## C.T. MALE ASSOCIATES

Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C.

50 Century Hill Drive, Latham, NY 12110 518.786.7400 FAX 518.786.7299 www.ctmale.com



May 28, 2024 *Via Email* 

Ms. Beth Magee Deputy Regional Permit Administrator New York State Department of Environmental Conservation Region 5 232 Golf Course Road Warrensburg, New York 12885-1172

Re: Wheelabrator Hudson Falls

Title V Permit Renewal - NYSDEC Permit ID 5-5344-00001/00016

C.T. Male Project No. 19.9051

Dear Ms. Magee:

C.T. Male Associates Engineering, Surveying, Architecture, Landscape Architecture & Geology, D.P.C. (C.T. Male) is submitting this application on behalf of Wheelabrator Hudson Falls LLC (Wheelabrator). This document and attachments are being submitted relative to the Title V Permit renewal for the Wheelabrator Hudson Falls facility, NYSDEC Permit ID 5-5344-00001. The facility's Title V Facility permit will expire on November 26, 2024, and this renewal application is being submitted 180-days prior to the permit expiration date, as required for Title V facilities.

As previously discussed with Department staff, the facility has previously submitted 6 NYCRR Part 219-10, Reasonably Available Control Technology (RACT) for Oxides of Nitrogen (NOx) at Municipal and Private Solid Waste Incineration Units documentation, which will be incorporated into the permit renewal. As such, additional information with respect to this regulatory requirement has not been included within this application package.

With respect to the Air Title V Permit, Wheelabrator is not seeking to modify any other enforceable conditions within the permit. All other facility operations will remain consistent with the currently permitted and exempt activities.

Emission calculations associated with facility operations are included in Attachment A, the Title V Permit Renewal Forms are included in Attachment B, the form titled "List of Exempt Activities" is included in Attachment C, and the form titled "Methods Used to Determine Compliance" is included in Attachment D.

## C.T. MALE ASSOCIATES

Ms. Beth Magee May 28, 2024 Page - 2

Should you have any questions or require additional information, please feel free to contact this office at (518) 786-7400 or Bob Brynes of Wheelabrator at (518) 747-2390 at your convenience.

Sincerely,

C.T. MALE ASSOCIATES

Joseph a. Farran If.

Joseph A. Farron, Jr.

Project Environmental Engineer

Reviewed and approved by:

Jeffrey A. Marx, P.E.

Managing Environmental Engineer

Jeffry A. May

Attachments

c: Bob Brynes, Tim Porter (Wheelabrator) Timothy Abrams (NYSDEC Region 5)

# Attachment A Emission Calculations

# **Attachment A.1**

# **2023 Greenhouse Gas Emissions Summary** from Combustion Activities

#### EMISSIONS OF GREENHOUSE GAS EMISSIONS FROM COMBUSTION

# <u>Annual Emissions Data Taken From 2023 e-GGRT Report</u> 1. Emission Information in Metric Tons

Contaminant Name	From Natural Gas Combustion	Unit 1 MSW Combustion	Unit 2 MSW Combustion	Total
Total CO2	6,010.9	59,321.3	60,640.8	125,973
Total Methane	0.11	20.93	21.39	42.43
Total Nitrous Oxide	0.011	2.747	2.808	5.57
Methane (CO2e)	2.8	523.2	534.9	1,061
Nitrous Oxide (CO2e)	3.4	818.6	836.8	1,659
Total CO2equivalents	6,017.1	60,663.1	62,012.5	128,693

#### 2. Emission Information in Tons

Contaminant Name	From Natural Gas	Unit 1 MSW	Unit 2 MSW	Total
Total CO2	6,625.9	65,390.5	66,845.0	138,861
Total Methane	0.12	23.07	23.58	46.77
Total Nitrous Oxide	0.012	3.03	3.10	6.14
Methane (CO2e)	3.09	576.73	589.63	1,169
Nitrous Oxide (CO2e)	3.75	902.35	922.41	1,829
Total CO2equivalents	6,632.7	66,869.5	68,357.0	141,859

#### **Certification Statement:**

The designated representative or alternate designated representative must sign (i.e., agree to) this certification statement. If you are an agent and you click on "SUBMIT", you are not agreeing to the certification statement, but are submitting the certification statement on behalf of the designated representative or alternate designated representative who is agreeing to the certification statement. An agent is only authorized to make the electronic submission on behalf of the designated representative, not to sign (i.e., agree to) the certification statement.

Facility Name: WHEELABRATOR HUDSON FALLS LLC

Facility Identifier:527532
Facility Reporting Year:2023

**Facility Location:** 

Address: 93 RIVER STREET City: HUDSON FALLS State: NY Postal Code: 12839

#### **Facility Site Details:**

CO2 equivalent emissions from facility subparts C-II, SS, and TT (metric tons):64,213.4

CO2 equivalent emissions from supplier subparts LL-QQ (metric tons):0

Biogenic CO2 emissions from facility subparts C-II, SS, and TT (metric tons):64,479

Cogeneration Unit Emissions Indicator:N GHG Report Start Date:2023-01-01 GHG Report End Date:2023-12-31

**Description of Changes to Calculation Methodology:** 

Plant Code Indicator:N Primary NAICS Code:562213 Second Primary NAICS Code:

#### Parent Company Details:

Parent Company Name: WHEELABRATOR TECHNOLOGIES HOLDINGS INC Address: 90 Arboretum Drive, Suite 310, Portsmouth, NH 03801

Percent Ownership Interest: 100

### **Subpart C: General Stationary Fuel Combustion**

#### **Gas Information Details**

Gas Name	Carbon Dioxide
<b>Gas Quantity</b>	61,494 (Metric Tons)
Own Result?	

Gas Name	Biogenic Carbon dioxide
<b>Gas Quantity</b>	64,479 (Metric Tons)
Own Result?	

Gas Name	Methane
<b>Gas Quantity</b>	42.43 (Metric Tons)
Own Result?	

Gas Name	Nitrous Oxide
<b>Gas Quantity</b>	5.566 (Metric Tons)
Own Result?	

#### **Unit Details:**

Unit Name: CP-1
Unit Description:
Common Pipe Details:
Use Ivt Indicator: Y

**Maximum Rated Heat Input Capacity: 52** 

**Cumulative Maximum Rated Heat Input Capacity: 52** 

#### **Emission Details:**

Annual Biogenic CO2 Emissions: 0 (metric tons)

Annual Fossil fuel based CO2 Emissions: 6010.9 (metric tons)

#### **Tier Fuel Details:**

Fuel: Natural Gas (Weighted U.S. Average)
Tier Name: Tier 2 (Equation C-2a)
Tier Methodology Start Date: 2023-01-01
Tier Methodology End Date: 2023-12-31

Frequency of HHV determinations : Other (specify)
Other specified frequency of HHV determinations : Factor

#### Tier 2 Monthly HHV Details:

<u> </u>											
January	February	March	April	May	June	July	August	September	October	November	December
N	N	N	N	N	N	N	N	N	N	N	N

#### Fuel Emission Details :

Total CO2 emissions	<b>Total CH4 emissions</b>	<b>Total N2O emissions</b>	Total CH4 emissions CO2e	Total N2O emissions CO2e
6010.9 (Metric Tons)	0.11 (Metric Tons)	0.011 (Metric Tons)	2.8 (Metric Tons)	3.4 (Metric Tons)

 $\textbf{Unit Name:} \ \mathsf{Unit}\ 1$ 

Unit Type: MWC (Municipal waste combustor)

**Unit Description:** 

**Individual Unit Details:** Use Ivt Indicator: Y

Maximum Rated Heat Input Capacity: 103.33 (mmBtu/hr)

#### **Emission Details:**

Annual CO<sub>2</sub> mass emissions from sorbent: 0 (Metric Tons) Annual Biogenic CO2 Emissions: 31885 (metric tons)

Sample Analysis Results for MSW

	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
1	0.51 (decimal fraction)	0.55 (decimal fraction)	0.57 (decimal fraction)	0.52 (decimal fraction)

#### **Tier Fuel Details:**

Fuel: Municipal Solid Waste

Tier Name: Tier 2 (Equation C-2c, steam generation) **Tier Methodology Start Date**: 2023-01-01

**Tier Methodology End Date**: 2023-12-31

#### Fuel Emission Details :

Total CO2 emissions Total CH4 emissions	Total N2O emissions	Total CH4 emissions CO2e	<b>Total N20 emissions CO2e</b>
59321.3 (Metric Tons) 20.93 (Metric Tons)	2.747 (Metric Tons)	523.2 (Metric Tons)	818.6 (Metric Tons)

Unit Name: Unit 2

Unit Type: MWC (Municipal waste combustor)

Unit Description:

**Individual Unit Details:** Use Ivt Indicator: Y

Maximum Rated Heat Input Capacity: 103.33 (mmBtu/hr)

**Annual Biogenic CO2 Emissions:** 32594 (metric tons)

Sample Analysis Results for MSW

First	Quarter	1	•		Third	Third Quarter			Fourth Quarter	
0.51	(decimal	fraction)	0.55	(decimal fraction	0.57	(decimal	fraction)	0.52	(decimal	fraction)

<u>Tier Fuel Details:</u> Fuel : Municipal Solid Waste

Tier Name: Tier 2 (Equation C-2c, steam generation) Tier Methodology Start Date: 2023-01-01 Tier Methodology End Date: 2023-12-31

