	83.80	714.38	1081.90	6.80	69.28	47.30	22.82	35.94	7.89	7.55	6.80	39.34	0.00	0.00	
12/25/2023	Average	12.51	1.99	53.92	910.21	1061.23	5.38	35.56	48.87	13.31	40.28	7.27	7.30	6.80	37.83	0.00	0.96	Normal(ON)
	Min	10.67	0.00	17.36	715.52	929.90	5.10	30.82	46.22	11.30	35.98	7.19	7.18	6.80	35.79	0.00	0.00	
	Max	15.90	969.60	136.27	987.97	1103.13	5.59	40.37	51.67	15.43	42.65	7.32	7.67	6.80	38.91	0.00	1.00	
12/26/2023	Average	12.88	0.88	51.06	921.36	1059.84	5.58	37.49	51.52	14.03	41.90	7.38	7.46	6.80	36.19	0.00	1.00	Normal(ON)
	Min	10.64	0.00	13.67	628.58	925.09	5.37	28.62	47.69	10.53	38.26	7.21	7.21	6.80	35.62	0.00	1.00	
	Max	15.92	423.21	169.16	1011.02	1104.17	5.83	40.60	54.74	25.03	44.11	7.73	8.07	6.80	36.55	0.00	1.00	
12/27/2023	Average	12.72	0.59	41.12	884.77	1065.07	5.77	36.65	54.20	17.55	43.41	7.38	7.53	6.80	37.98	0.00	1.00	Normal(ON)
	Min	11.06	0.00	13.73	609.52	1033.41	5.41	28.39	50.58	13.80	38.50	7.23	7.11	6.80	36.27	0.00	0.00	
	Max	14.71	413.06	175.70	986.37	1097.36	5.90	40.27	55.42	25.21	46.28	7.70	8.24	6.80	40.37	0.00	1.00	
12/28/2023	Average	12.30	0.29	53.73	865.31	1066.51	5.65	36.48	54.73	18.25	43.90	7.37	7.43	6.80	40.12	0.00	1.00	Normal(ON)
	Min	10.89	0.00	14.95	603.32	995.23	5.43	28.48	53.28	15.59	38.52	7.30	7.17	6.80	39.78	0.00	1.00	
	Max	14.08	69.49	172.98	956.26	1097.88	5.77	39.77	55.85	24.99	45.73	7.67	8.26	6.80	40.42	0.00	1.00	
12/29/2023	Average	12.62	2.80	72.13	967.30	1066.94	5.54	35.06	54.39	19.33	44.11	7.32	7.40	6.80	39.97	0.00	1.00	Normal(ON)/Shutdown/Off/Preheat
	Min	10.03	0.00	-9.90	770.18	825.80	5.04	27.01	52.34	16.50	41.00	7.27	7.28	6.80	39.82	0.00	1.00	
	Max	20.27	882.14	211.99	1037.59	1110.40	5.74	38.67	55.74	25.57	46.29	7.37	7.97	6.80	40.23	0.00	1.00	
12/30/2023	Average	13.10	2.30	60.24	931.59	1070.84	5.00	33.52	52.99	19.47	43.37	7.28	7.38	6.80	39.70	0.00	1.81	Preheat/Normal(ON)/Shutdown/Off/Preheat
	Min	10.73	0.00	-8.08	656.33	950.49	4.99	22.84	51.67	16.78	37.14	7.23	7.17	6.80	39.52	0.00	1.00	
	Max	20.00	99.52	178.77	1010.79	1132.10	5.04	36.87	54.07	29.63	45.45	7.35	8.08	6.80	39.88	0.00	2.00	
12/31/2023	Average	13.23	3.17	55.64	990.74	1070.18	5.00	34.24	53.26	19.01	43.02	7.18	7.36	6.80	38.52	0.00	1.84	Preheat/Normal(ON)/Shutdown/Off/Preheat
	Min	10.23	0.00	-5.50	636.63	929.97	4.90	21.72	51.71	15.47	36.69	6.30	7.07	6.80	37.52	0.00	1.00	
	Max	20.00	634.32	136.86	1515.38	1110.89	5.01	38.66	54.25	31.05	45.93	7.44	7.86	6.80	40.33	0.00	2.00	