#### **Fuel Emission Details**:

Total CO2 emissions	Total CH4 emission	s Total N2O emissions	Total CH4 emissions CO2e	Total N2O emissions CO2e
60640.8 (Metric Tons)	21.39 (Metric Tons)	2.808 (Metric Tons)	534.9 (Metric Tons)	836.8 (Metric Tons)

# **Attachment A.2**

2023 Emissions Summary from Natural Gas and MSW Combustion Activities

## Wheelabrator Hudson Falls Air Title V Permit Application C.T. Male Project No. 19.9051

# Potential to Emit - Natural Gas (Exempt Process E01 Only)

Pollutant	tons/yr
СО	8.85E+00
Lead	5.27E-05
Mercury	2.74E-05
Cadmium	1.16E-04
SO2	6.32E-02
PM-10	8.01E-01
NOX	1.48E+01
Unspeciated VOC	5.80E-01
CO2	1.26E+04

#### Potential to Emit - MSW

Pollutant	tons/yr				
СО	9.62E+01				
Lead	3.30E-01				
Mercury	4.13E-02				
Cadmium	2.89E-02				
SO2	6.38E+01				
PM-10	2.06E+01				
NOX	3.24E+02				
Unspeciated VOC	3.94E+01				
CO2	1.79E+05				
Dioxin	2.89E-05				
HCI	3.63E+01				
Chromium VI	1.75E-02				
PCB	1.87E-03				
PAH	7.45E-02				

#### **Facility-Wide Potential Emissions**

Pollutant	tons/yr	lb/yr
со	1.05E+02	210,110
Lead	3.30E-01	660.6
Mercury	4.13E-02	82.62
Cadmium	2.90E-02	58.03
SO2	6.39E+01	127,794
PM-10	2.14E+01	42,885
NOX	3.39E+02	677,504
Unspeciated VOC	4.00E+01	79,999
CO2	1.92E+05	383,873,555
Dioxin	2.89E-05	0.058
HCI	3.63E+01	72,657
Chromium VI	1.75E-02	35.04
PCB	1.87E-03	3.73
PAH	7.45E-02	148.9

### Actual Emissions - Natural Gas Processes 001, 003, E01

Pollutant	tons/yr				
СО	4.25E+00				
Lead	2.53E-05				
Mercury	1.32E-05				
Cadmium	5.57E-05				
SO2	3.04E-02				
PM-10	3.85E-01				
NOX	7.08E+00				
Unspeciated VOC	2.78E-01				
CO2	6.07E+03				

#### **Actual Emissions - MSW**

Pollutant	tons/yr				
CO	2.80E+01				
Lead	4.47E-02				
Mercury	2.90E-03				
Cadmium	4.91E-03				
SO2	1.21E+01				
PM-10	2.91E+00				
NOX	1.95E+02				
Unspeciated VOC	6.25E-01				
CO2	1.31E+05				
Dioxin	1.97E-06				
HCI	2.19E+01				
Chromium VI	3.16E-04				
PCB	4.33E-06				
PAH	1.76E-04				

#### **Facility-Wide Actual Emissions**

Pollutant	tons/yr	lb/yr			
СО	3.22E+01	64,402			
Lead	4.47E-02	89.35			
Mercury	2.91E-03	5.83			
Cadmium	4.96E-03	9.92			
SO2	1.21E+01	24,171			
PM-10	3.29E+00	6,589			
NOX	2.02E+02	403,169			
Unspeciated VOC	9.03E-01	1,807			
CO2	1.37E+05	274,884,002			
Dioxin	1.97E-06	0.0039			
HCI	2.19E+01	43,800			
Chromium VI	3.16E-04	0.63			
РСВ	4.33E-06	0.0087			
PAH	1.76E-04	0.35			

#### **EMISSIONS OF AIR CONTAMINANTS FROM NATURAL GAS COMBUSTION**

#### Natural Gas Usage - 2023 (from 2023 Emission Statement):

Process E01 (Exempt) 14.55 Million Cubic Feet 604.8 Hours in 2023 (4.0 hr/day; 7.0 days/wk; 21.6 wk/yr)

Process 001 39.8 Million Cubic Feet
Process 003 46.86 Million Cubic Feet
Total Annual Consumption 101.21 Million Cubic Feet

#### **Emission Factors:**

As per AP-42, Chapter 1.4 for Natural Gas Combustion

Contaminant Name	Natural Gas Emission Factor (Ib/Million SCF)	Natural Gas Emission Factor (Ib/MMBTU)*		
$NO_X$	140	0.137		
Lead	0.0005	4.90E-07		
Mercury	0.00026	2.55E-07		
Cadmium	0.0011	1.08E-06		
SO <sub>2</sub>	0.6	0.000588		
CO	84	0.0824		
PM	7.6	0.00745		
VOC	5.5	0.00539		
CO <sub>2</sub>	120,000	117.65		

<sup>\* -</sup> Per AP-42, divide Emission Factor (lb/Million SCF) by 1,020 to obtain Emission Factor (lb/MMBTU).

#### Actual Annual Natural Gas Combustion-Related Emissions (2023)

Annual Emissions from Natural Gas Combustion (lb/yr) = Annual Natural Gas Usage (Million CF) \* Emission Factor (lb/Million CF) 2023 Natural Gas Usage = 101.21 Million Cubic Feet

Contaminant	Combined	Combined			
Name	Emissions (lb/yr)	Emissions (ton/yr)			
$NO_X$	14,169	7.08			
Lead	0.051	2.53E-05			
Mercury	0.0263	1.32E-05			
Cadmium	0.111	5.57E-05			
SO <sub>2</sub>	60.73	0.0304			
CO	8,502	4.25			
PM	769.2	0.385			
VOC	556.7	0.278			
CO <sub>2</sub>	12,145,200	6,073			

#### Potential to Emit from Exempt Natural Gas Combustion

PTE from Natural Gas Combustion in Exempt Source (lb/yr) = Annual Emissions Per Source (lb/yr) / Hours of Operation per Source (hr/yr) \* 8,760 hr/yr PTE (tons/yr) = Emissions (lb/yr) / 604.8 (hr/yr) \* 8,760 (hr/yr) / 2000 (lb/ton)

Analysis assumes PTE for MSW Combustors would be based on MSW combustion only (no use of natural gas as supplemental fuel)

Contaminant	Exempt Process E01							
Name	Annual (lb/yr)	Hourly (lb/hr)	PTE (ton/yr)					
NO <sub>X</sub>	2,037	3.37	14.75					
Lead	0.0073	0.000012	0.000053					
Mercury	0.0038	0.0000063	0.000027					
Cadmium	0.016	0.000026	0.00012					
SO <sub>2</sub>	8.73	0.014	0.063					
CO	1,222	2.02	8.85					
PM	110.6	0.18	0.80					
VOC	80.03	0.13	0.58					
CO <sub>2</sub>	1,746,000	2,887	12,645					

#### Section 2.3 - Combustion and Incineration Process Emissions

Owner: WHEELABRATOR HUDSON FALLS LLC

93 RIVER ST

HUDSON FALLS, NY 12839

Facility: WHEELABRATOR HUDSON FALLS 93 RIVER ST

HUDSON FALLS, NY 12839

**DARID:** 5344010149

Primary SIC: 4953

**DECID:** 5534400001

**Process Data** 

Emission Unit: U-00001

If any Process data including SCC Code, "thruput units", or process description need to be changed, please contact DEC.

SCC: 3-90-006-89 NATURAL GAS:GENERAL Process ID: 001

SCC Desc: IN-PROCESS FUEL USE

INDUSTRIAL PROCESSES - IN-PROCESS FUEL USE

General

Fuel Type: NATURAL GAS Annual Thruput: 39.80 Thruput Units: \* million cubic feet burned

#### **Process Description:**

This process involves natural gas combustion during upset conditions and as supplemental fuel during startup and shutdown. In addition, this unit is operated on natural gas during warm up prior to introducing waste. All the emission limits and compliance are associated with process 002 for this emission unit.

#### **Control Equipment Description:**

Provide control efficiency below with emissions summary

#### **Operational Data:**

Annual Average		Percent Fuel Use by Season			Jun - Aug			Jan, Feb, & Dec of 2023				
Hrs/Day	Days/Wk	Wks/Yr	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Wk	<b>Total Days</b>	Hrs/Day	Days/Wk	<b>Total Days</b>
2.94	0.86	6.38	26.0	20.9	34.0	19.0	4.56	1.33	17.46	1.59	0.46	5.95

#### **Process Contaminant Summary:**

Chem Family	CAS No.	Contaminant Name	Control Efficiency (%)	Actual (Lbs/yr)	HD	Emission Factor	Source
6	000124-38-9	CARBON DIOXIDE					
5	000630-08-0	CARBON MONOXIDE	-				
8	007439-92-1	LEAD		-			
2	007446-09-5	SULFUR DIOXIDE					
3	010102-44-0	NITROGEN DIOXIDE					
7	0NY075-00-5	PM-10					
1	0NY075-10-0	UNSPECIATED PARTICULATES (EMISSION STATEMENT USE ONLY)					
7	0NY075-10-5	UNSPECIATED PM-10 (EMISSION STATEMENT USE ONLY)					
3	0NY210-00-0	OXIDES OF NITROGEN					
4	0NY998-10-0	UNSPECIATED VOC (EMISSION STATEMENT USE ONLY)			_		
					$\equiv$		

<sup>\*</sup> Do not use any "Thruput Units" other than those which correspond to this Process SCC Code.

#### **Section 2.3 - Combustion and Incineration Process Emissions**

Owner: WHEELABRATOR HUDSON FALLS LLC

93 RIVER ST

HUDSON FALLS, NY 12839

Facility: WHEELABRATOR HUDSON FALLS 93 RIVER ST HUDSON FALLS, NY 12839

						DARID: 5344010149						
						Primar	<b>/ SIC</b> : 495	3	DECID: 5	534400001		
Process D	<u>Data</u>					Emissi	on Unit: U	-00002				
If any P	rocess data	including	SCC Code,	"thruput u	nits", or pı	rocess desc	ription nee	ed to be cha	nged, pleas	se contact	DEC.	
SCC:	3-90-006-89	NATURAL	GAS:GENE	RAL				Process	<b>D</b> : 003			
SCC Desc: IN-PROCESS FUEL USE INDUSTRIAL PROCESSES - IN-PROCESS FUEL USE General												
Fuel Type:	NATURAL G	AS		Annual T	hruput:	46.86	т	hruput Unit	s: * millio	n cubic fee	t burned	
* Do no	ot use any "T	hruput Uni	its" other th	an those w	hich corre	spond to th	is Process	SCC Code				
Process De	scription:											
	s involves nat natural gas d iit.											
Control Equ	uipment Des	cription:										
Provide of	control efficier	ncy below v	vith emission	ns summary	,							
Operation	nal Data:											
A	nnual Averag	ıe	Peı	cent Fuel l	Jse by Sea	son		Jun - Aug		Jan,	Feb. & De	c of 2023
Hrs/Day	-	Wks/Yr				Sep-Nov		Days/Wk		Hrs/Day	Days/Wk	Total Days
3.61	1.06	7.85	25.7	21.2	32.2	20.8	5.45	1.59	20.89	2.95	0.86	11.07
Process (	Contaminar	nt Summa	irv.									

Providing fuel combustion emissions for the process listed above is OPTIONAL. REPORT EMISSIONS IF KNOWN. Otherwise, federal emission factors will be used to calculate your emissions.

Chem Family	CAS No.	Contaminant Name	Control Efficiency (%)	Actual (Lbs/yr)	HD	Emission Factor	Source
6	000124-38-9	CARBON DIOXIDE					
5	000630-08-0	CARBON MONOXIDE					
8	007439-92-1	LEAD					
2	007446-09-5	SULFUR DIOXIDE					
3	010102-44-0	NITROGEN DIOXIDE					
7	0NY075-00-5	PM-10					
1	0NY075-10-0	UNSPECIATED PARTICULATES (EMISSION STATEMENT USE ONLY)					
7	0NY075-10-5	UNSPECIATED PM-10 (EMISSION STATEMENT USE ONLY)					
3	0NY210-00-0	OXIDES OF NITROGEN					
4	0NY998-10-0	UNSPECIATED VOC (EMISSION STATEMENT USE ONLY)					

Data Not Measured - Use Federal Emission Factors for Calculations

#### **Section 2.3 - Combustion and Incineration Process Emissions**

Owner: WHEELABRATOR HUDSON FALLS LLC

93 RIVER ST

HUDSON FALLS, NY 12839

000106-97-8 BUTANE 000107-02-8 ACROLEIN Facility: WHEELABRATOR HUDSON FALLS 93 RIVER ST HUDSON FALLS, NY 12839

**DARID**: 5344010149

						Primar	y <b>SIC</b> : 495	3	DECI	): 55344000	001		
Proces	s Data					Emissi	on Unit: E-	10001	_	_			
If a	ny Process dat	a including	SCC Code,	"thruput u	nits", or p	rocess des	cription nee	ed to be c	hanged, p	lease conta	act DE	C.	
S	CC: 1-03-006-0	3 C/I:NAT.G	AS/<10 MM	BTU/HR				Proces	s ID: E01	(EXEMF	'Τ')		
SCC De		COMBUST CIAL/INSTITU 10 MMBtu/H	JTIONAL BO										
Fuel Typ	oe: NATURAL	GAS		_ Annual T	hruput:	14.55	т	hruput U	nits: 🌸 n	nillion cubic	feet bu	ırned	
* De	o not use any '	Thruput Un	its" other t	han those w	vhich corre	espond to t	nis Process	SCC Co	de.				
Space h	s Description: neaters. Equipment De ide control effici		with emissio	ns summary	,								
Operat	tional Data:												
	Annual Avera Days/Wk	•				ason Sep-Nov				- Ja nys Hrs/D		o, & Dec of ays/Wk To	
4.0	7.0	21.6	50	25	0	25	0.0	0.0	00_	4.0		7.0	90
Proces	ss Contamina	ant Summa	ary:										
Provid	ding fuel comb	oustion emi	 ssions for t	the process	s listed ab	ove is OP1	IONAL. RI	EPORT E	EMISSIO	NS IF KNO	WN.		
	nerwise, feder												
Chem									Control Efficiency (%)			Emission	
	CAS No.	Contamina							(70)	(Lbs/yr)	HD	Factor	Source
9	000050-00-0	FORMALD	EHYDE										
9	000050-32-8	BENZO(A)	PYRENE										
8	000053-70-3	DIBENZ[A,	H]ANTHRA	CENE									
8	000056-49-5	3-METHYL	.CHOLANTH	RENE									
9	000056-55-3	BENZO(A)	ANTHRACE	NE					_				
8	000057-97-6	7,12-DIME	THYLBENZ	[A]ANTHRA	CENE								
9	000071-43-2	BENZENE											
6	000074-82-8	METHANE											
6	000074-84-0	ETHANE											
4	000074-98-6	PROPANE									_		
9	000075-07-0	ACETALDE	EHYDE										
8	000083-32-9	ACENAPH	THENE										
9	000085-01-8												
8	000086-73-7												
9	000091-20-3												
8	000001-57-6			ENE									

#### **EMISSIONS OF AIR CONTAMINANTS FROM MSW COMBUSTION**

#### Annual Emissions (Based on 2023 Operations Per Emission Unit from Emission Statement)

Process 002 66,911.95 tons burned 5851.2 Hours of Operation in 2023 (20.96 hr/day; 6.13 days/wk; 45.54 wk/yr)
Process 004 66,458 tons burned 6566.5 Hours of Operation in 2023 (21.78 hr/day; 6.37 days/wk; 47.33 wk/yr)

0	Emissions	by Process	2023 Actual	Operations	
Contaminant Name	Process 002 (lb/yr)	Process 004 (lb/yr)	Combined lb/yr	Combined ton/yr	Data Source
CO	CO <b>17,600 38,300</b>		55,900	27.95	2023 Emission Statement
Dioxin	0.0011	0.0028	0.0039	1.97E-06	2023 Emission Statement
Lead	65.80	23.50	89.30	4.47E-02	2023 Emission Statement
Mercury	2.95	2.85	5.80	2.90E-03	2023 Emission Statement
Cadmium	Cadmium <b>7.87 1.94</b>			4.91E-03	2023 Emission Statement
Chromium VI*	Chromium VI* 0.038 0.59		0.63	3.16E-04	2023 Stack Test & 2023 Hours
PCB**	0.0041	0.0046	0.009	4.33E-06	2023 Stack Test & 2023 Hours
PAH***	0.17	0.19	0.35	1.76E-04	2023 Stack Test & 2023 Hours
SO <sub>2</sub>	14,200	9,910	24,110	12.06	2023 Emission Statement
HCI	19,800	24,000	43,800	21.90	2023 Emission Statement
PM-10	3,940	1,880	5,820	2.91	2023 Emission Statement
$NO_X$	182,000	207,000	389,000 194.50 2		2023 Emission Statement
VOC	649	601	1,250 0.63 2		2023 Emission Statement
CO <sub>2</sub> ****	131,816,542	130,922,260	262,738,802	131,369	AP-42 Chapter 2.1

<sup>\* -</sup> Based on stack test hourly emission data (6.52E-6 lb/hr and 5851.2 hr/yr for Unit 1 and 9.03E-5 lb/hr and 6566.5 hr/yr for Unit 2)

<sup>\*\* -</sup> Based on stack test hourly emission data (6.97E-7 lb/hr per unit and 5851.2 hr/yr for Unit 1 and 6566.5 hr/yr for Unit 2)

<sup>\*\*\* -</sup> Based on stack test hourly emission data (2.84E-5 lb/hr per unit and 5851.2 hr/yr for Unit 1 and 6566.5 hr/yr for Unit 2)

<sup>\*\*\*\* -</sup> Based on combustion totals and AP-42 emission factor for CO<sub>2</sub> (Chapter 2.1), 1.97E+03 lb/ton (Uncontrolled)

#### **Potential to Emit Calculations**

- PTE (lb/yr for pollutants with Conc. Based limits) = Avg. Air Flow per Process \* Pollutant Concentration \* 60 min/hr \* 8,760 hr/yr Pollutant Concentration conversions based on contaminant Molecular Weight (64.0648 for SO2; 46.0 for NOX; 28.0 for CO; and 36.46 for HCl)
- VOC calculation uses permit established factor of 4.5 lb VOC per hour for each incinerator and 8,760 hours per year
- Chromium VI, PCB and PAH calculations use permit established emission factors for each incinerator and 8,760 hours per year
- $CO_2$  calculations based on  $NO_X$  hourly scaled up based on Emission Factors in AP-42 Chapter 2.1 (3.56E+00 for  $NO_X$  and 1.97E+03 for  $CO_2$ ) (CO2 lb/hr = NOX lb/hr \* (1.97E+03 / 3.56E+00))