December 2023 Incineration Feed Data

TheDate	00:00	01:00	02:00	03:00	04:00	05:00	06:00	07:00	08:00	09:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	DailySum	Monthly Sum	
01-Dec-23	655.80	646.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.90	0.00	558.50	589.30	654.40	653.00	650.30	650.40	650.30	655.20	656.10	654.40	7711.00	284918.1	
02-Dec-23	601.00	599.30	605.00	609.80	600.30	602.80	583.60	335.90	0.00	0.00	0.00	0.00	0.00	0.00	603.00	606.90	603.00	602.70	604.90	632.40	629.80	610.00	569.60	0.00	10000.00		
03-Dec-23	600.20	600.20	630.40	606.00	603.10	599.50	602.70	604.60	602.60	602.10	602.60	602.60	602.00	601.20	605.00	606.40	328.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10000.00		
04-Dec-23	599.80	603.90	604.90	602.50	601.10	600.70	605.60	502.60	607.30	600.20	603.00	600.90	604.30	607.10	609.40	603.10	443.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10000.00		
05-Dec-23	0.00	601.20	602.00	603.20	602.90	600.10	604.20	510.50	527.40	316.30	532.40	515.60	554.70	503.00	559.60	568.90	606.80	652.20	539.00	0.00	0.00	0.00	0.00	0.00	10000.00		
06-Dec-23	651.20	650.60	652.00	655.70	652.20	651.20	423.30	508.20	0.00	0.00	0.00	0.00	523.60	525.70	586.00	661.40	652.70	552.10	556.30	550.90	546.90	0.00	0.00	0.00	10000.00		
07-Dec-23	554.10	405.70	509.60	503.70	501.80	510.70	458.30	512.20	514.70	547.10	554.10	556.40	551.50	557.40	546.50	556.60	560.20	557.90	525.50	0.00	0.00	0.00	0.00	0.00	9984.00		
08-Dec-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	505.80	250.40	500.80	511.40	506.70	506.80	603.20	606.30	609.30	627.50	604.50	5832.70		
09-Dec-23	613.30	602.50	606.10	600.50	607.40	600.80	601.40	526.40	555.90	554.70	550.00	560.80	570.10	564.10	556.80	550.60	563.40	215.20	0.00	0.00	0.00	0.00	0.00	0.00	10000.00		
10-Dec-23	500.70	500.40	504.00	506.30	578.30	602.30	562.20	557.50	563.60	611.30	602.20	551.20	552.10	602.10	600.50	608.10	511.00	486.20	0.00	0.00	0.00	0.00	0.00	0.00	10000.00		
11-Dec-23	503.20	500.80	508.00	502.40	503.90	500.20	412.40	364.20	551.20	0.00	555.20	513.30	588.90	276.80	554.20	550.20	558.00	558.70	578.00	503.00	417.40	0.00	0.00	0.00	10000.00		
12-Dec-23	503.20	504.00	509.40	501.40	402.70	506.40	401.40	522.70	503.90	603.70	607.60	607.20	613.90	609.60	604.50	606.20	602.50	603.30	186.40	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
13-Dec-23	504.00	506.70	511.10	517.80	502.00	503.30	604.30	550.70	550.60	601.20	602.20	611.20	601.70	607.60	0.00	602.80	603.80	601.80	417.20	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
14-Dec-23	0.00	514.00	537.90	503.80	503.50	509.00	526.10	198.00	552.80	560.30	557.00	556.80	551.00	555.40	555.40	553.20	551.70	568.10	555.20	590.80	0.00	0.00	0.00	0.00	0.00		10000.00
15-Dec-23	561.80	603.00	600.80	602.20	600.80	600.30	650.50	491.60	560.60	571.00	559.80	608.10	604.30	358.10	531.90	583.60	612.90	298.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
16-Dec-23	622.00	600.20	601.40	605.10	601.10	605.20	617.50	603.10	603.20	509.60	599.40	602.20	609.30	605.20	611.90	606.20	374.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9977.00		
17-Dec-23	564.50	510.80	506.80	503.00	511.80	510.60	507.60	516.00	501.10	604.20	602.00	613.00	602.20	603.90	606.20	606.40	612.20	517.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
18-Dec-23	0.00	0.00	599.30	601.80	608.10	602.40	603.00	551.90	621.60	604.30	436.40	595.30	601.30	602.50	600.40	601.20	603.40	0.00	605.30	561.80	0.00	0.00	0.00	0.00	0.00		10000.00
19-Dec-23	338.80	636.50	624.60	633.60	617.80	602.70	615.50	88.40	553.60	555.20	573.30	575.10	559.60	549.20	555.10	603.60	619.20	601.00	97.20	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
20-Dec-23	584.40	604.30	599.10	601.00	598.10	574.80	592.80	505.70	558.50	553.80	556.60	384.90	522.00	506.40	104.00	0.00	0.00	0.00	0.00	620.00	555.40	507.00	471.20	0.00	10000.00		
21-Dec-23	650.20	655.30	654.20	657.70	656.00	651.10	540.70	587.50	554.40	603.60	602.40	566.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	157.80	604.00	630.00	615.20	613.50	10000.00		
22-Dec-23	609.10	619.50	609.80	609.40	606.80	590.20	614.00	553.00	554.00	551.80	555.20	563.00	564.70	578.10	580.90	581.00	599.40	60.10	0.00	0.00	0.00	0.00	0.00	0.00	10000.00		
23-Dec-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
24-Dec-23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	119.20	304.70	106.80	0.00	0.00	0.00	0.00	271.40	255.10	356.20	1413.40		
25-Dec-23	601.00	610.30	601.20	606.10	602.40	600.70	623.00	328.50	556.00	303.90	566.50	551.90	510.20	340.30	254.60	509.10	553.40	516.60	218.00	546.30	0.00	0.00	0.00	0.00	0.00		10000.00
26-Dec-23	600.00	600.20	600.80	601.00	549.60	600.60	466.00	552.20	502.20	553.50	562.00	551.80	552.40	551.80	550.20	553.00	564.40	488.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
27-Dec-23	602.80	605.00	601.40	608.40	600.80	601.60	606.40	553.10	550.20	503.40	553.60	557.40	552.40	552.70	552.00	553.40	605.20	240.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
28-Dec-23	543.70	503.60	507.00	528.60	503.40	503.90	520.30	553.30	558.10	605.80	555.20	552.00	567.80	282.90	565.80	554.10	596.70	562.40	435.40	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
29-Dec-23	601.60	604.60	602.50	603.40	613.70	577.20	407.80	562.20	557.70	23.60	554.00	563.60	553.40	311.40	575.00	560.60	553.40	612.30	562.00	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
30-Dec-23	551.10	571.00	560.10	573.70	575.60	553.40	417.50	550.40	553.10	551.80	557.00	553.40	566.80	570.40	570.70	553.20	573.00	597.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00		10000.00
31-Dec-23	503.50	501.30	577.80	502.00	501.30	523.20	504.90	580.40	580.40	580.10	588.40	579.10	607.70	614.60	650.50	657.10	543.40	404.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00		10000.00