Contaminant Name	Max. Concentration Limit in Permit		Emissions by Process (lb/hr)		Combined PTE	E at 8,760 hr/yr	PTE Based on Permitted NO <sub>X</sub> or other Mass Limit*		
			Process 002	Process 004	lb/hr	lb/yr	lb/yr	ton/yr	
CO	100	ppm	11.12	10.63	21.75	190,527	192,407	96.20	
Dioxin	35	ng/dscm	3.34E-06	3.19E-06	6.53E-06	0.057	0.058	2.89E-05	
Lead	400	ug/dscm	3.82E-02	3.65E-02	7.47E-02	654	660.5	0.33	
Mercury	50	ug/dscm	4.77E-03	4.56E-03	9.33E-03	81.76	82.57	4.13E-02	
Cadmium	35	ug/dscm	3.34E-03	3.19E-03	6.53E-03	57.23	57.80	2.89E-02	
Chromium VI**	N/A	(based on	0.02 lb/hr per i	ncinerator)	0.004	35.04	35.04	1.75E-02	
PCB***	N/A	(based on 0.	000213 lb/hr pe	er incinerator)	0.000426	3.73	3.73	1.87E-03	
PAH****	N/A	(based on (	0.0085 lb/hr per	incinerator)	0.017	148.9	148.9	7.45E-02	
SO <sub>2</sub>	29	ppm	7.38	7.05	14.43	126,420	127,668	63.83	
HCl	29	ppm	4.20	4.01	8.21	71,947	72,657	36.33	
PM-10	25	mg/dscm	2.39	2.28	4.67	40,880	41,283	20.64	
NO <sub>X</sub> *****	205	ppm	37.46	35.79	73.25	641,668	648,000	324.0	
VOC	N/A	(based	on 4.5 lb VOC/h	nr from each inc	inerator)	78,840	78,840	39.42	
CO <sub>2</sub>	N/A		20,730	19,804	40,534.29	355,080,418	358,584,270	179,292	

Avg Air Flow (DSCFM 7% O2)

25,491

24,352

(from 2023 Stack Testing)

- \* Application PTE is based on calculated PTE adjusted to be consistent with 648,000 lb/yr annual NO<sub>X</sub> limit listed in current permit to account for slight fluctuations in air flow from stack testing performed annually. No adjustments for Chromium VI, PCB, PAH or VOC due to mass limits in permit.
- \* Chromium VI PTE is limited by permit condition of 0.002 lb/hr for each incinerator.
- \*\* PCB PTE is limited by permit condition of 0.000213 lb/hr for each incinerator.
- \*\*\* PAH PTE is limited by permit condition of 0.0085 lb/hr for each incinerator.
- \*\*\*\* NO<sub>X</sub> has existing emission limits per emission unit in the permit (162 tons each), and MSW Combustion PTE was calculated to comply with that facility-wide limit.

# **Attachment A.3**

# 2023 HAP Emissions Summary from MSW Combustion Activities

# Wheelabrator Hudson Falls LLC Air Title V Permit Application C.T. Male Project No. 19.9051

#### **2023 Emission Statement Data for HAP Emissions**

#### Annual HAP Emissions from MSW Combustion - 2023 (from 2023 Emission Statement or based on 2023 Stack Testing and Hours for PCB):

Family	CAS No.	Contominant Name	Unit 1	Unit 2	Combined	PM/HAP	VOC/HAP	HAP Only	Tota	I НАР
raminy	CAS NO.	Contaminant Name	Lb/Yr	Lb/Yr	lb/yr	Category 8	Category 9	Category 10	lb/yr	tons/yr
9	000050-00-0	FORMALDEHYDE	3.43E+02	3.47E+02	6.90E+02		690		6.90E+02	3.45E-01
9	000050-32-8	BENZO(A)PYRENE	2.78E-03	1.22E-03	4.00E-03		0.004		4.00E-03	2.00E-06
6	000074-82-8	METHANE			0.00E+00				0.00E+00	0.00E+00
6	000124-38-9	CARBON DIOXIDE			0.00E+00				0.00E+00	0.00E+00
5	000630-08-0	CARBON MONOXIDE	1.76E+04	3.84E+04	5.60E+04				0.00E+00	0.00E+00
9	001336-36-3	POLYCHLORINATED BIPHENYL (PCB)	4.08E-03	4.58E-03	8.66E-03		0.00866		8.66E-03	4.33E-06
8	001746-01-6	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN	1.11E-03	2.83E-03	3.94E-03	0.00394			3.94E-03	1.97E-06
8	007439-92-1	LEAD	6.58E+01	2.35E+01	8.93E+01	89.3			8.93E+01	4.47E-02
8	007439-96-5	MANGANESE	2.95E+00	2.85E+00	5.80E+00	5.8			5.80E+00	2.90E-03
8	007439-97-6	MERCURY	2.95E+00	2.85E+00	5.80E+00	5.8			5.80E+00	2.90E-03
8	007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS	1.63E+00	1.48E+00	3.11E+00	3.11			3.11E+00	1.56E-03
8	007440-38-2	ARSENIC	5.81E-01	1.67E-01	7.48E-01	0.748			7.48E-01	3.74E-04
1	007440-39-3	BARIUM	2.65E+00	1.64E+00	4.29E+00				0.00E+00	0.00E+00
8	007440-41-7	BERYLLIUM	2.78E-02	2.74E-02	5.52E-02	0.0552			5.52E-02	2.76E-05
8	007440-43-9	CADMIUM	7.87E+00	1.94E+00	9.81E+00	9.81			9.81E+00	4.91E-03
8	007440-47-3	CHROMIUM	2.13E+00	1.87E+00	4.00E+00	4			4.00E+00	2.00E-03
8	007440-48-4	COBALT	1.14E-01	1.10E-01	2.24E-01	0.224			2.24E-01	1.12E-04
1	007440-50-8	COPPER	1.71E+01	6.92E+00	2.40E+01				0.00E+00	0.00E+00
1	007440-62-2	VANADIUM	1.12E-01	1.10E-01	2.22E-01				0.00E+00	0.00E+00
1	007440-66-6	ZINC	2.80E+02	1.11E+02	3.91E+02				0.00E+00	0.00E+00
2	007446-09-5	SULFUR DIOXIDE	1.42E+04	9.91E+03	2.41E+04				0.00E+00	0.00E+00
10	007647-01-0	HYDROGEN CHLORIDE	1.98E+04	2.40E+04	4.38E+04			43,800	4.38E+04	2.19E+01
10	007664-39-3	HYDROGEN FLUORIDE	1.25E+02	1.20E+02	2.45E+02			245	2.45E+02	1.23E-01
6	007664-93-9	SULFURIC ACID	1.03E+03	6.65E+02	1.70E+03				0.00E+00	0.00E+00
8	007782-49-2	SELENIUM	1.12E-01	1.10E-01	2.22E-01	0.222			2.22E-01	1.11E-04
3	10102-44-0	NITROGEN DIOXIDE			0.00E+00				0.00E+00	0.00E+00
6	036088-22-9	PENTACHLORODIBENZODIOXIN			0.00E+00				0.00E+00	0.00E+00
7	0NY075-005	PM-10			0.00E+00				0.00E+00	0.00E+00
1	0NY075-10-0	UNSPECIATED PARTICULATES	3.94E+03	1.88E+03	5.82E+03				0.00E+00	0.00E+00
7	0NY075-10-5	UNSPECIATED PM-10			0.00E+00				0.00E+00	0.00E+00
3	ONY21O-00-0	OXIDES OF NITROGEN	1.82E+05	2.07E+05	3.89E+05				0.00E+00	0.00E+00
4	0NY998-10-0	UNSEPCIATED VOC	6.49E+02	6.01E+02	1.25E+03				0.00E+00	0.00E+00
		TOTAL HAP (BY CATEGORY AND ALL HAP COME	SINED)			119.07	690.01	44,045	4.49E+04	2.24E+01

<sup>&</sup>quot;Family" Designations from Emission Statement are counted into Total HAP (8 = PM/HAP; 9 = VOC/HAP; 10 = HAP Only), all others do not count toward Total HAP amount.

#### Section 2.3 - Combustion and Incineration Process Emissions

Owner: WHEELABRATOR HUDSON FALLS LLC

93 RIVER ST

HUDSON FALLS, NY 12839

Facility: WHEELABRATOR HUDSON FALLS 93 RIVER ST

HUDSON FALLS, NY 12839

**DARID: 5344010149** 

Primary SIC: 4953

**DECID:** 5534400001

**Process Data** 

Emission Unit: U-00001

If any Process data including SCC Code, "thruput units", or process description need to be changed, please contact DEC.

SCC: 5-03-001-12 INCINERTR-IND:WATERWALL COMB

Process ID: 002

Thruput Units: 💌 tons burned

SCC Desc: SOLID WASTE DISPOSAL - INDUSTRIAL

SOLID WASTE DISPOSAL: INDUSTRIAL - INCINERATION

SOL WST DISP-INDUSTRIAL:INCINERATION:MASS BURN WATERWALL COMBUSTOR

**Annual Thruput:** 

\* Do not use any "Thruput Units" other than those which correspond to this Process SCC Code.

#### **Process Description:**

This process involves municipal solid waste and/or solid waste combustion (mass-burn) in a water wall refractory combustor to generate electricity for sale.

66,911.95

#### **Control Equipment Description:**

Fuel Type: REFUSE DERIVED FUEL

Provide control efficiency below with emissions summary

#### **Operational Data:**

Annual Average			Pe	rcent Fuel l	Jse by Sea	son		- Jun - Aug		Jan, Feb, & Dec of 2023			
Hrs/Day	Days/Wk	Wks/Yr	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Wk	<b>Total Days</b>	Hrs/Day	Days/Wk	<b>Total Days</b>	
20.96	6.13	45.54	25.5	25.1	25.4	24.0	21.65	6.31	83.00	21.27	6.20	79.77	

#### **Process Contaminant Summary:**

Chem			Control	/ Actual		Emission	
	CAS No.	Contaminant Name	(%)	(Lbs/yr)	HD	Factor	Source
9	000050-00-0	FORMALDEHYDE		3.43E+02	_1_		
9	000050-32-8	BENZO(A)PYRENE		2.78E-03	1		
6	000074-82-8	METHANE	10				
6	000124-38-9	CARBON DIOXIDE					
5	000630-08-0	CARBON MONOXIDE		1.76E+04	7		
9	001336-36-3	POLYCHLORINATED BIPHENYL					
8	001746-01-6	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN		1.11E-03	1		
8	007439-92-1	LEAD		6.58E+01	1		
8	007439-96-5	MANGANESE		2.95E+00	1		
8	007439-97-6	MERCURY		2.95E+00	_1_		
8	007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS		1.63E+00	1		
8	007440-38-2	ARSENIC		5.81E-01	_1_		
1	007440-39-3	BARIUM		2.65E+00	1		
8	007440-41-7	BERYLLIUM		2.78E-02	_1_		
8	007440-43-9	CADMIUM		7.87E+00	1		
8	007440-47-3	CHROMIUM		2.13E+00	_1_		
8	007440-48-4	COBALT		1.14E-01	_1_		
1	007440-50-8	COPPER		1.71E+01	1		

#### Section 2.3 - Combustion and Incineration Process Emissions

Owner: WHEELABRATOR HUDSON FALLS LLC

93 RIVER ST

HUDSON FALLS, NY 12839

Facility: WHEELABRATOR HUDSON FALLS

93 RIVER ST

HUDSON FALLS, NY 12839

**DARID:** 5344010149

Primary SIC: 4953

**DECID:** 5534400001

#### **Process Contaminant Summary:**

Chem			Control Efficiency	Actual		Emission	
Family	CAS No.	Contaminant Name	(%)	(Lbs/yr)	HD	Factor	Source
1	007440-62-2	VANADIUM		1.12E-01	_1_		
1	007440-66-6	ZINC		2.80E+02	1		
2	007446-09-5	SULFUR DIOXIDE	80	1.42E+04	7		
10	007647-01-0	HYDROGEN CHLORIDE	98	1.98E+04	1		
10	007664-39-3	HYDROGEN FLUORIDE	99.9	1.25E+02	_1_		
6	007664-93-9	SULFURIC ACID		1.03E+03	1		
8	007782-49-2	SELENIUM		1.12E-01	_1_		
3	010102-44-0	NITROGEN DIOXIDE					
6	036088-22-9	PENTACHLORODIBENZODIOXIN					
7	0NY075-00-5	PM-10					
1	0NY075-10-0	UNSPECIATED PARTICULATES (EMISSION STATEMENT USE ONLY)		3.94E+03	_1_		
7	0NY075-10-5	UNSPECIATED PM-10 (EMISSION STATEMENT USE ONLY)					
3	0NY210-00-0	OXIDES OF NITROGEN		1.82E+05	7		
4	0NY998-10-0	UNSPECIATED VOC (EMISSION STATEMENT USE ONLY)		6.49E+02	1		

#### Section 2.3 - Combustion and Incineration Process Emissions

Owner: WHEELABRATOR HUDSON FALLS LLC

93 RIVER ST

HUDSON FALLS, NY 12839

Facility: WHEELABRATOR HUDSON FALLS 93 RIVER ST HUDSON FALLS, NY 12839

**DARID:** 5344010149

Primary SIC: 4953

Emission Unit: U-00002

**DECID:** 5534400001

#### **Process Data**

If any Process data including SCC Code, "thruput units", or process description need to be changed, please contact DEC.

SCC: 5-03-001-12 INCINERTR-IND:WATERWALL COMB

Process ID: 004

Thruput Units: \* tons burned

SCC Desc: SOLID WASTE DISPOSAL - INDUSTRIAL

SOLID WASTE DISPOSAL - INDUSTRIAL SOLID WASTE DISPOSAL: INDUSTRIAL - INCINERATION

SOL WST DISP-INDUSTRIAL:INCINERATION:MASS BURN WATERWALL COMBUSTOR

**Annual Thruput:** 

\* Do not use any "Thruput Units" other than those which correspond to this Process SCC Code.

# Process Description:

This process involves municipal solid waste and/or solid waste combustion (mass-burn) in a water wall refractory combustor to generate electricity for sale.

66,458

#### Control Equipment Description:

Fuel Type: REFUSE DERIVED FUEL

Provide control efficiency below with emissions summary

#### **Operational Data:**

An	Annual Average			Percent Fuel Use by Season			Season Jun - Aug			Jan, I	Feb, & Dec	of 2023
Hrs/Day	Days/Wk	Wks/Yr	Dec-Feb	Mar-May	Jun-Aug	Sep-Nov	Hrs/Day	Days/Wk	<b>Total Days</b>	Hrs/Day	Days/Wk	<b>Total Days</b>
21.78	6.37	47.33	26.0	24.7	24.5	24.7	21.87	6.38	83.85	22.30	6.50	83.63

#### **Process Contaminant Summary:**

Chem Family	CAS No.	Contaminant Name	Control Efficiency (%)	Actual (Lbs/yr)	HD	Emission Factor	Source
9	000050-00-0	FORMALDEHYDE		3.47E+02	1		
9	000050-32-8	BENZO(A)PYRENE		1.22E-03	1		
6	000074-82-8	METHANE					
6	000124-38-9	CARBON DIOXIDE					
5	000630-08-0	CARBON MONOXIDE		3.83E+04	7		
9	001336-36-3	POLYCHLORINATED BIPHENYL					
8	001746-01-6	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN		2.83E-03	1		
8	007439-92-1	LEAD		2.35E+01	1		
8	007439-96-5	MANGANESE		2.85E+00	1		
8	007439-97-6	MERCURY		2.85E+00	1		
8	007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS		1.48E+00	1		
8	007440-38-2	ARSENIC		1.67E-01	1		
1	007440-39-3	BARIUM		1.64E+00	1		
8	007440-41-7	BERYLLIUM		2.74E-02	1		
8	007440-43-9	CADMIUM		1.94E+00	1		
8	007440-47-3	CHROMIUM		1.87E+00	1		
8	007440-48-4	COBALT		1.10E-01	1		
1	007440-50-8	COPPER		6.92E+00	1		

#### **Section 2.3 - Combustion and Incineration Process Emissions**

Owner: WHEELABRATOR HUDSON FALLS LLC

93 RIVER ST

HUDSON FALLS, NY 12839

Facility: WHEELABRATOR HUDSON FALLS 93 RIVER ST

HUDSON FALLS, NY 12839

Control

**DARID:** 5344010149

Primary SIC: 4953

**DECID:** 5534400001

#### **Process Contaminant Summary:**

Chem Family	CAS No.	Contaminant Name	Efficiency (%)	Actual (Lbs/yr)	HD	Emission Factor	Source
1	007440-62-2	VANADIUM		1.10E-01	_1_		
1	007440-66-6	ZINC		1.11E+02	_1_		
2	007446-09-5	SULFUR DIOXIDE	80	9.91E+03	7		
10	007647-01-0	HYDROGEN CHLORIDE	98	2.40E+04	1		
10	007664-39-3	HYDROGEN FLUORIDE	99	1.20E+02	_1_		
6	007664-93-9	SULFURIC ACID		6.65E+02	1		
8	007782-49-2	SELENIUM		1.10E-01	1		
3	010102-44-0	NITROGEN DIOXIDE					
6	036088-22-9	PENTACHLORODIBENZODIOXIN					
7	0NY075-00-5	PM-10					
1	0NY075-10-0	UNSPECIATED PARTICULATES (EMISSION STATEMENT USE ONLY)		1.88E+03	1		
7	0NY075-10-5	UNSPECIATED PM-10 (EMISSION STATEMENT USE ONLY)					
3	0NY210-00-0	OXIDES OF NITROGEN		2.07E+05	7		
4	0NY998-10-0	UNSPECIATED VOC (EMISSION STATEMENT USE ONLY)		6.01E+02	1		
					=		

# Attachment B Title V Permit Renewal Forms

#### New York State Department of Environmental Conservation

Air Permit Application

DEC ID: 5534400001

Application ID: 553440000100016

Renewal Number: 5

Facility: WHEELABRATOR HUDSON FALLS

Mar 29, 2024 10:40 am

Department of

Environmental Conservation

## Section I - Certification

**Permit Application Certification** 

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

submitted. Based on my inquiry of the person or persons directly responsible for gathering the information I believe the information is true, accurate and complete. I am aware that there are significant penaltles forsubmitting false information,

including the possibility of fines and imprisonment for knowing violations.

Responsible Official Maurice G. Holcomb	Title Plant Marayer
Signature Manua C And	Date 5.25, 2024

### **Professional Engineer Certification**

I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments as they pertain to the practice of engineering.