Carbon Monoxide > 8ppm 4 hour alarm



Carbon Monoxide > 8ppm 4 hour alarm

	Start	Stop		Op.	Stack CO	Stack CO		Actions
Date	Time	Time	Duration	Mode	@ 11% O2	as mg/m ³	Explanation	Taken
12/7/2023	15:00	19:00	04:00	Normal	8.9	10.3	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
12/10/2023	00:01	4:00	03:59	Normal	11.8	13.6	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
12/14/2023	06:00	8:00	02:00	Normal	8.3	9.6	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
12/18/2023	23:00	0:00	01:00	Shutdown	9.1	10.5	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
12/25/2023	09:30	11:00	01:30	Normal	10.8	12.5	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
12/29/2023	02:30	7:00	04:30	Normal	10.7	12.3	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.
12/30/2023	01:52	4:00	02:08	Normal	8.2	9.5	High CO levels were caused by turbulence in the primary chamber during ram cycles.	The operator monitored the CO level and suspended feed until they returned to the normal operating range.

Secondary Chamber Temperature < 1000°C

Date	Start Time	Stop Time	Duration	Op. Mode	Temp. °C	Explanation	Actions Taken
12/16/2023	17:09	17:54	00:45	Shutdown	963	Low secondary chamber temperature caused by an incorrect flame-port air setting during shutdown	No waste was fed at this time. The incinerator was brought to a controlled shutdown.
12/25/2023	22:38	00:17	01:39	Normal	956	Low secondary chamber temperature caused by an incorrect flame-port air setting.	The operator adjusted the flame-port air setting. No waste was fed until the secondary chamber temperature returned to the normal operating range.

Atomizer Amps < 36

	Start	Stop		Op.	Atom. A	Atom. B		Action
Date	Time	Time	Duration	Mode	amps	amps	Explanation	Taken
12/23/2023	0:56:00	4:17:00	3:21:00	Shutdown	14.8		Atomizer amperge dropped during the shutdown process.	The incinerator was brought to a controlled shutown. No waste was fed at this time.

Differential from Demister < 10 C



Differential from Demister < 10°C

	Start	Stop		Op.	Differential Temp		Actions
Date	Time	Time	Duration	Mode	Outlet °C	Explanation	Taken
12/8/2023	3:29	6:23	02:54	Shutdown	0	Low differential temperature was the result of a high demister temperature during the shutdown process.	The incinerator was brought to a controlled shutdown.