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

	1 1 1		
Professional Engineer	EFFREY A. MARX	NYS License No.	082100
Signature Cellen	g A. Mano	Date 5/25	2024
7/10			



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

## **Section II - Identification Information**

	Section II - Identificat										
Permit Typ	e: Air Title V Facility (ATV)										
	RENEWAL										
General Pe	rmit Title:										
☐ Appl	ication involves construction of new facility	plication involves construction	n of new emission unit(s)								
	Owner / F	rm									
Name W	HEELABRATOR HUDSON FALLS LLC										
Street 93	Street 93 RIVER ST										
City HU	HUDSON FALLS  State NY Country USA Zip 12839										
Owner C	Owner Classification Corporation/Partnership Taxpayer Id 721541910										
	Fac	lity									
Name	WHEELABRATOR HUDSON FALLS										
Address	93 RIVER ST										
City	HUDSON FALLS	Zip 12	2839 1354								
	Owner / Firm Conta	ct Information									
Name	MAURICE C HOLCOMB		Phone No. 5187472390								
Affiliation	PLANT MANAGER		Fax No. 5187472582								
Title											
Street	WHEELABRATOR HUDSON FALLS LLC										
	93 RIVER ST										
City	HUDSON FALLS	State NY Country U	SA <b>Zip</b> 12839								
E-mail											

**Project Description** 

Application for renewal of Air Title V Facility.



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# **Section III - Facility Information**

#### Classification

X INDUSTRIAL		
	Affected States	
VERMONT		
	SIC Codes	
4953		
	NAICS Codes	
5622		

## **Facility Description**

The Wheelabrator Hudson Falls, L.L.C. facility is designed to process 600 tons per day of municipal solid waste and/or solid waste. The facility consists of two identical municipal waste combustors with state-of-the-art pollution control equipment. The facility also utilizes on exempt 200 HP emergency fire pump which Subpart ZZZZ (RICE NESHAP) applies.

## **Compliance Statements (Title V Only)**

I certif	y that as of the date of this application the facility is in compliance with all applicable requirements
	or more emission units at the facility are not in compliance with all applicable requirements at the time of signing this ation ( the 'NO' box must be checked), the noncomplying units must be identified in the "Compliance Plan" block of
	n IV of this form along with the compliance plan information required. For all emission units at this facility that are ting in compliance with all applicable requirements complete the following:
X	This facility will continue to be operated and maintained in such manner as to assure compliance for the duration of the permit, except those units referenced in the compliance plan portion of Section IV of this application.
X	For all emission units, subject to any applicable requirements that will become effective during the term of the permit, this facility will meet all such requirements on a timely basis.
X	Compliance certification reports will be submitted at least once a year. Each report will certify compliance status with respect to each requirement, and the method used to determine status.

## **Facility Applicable Federal Requirements**

Title	Туре	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
40	CFR	60	Α	13	а					
40	CFR	60	Cb	35b						
40	CFR	60	Cb	36b						
40	CFR	60	Cb	38b						
40	CFR	60	Cb	39b	а					
40	CFR	63	ZZZZ							
40	CFR	68								
40	CFR	82	F							
6	NYCRR	200		6						
6	NYCRR	201	1	7						
6	NYCRR	201	1	8						
6	NYCRR	201	3	2	а					
6	NYCRR	201	3	3	а					



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# Section III - Facility Information Facility Applicable Federal Requirements

Title	Туре	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	201	6	4	а	4				
6	NYCRR	201	6	4	а	7				
6	NYCRR	201	6	4	а	8				
6	NYCRR	201	6	4	С					
6	NYCRR	201	6	4	С	3	ii			
6	NYCRR	201	6	4	d	4				
6	NYCRR	201	6	4	е					
6	NYCRR	202	1	1						
6	NYCRR	202	2	1						
6	NYCRR	202	2	5						
6	NYCRR	211		2						
6	NYCRR	215		2						
6	NYCRR	201	6							
40 40	CFR CFR	60 60	Cb Cb	33b 34b	d b					

## **Facility State Only Requirements**

Title	Туре	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
6	NYCRR	211		1						
6	NYCRR	617		11	d	5				
	ECL	19	0301							



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation											
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem		
40	CFR	52	Α	21	j	2						
Х Арр	X Applicable Federal Requirement											

#### **Description**

The emission limit for nitrogen oxides contained in the exhaust gases discharged to the atmosphere is 372 parts per million (dry, corrected to 7% oxygen).

Monitoring Performed For										
Emission Unit	nit U00001 Emission Point 00001 Process 002 Emission Source									
Monitoring Performed For										
Emission Unit	U00002	Emission Point	00002	Process	004	Emission Source	I			

Capping	CAS No.	Contaminant Name
	0NY210-00-0	OXIDES OF NITROGEN

				Monitoring	g Information				
X CONTINUO	US EMISS	ION MON	TORING (CEN	<b>1</b> )					
Work Practice			Pro	cess Material		Ref Test Method			
Туре	Code			Description	on				
				PS-2					
			Paramet	er		Manufacturer Name/Model No.			
Code	Code			Description	on				
						Thermo Environmental Instruments Model 42			
	Lir	nit			Li	mit Units			
Uppei	r		Lower	Code		Description			
372				274	parts per million by volume	(dry, corrected to 7% O2)			
Averaging N	/lethod	Code	80	Desc	1-HOUR AVERAGE				
Monitoring	Freq	Code	01	Desc	sc CONTINUOUS				
Reporting	Reqs	Code	ode 14 Desc SEMI-ANNUALLY (CALENDAR)						



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation											
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item		
40	CFR	60	Α	13	е							
Х Арр	X Applicable Federal Requirement											

#### **Description**

Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under subdivision 40CFR60.13(d), all continuous monitoring systems shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

Continuous monitoring systems for measuring opacity shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

Continuous monitoring systems for measuring emissions other than opacity shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

	Monitoring Performed For								
Emission Unit	U00001	Emission Point	Emission Source						
	Monitoring Performed For								
I -	U00002	Emission Point		Emission Source					

	Monitoring Information									
X RECORD K	EEPING/M	AINTENA	NCE PROCEDU	RES						
Work Practice			Proce	ss Material		Ref Test Method				
Туре	Code			Descriptio						
			Manufacturer Name/Model No.							
Code	Code				n					
	Lir	nit			Limi	t Units				
Uppe	r		Lower	Code		Description				
Averaging N	/lethod	Code		Desc						
Monitoring	j Freq	Code	14	Desc	AS REQUIRED - SEE PERM	T MONITORING DESCRIPTION				
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDA	AR)				



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# **Section III - Facility Information Facility Compliance Certification**

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
40	CFR	60	Cb	33b	а	1	i			
Х Арр										

#### **Description**

Each affected MWC unit is required to meet an emission limit for particulate matter not to exceed 25 milligrams per dry standard cubic meter, corrected to 7 percent oxygen. Compliance will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department. There are additional BACT limits of 27 milligrams per dry standard cubic meter (corrected to 7% oxygen) and 0.1 pounds per million Btus required under 40CFR 52.21(j)(2).

	Monitoring Performed For									
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source				
	Monitoring Performed For									
Emission Unit	U00002	Emission Point	00002	Process	004	Emission Source				

Capping	CAS No.	Contaminant Name
	0NY075-00-0	PARTICULATES

	Monitoring Information									
X INTERMITT	ENT EMIS	SION TE	STING							
<b>Work Practice</b>			Pro	cess Material		Ref Test Method				
Type	Code			Description						
					40 CFR 60 App A RM 5					
			Manufacturer Name/Model No.							
Code	Code			Description	on					
	Liı	mit			Limit Units					
Uppei	r		Lower	Code		Description				
25				329	milligrams per dry standard o	subic meter (corrected to 7% oxygen)				
Averaging N	/lethod	Code	20	Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE				
Monitoring	Freq	Code	09	Desc	ANNUALLY					
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDA	AR)				



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
40	CFR	60	Cb	33b	а	1	iii			
Х Арр										

#### **Description**

The emission limit for opacity exhibited by the gases discharged to the atmosphere from a designated facility must not exceed 10 percent (6-minute average). Compliance with this limit shall be demonstrated using a continuous opacity monitor (COM) operated in accordance with a quality assurance/ quality control protocol approved by the Department. This limit is also required under 6NYCRR 617.11(d)(5).

Monitoring Performed For								
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source		
Monitoring Performed For								
Emission Unit	U00002	Emission Point	00002	Process	004	Emission Source		

				Monitoring	g Information		
X MONITORIN	NG OF PRO	CESS OF	R CONTROL D	EVICE PARAI	METERS AS SURROGA	TE	
Work Practice			Pro	cess Material		Ref Test Method	
Type	Code	Description					
					PS-1		
_			Manufacturer Name/Model No.				
Code				Description	on		
01				OPACITY	<b>Y</b>	Teledyne Monitor Labs Lighthawk 560	
	Lim	nit				Limit Units	
Upper	r		Lower	Code		Description	
10				136	percent		
Averaging N	/lethod	Code	44	Desc	6 MINUTE AVERAGE		
Monitoring	Freq	Code	01	Desc	CONTINUOUS		
Reporting	Regs	Code	14	Desc	SEMI-ANNUALLY (CALENDAR)		



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# **Section III - Facility Information Facility Compliance Certification**

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
40	CFR	60	Cb	33b	а	2	i			
Х Арр										

#### **Description**

Each affected MWC unit is required to meet an emission limit for cadmium not to exceed 35 micrograms per dry standard cubic meter, corrected to 7 percent oxygen. Compliance will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department. This limit is also required under 6NYCRR 617.11(d)(5).

	Monitoring Performed For							
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source		
Monitoring Performed For								

Capping	CAS No.	Contaminant Name
	007440-43-9	CADMIUM

	Monitoring Information								
X INTERMITT	X INTERMITTENT EMISSION TESTING								
Work Practice			Proc	ess Material		Ref Test Method			
Type	Code			Descriptio					
					40 CFR 60 App A RM29				
				Manufacturer Name/Model No.					
Code				Descriptio	n				
	Lin	nit			Lim	mit Units			
Upper	•		Lower	Code		Description			
35				370	micrograms per dry standard	cubic meter (corrected to 7% oxygen)			
Averaging N	lethod	Code	20	Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE			
Monitoring	Freq	Code	09	Desc	ANNUALLY				
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDA	AR)			



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# **Section III - Facility Information Facility Compliance Certification**

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
40	CFR	60	Cb	33b	а	3				
Х Арр	licable Federa	l Requirem	ent					•		

#### **Description**

Each affected MWC unit is required to meet the less stringent of either of the following: an emission limit for mercury not to exceed 50 micrograms per dry standard cubic meter, corrected to 7 percent oxygen or, an 85 percent reduction by weight of the potential mercury emission concentration. Compliance with the emission concentration limit will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department.

	Monitoring Performed For								
sion Unit U00001 Emission Point 00001 Process 002 Emission Source									
M	lonitoring I	Performed l	For						
0002 Emission Point	00002	Process	004	Emission Source					
	M	Monitoring	Monitoring Performed I	Monitoring Performed For	Monitoring Performed For				

Capping	CAS No.	Contaminant Name
	007439-97-6	MERCURY

				Monitoring	g Information			
X INTERMITT	ENT EMIS	SION TE	STING					
Work Practice			Pro	cess Material		Ref Test Method		
Туре	Code	Description						
					40 CFR 60 App A RM 29			
				Manufacturer Name/Model No.				
Code	!			Description	on			
	Liı	mit			Limit Units			
Uppei	r		Lower	Code		Description		
50				370	micrograms per dry standard	cubic meter (corrected to 7% oxygen)		
Averaging N	/lethod	Code	20	Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE		
Monitoring	Freq	Code	09	Desc	ANNUALLY			
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALEND	AR)		



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# **Section III - Facility Information Facility Compliance Certification**

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
40	CFR	60	Cb	33b	а	3				
Х Арр	licable Federa	l Requirem	ent					•		

#### **Description**

Each affected MWC unit is required to meet the less stringent of either of the following: an emission limit for mercury not to exceed 50 micrograms per dry standard cubic meter, corrected to 7 percent oxygen or, an 85 percent reduction by weight of the potential mercury emission concentration. Compliance with the latter (percent reduction) limit will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department.

Monitoring Performed For								
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source		
Monitoring Performed For								
		М	onitoring	Performed	For			

Capping	CAS No.	Contaminant Name
	007439-97-6	MERCURY

	Monitoring Information									
X INTERMITT	ENT EMIS	SION TE	STING							
Work Practice			Pro	cess Material		Ref Test Method				
Type	Code			Description						
					40 CFR 60 App A RM 29					
				Manufacturer Name/Model No.						
Code	ı			Description	on					
	Lir	nit			Lim	it Units				
Upper	r		Lower	Code		Description				
			85	340	percent reduction by weight (	(corrected to 7% O2, dry basis)				
Averaging N	/lethod	Code	20	Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE				
Monitoring	Freq	Code	09	Desc	ANNUALLY					
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDAR)					



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# **Section III - Facility Information Facility Compliance Certification**

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
40	CFR	60	Cb	33b	а	4				
X App	licable Federa	l Requirem	ent							

#### **Description**

Each affected MWC unit is required to meet an emission limit for lead not to exceed 400 micrograms per dry standard cubic meter, corrected to 7 percent oxygen. Compliance will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department. There is an additional limit of 0.5 mg/dscm (corrected to 7% oxygen) required under 6NYCRR 617.11(d)(5).

Monitoring Performed For								
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source		
Monitoring Performed For								
		М	onitoring	Performed	For			

Capping	CAS No.	Contaminant Name
	007439-92-1	LEAD

Monitoring Information									
X INTERMITTENT EMISSION TESTING									
Work Practice			Ref Test Method						
Туре	Code			Description					
						40 CFR 60 App A RM29			
	-		Paramet	er		Manufacturer Name/Model No.			
Code	)			Descriptio	on				
	Lii	nit			Limit Units				
Uppe	r		Lower	Code	Description				
400				370	micrograms per dry standard cubic meter (corrected to 7% oxygen)				
Averaging N	Method	Code	20	Desc	AVERAGING METHOD AS P	ER REFERENCE TEST METHOD INDICATE			
Monitoring	g Freq	Code	09	Desc	ANNUALLY				
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDA	AR)			



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation											
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem		
40	CFR	60	Cb	33b	b	3	i					
X Applicable Federal Requirement												

#### **Description**

Each affected MWC unit is required to meet the less stringent of either of the following: an emission limit for sulfur dioxide not to exceed 29 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis). Compliance with these limits is based on a 24-hour daily geometric mean. To demonstrate compliance with the percent reduction limit the owner or operator of the facility shall install, calibrate, maintain and operate a continuous emissions monitor for sulfur dioxide according to QA/QC plan approved by the Department. There is an additional not to exceed limit of 35 parts per million, corrected to 7 percent oxygen (dry basis), or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis) required under 40CFR 52.21(j)(2).

	Monitoring Performed For										
Emission Unit   U00001   Emission Point   00001   Process   002   Emission Source											
	Monitoring Performed For										
Emission Unit	U00002	Emission Point	00002	Process	004	Emission Source					

Capping	CAS No.	Contaminant Name
	007446-09-5	SULFUR DIOXIDE

Monitoring Information										
X CONTINUOUS EMISSION MONITORING (CEM)										
Work Practice			Proc	Ref Test Method						
Туре	Code	Description			on					
					PS-2					
			Paramete	er		Manufacturer Name/Model No.				
Code	)	Description								
						Western Research Model 921CE				
	Liı	mit			Lin	nit Units				
Uppe	r	Lower		Code	Description					
			75	331	percent reduction by weight or volume (corrected to 7% O2, dry basis)					
Averaging N	Method	Code	40	Desc	24 HOUR DAILY AVERAGE (GEOMETRIC MEAN)					
Monitoring	g Freq	Code	01	Desc	CONTINUOUS					
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALEND	AR)				



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation											
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem		
40	CFR	60	Cb	33b	b	3	i					
Х Арр	X Applicable Federal Requirement											

#### **Description**

Each affected MWC unit is required to meet the less stringent of either of the following: an emission limit for sulfur dioxide not to exceed 29 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis). Compliance with these limits is based on a 24-hour daily geometric mean. To demonstrate compliance with the emission limit the owner or operator of the facility shall install, calibrate, maintain and operate a continuous emissions monitor for sulfur dioxide according to a QA/QC plan approved by the Department. There is an additional not to exceed limit of 35 parts per million, corrected to 7 percent oxygen (dry basis), or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis) required under 40CFR 52.21(j)(2).

Monitoring Performed For										
Emission Unit   U00001   Emission Point   00001   Process   002   Emission Source										
Monitoring Performed For										
		M	onitoring	Performed	For					

Capping	CAS No.	Contaminant Name
	007446-09-5	SULFUR DIOXIDE

Monitoring Information										
X CONTINUOUS EMISSION MONITORING (CEM)										
Work Practice			Proc	ess Material	Ref Test Method					
Туре	Code	Description								
					PS-2					
				Manufacturer Name/Model No.						
Code	е			Description	on					
						Western Research Model 921CE				
	Lit	mit			Lin	nit Units				
Uppe	er		Lower	Code	Description					
29				274	parts per million by volume (dry, corrected to 7% O2)					
Averaging I	Method	Code	40	Desc	24 HOUR DAILY AVERAGE (GEOMETRIC MEAN)					
Monitoring	g Freq	Code	01	Desc	CONTINUOUS					
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALEND	DAR)				



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item	
40	CFR	60	Cb	33b	b	3	ii				
Х Арр											

#### **Description**

Each affected MWC unit is required to meet the less stringent of either of the following: an emission limit for hydrogen chloride not to exceed 29 part per million by volume, corrected to 7 percent oxygen (dry basis) or, an 95 percent reduction by weight or volume of the potential hydrogen chloride emission concentration. Compliance with the emission standard will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department. There is an additional limit of either 35 ppmv or 95% reduction (by wt. or vol., corrected to 7% oxygen, dry basis) required under 6NYCRR 617.11(d)(5).

	Monitoring Performed For										
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source					
		М	onitoring	Performed	For						
Emission Unit	U00002	M Emission Point	onitoring 00002	Performed   Process	<b>For</b> 004	Emission Source					

Capping	CAS No.	Contaminant Name
	007647-01-0	HYDROGEN CHLORIDE

	Monitoring Information										
X INTERMITTENT EMISSION TESTING											
Work Practice			Pro		Ref Test Method						
Туре	Code			Description	on						
				EPA Method 26/26A							
		•	Paramet		Manufacturer Name/Model No.						
Code	!			Description	on						
	Liı	mit			Limit Units						
Upper	r		Lower	Code		Description					
			95	331	percent reduction by weight of	or volume (corrected to 7% O2, dry basis)					
Averaging N	/lethod	Code	20	Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE					
Monitoring	Monitoring Freq		09	Desc	ANNUALLY						
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDA	AR)					



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item	
40	CFR	60	Cb	33b	b	3	ii				
Х Арр											

#### **Description**

Each affected MWC unit is required to meet the less stringent of either of the following: an emission limit for hydrogen chloride not to exceed 29 part per million by volume, corrected to 7 percent oxygen (dry basis) or, an 95 percent reduction by weight or volume of the potential hydrogen chloride emission concentration. Compliance with the emission standard will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department. There is an additional limit of either 35 ppmv or 95% reduction (by wt. or vol., corrected to 7% oxygen, dry basis) required under 6NYCRR 617.11(d)(5).

	Monitoring Performed For										
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source					
		М	onitoring	Performed	For						
Emission Unit	U00002	M Emission Point	onitoring 00002	Performed   Process	<b>For</b> 004	Emission Source					

Capping	CAS No.	Contaminant Name
007647-01-0		HYDROGEN CHLORIDE

	Monitoring Information										
X INTERMITTENT EMISSION TESTING											
Work Practice			Pro	cess Material		Ref Test Method					
Туре	Code			Description							
				EPA Test Method 26/26A							
		•		Manufacturer Name/Model No.							
Code	•			Description	on						
	Liı	mit			Lim	it Units					
Uppei	r		Lower	Code		Description					
29				274	parts per million by volume (o	dry, corrected to 7% O2)					
Averaging N	/lethod	Code	20	Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE					
Monitoring	Monitoring Freq Code 09			Desc	ANNUALLY						
Reporting	Reporting Reqs Code 14			Desc	SEMI-ANNUALLY (CALENDAR)						



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# **Section III - Facility Information Facility Compliance Certification**

	Rule Citation										
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem	
40	CFR	60	Cb	33b	С	1	ii				
Х Арр											

#### **Description**

Each affected MWC unit which employs an electrostatic precipitator for emission controls is required to meet an emission concentration limit for dioxin/furan not to exceed 35 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen. Compliance with the limit will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department.

Monitoring Performed For											
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source					
	Monitoring Performed For										
Emission Unit	U00002	Emission Point	00002	Process	004	Emission Source					

Capping	CAS No.	Contaminant Name
	001746-01-6	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

	Monitoring Information										
X INTERMITTENT EMISSION TESTING											
Work Practice			Proc	ess Material		Ref Test Method					
Type	Code			Description							
					40 CFR 60 App A RM 23						
		•		Manufacturer Name/Model No.							
Code				Descriptio	n						
	Lin	nit			Limit Units						
Upper	•		Lower	Code		Description					
35				330	nanograms per dry standard	cubic meter (total mass, corrected to 7% O2)					
Averaging N	<b>l</b> lethod	Code	20	Desc	AVERAGING METHOD AS P	ER REFERENCE TEST METHOD INDICATE					
Monitoring	Freq	Code	09	Desc	ANNUALLY						
Reporting	Reporting Reqs Code 14				SEMI-ANNUALLY (CALENDAR)						



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# **Section III - Facility Information Facility Compliance Certification**

	Rule Citation												
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item												
40	CFR	60	Cb	34b	а								
Х Арр	licable Federa	l Requirem	ent					•					

#### **Description**

The emission limit for carbon monoxide contained in the exhaust gases discharged to the atmosphere is 100 parts per million (dry, corrected to 7% oxygen). This limit is also required under 40CFR 52.21(j)(2).

In addition, the source owner or operator shall not exceed, 6NYCRR 617.11(d)(5), minimum combustion index (CI) requirements of 99.5% and 99.8% based on 8-hour and 7-day running averages, respectively. Compliance with the 100 ppm CO limit also serves to demonstrate compliance with these CI limits. However, this condition does not eliminate the requirement to maintain CI records required by other permit conditions.

	Monitoring Performed For												
Emission Unit	Emission Unit U00001 Emission Point 00001 Process 002 Emission Source												
Monitoring Performed For													
		М	onitoring	Performed	For								
Emission Unit	U00002	M Emission Point	onitoring 00002	Performed	<b>For</b> 004	Emission Source							

Capping	CAS No.	Contaminant Name
	000630-08-0	CARBON MONOXIDE

				Monitoring	g Information	
X CONTINUO	OUS EMISS	OM NOI	IITORING (CEM	)		
Work Practice			Prod	ess Material		Ref Test Method
Туре	Code			Description	on	
						PS4
			Paramete	er		Manufacturer Name/Model No.
Code	9			Description	on	
						Teledyne 300EM
	Li	mit			Lim	nit Units
Uppe	er		Lower	Code		Description
100				274	parts per million by volume (	dry, corrected to 7% O2)
Averaging I	Method	Code	41	Desc	4-HOUR BLOCK (ARITHME	TIC AVERAGE)
Monitoring	g Freq	Code				
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALEND	AR)



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

	Rule Citation												
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item												
40	CFR	60	Eb	58b									
Х Арр	licable Federa	l Requirem	ent					•					

#### **Description**

- (a) The provisions for startup, shutdown, and malfunction are provided in paragraphs (a)(1) and (a)(2) of this section.
- (1) The standards under this subpart apply at all times except during periods of startup, shutdown, and malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence, except as provided in paragraph (a)(1)(iii) of this section. During periods of startup, shutdown, or malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7).
- (i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warmup period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.
- (ii) Continuous burning is the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.
- (iii) For the purpose of compliance with the carbon monoxide emission limits in §60.53b(a) (e.i., 60-Cb.34b(a)), if a loss of boiler water level control (e.g., boiler waterwall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence. During such periods of malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of §60.59b(d)(7).

#### §60.59b(d)(7):

Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data, particulate matter emissions data, cadmium emissions data, lead emissions data, mercury emissions data, hydrogen chloride emissions data, or dioxin/furan emissions data (for owners and operators who elect to continuously monitor particulate matter, cadmium, lead, mercury, or hydrogen chloride, or who elect to use continuous automated sampling systems for dioxin/furan or mercury emissions, instead of conducting performance testing using EPA manual test methods) or operational data (i.e., carbon monoxide emissions, unit load, and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters, and the reasons for excluding the data.

				Monitoring	Information			
X RECORD K	EEPING/N	IAINTENA	ANCE PROCEDI	JRES				
Work Practice			Proc	ess Material		Ref Test Method		
Type	Code			Descriptio	n			
			Paramete	r		Manufacturer Name/Model No.		
Code				Descriptio	n			
	Liı	nit			Lim	nit Units		
Upper	•		Lower	Code		Description		
Averaging N	lethod	Code		Desc				
Monitoring	Freq	Code	14	AS REQUIRED - SEE PERM	IT MONITORING DESCRIPTION			
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDA	AR)		



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

	Rule Citation												
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item												
40	CFR	60	Eb	58b									
X App	licable Federa	I Requirem	ent										

#### **Description**

40CFR 60-Eb.58b(m)(1):

- (m) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit under §60.52b(a)(5) (e.i., 60-Cb.33b(a)(3)), and/or the dioxin/furan emission limits under §60.52(b)(c), or the dioxin/furan emission level specified in paragraph (g)(5)(iii) of this section shall follow the procedures specified in paragraphs (m)(1) through (m)(4) of this section.
- (1) During the performance tests for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed, as specified in paragraphs (m)(1)(i) and (m)(1)(ii) of this section.
- (i) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for mercury emissions and each subsequent performance test for mercury emissions.
- (ii) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions. If a subsequent dioxin/furan performance test is being performed on only one affected facility at the MWC plant, as provided in paragraph (g)(5)(iii) of this section, the owner or operator may elect to apply the same estimated average carbon mass feed rate from the tested facility for all the similarly designed and operated affected facilities at the MWC plant.

				Monitoring	g Information	
X RECORD K	EEPING/MA	AINTEN <i>A</i>	NCE PROCED	URES		
Work Practice			Proc	cess Material		Ref Test Method
Туре	Code			Descriptio	on	
			Paramet	er		Manufacturer Name/Model No.
Code				Descriptio	on	
	Lim	nit			Lim	it Units
Upper	r		Lower	Code		Description
Averaging N	/lethod	Code		Desc		
Monitoring	Freq	Code	14	Desc	AS REQUIRED - SEE PERM	T MONITORING DESCRIPTION
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDA	AR)



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

	Rule Citation												
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item												
40	CFR	60	Eb	58b									
Х Арр	licable Federa	l Requirem	ent					•					

#### **Description**

The carbon feeder screw speed (rpm), which is the primary indicator of the carbon mass feed rate must equal or exceed the level documented during the performance test (based on an 8-hour block average) specified under paragraphs(m)(1)(i) of this section or the corrected screw feeder speed obtained during periodic calibration.

Deviations from this level caused by short-term interruptions (e.g., maintenance, calibration, malfunctions or other unavoidable conditions) may be excused, provided, during the subsequent portion of the averaging period, the required carbon mass feed rate is obtained. To minimize carbon injection system downtime, good engineering practices must always be applied.

The permitte shall report the calender dates when the screw speeds are below levels estimated during the performance test, with reasons of such occurrence and corrective actions. In addition, for the dates identified, the report shall include the hourly carbon mass feed rate data recorded under 40CFR60.59b (d)(4)(iii), with supporting calculations.

Compliance with this condition also demonstrates compliance with 6NYCRR 219-7.2

	Monitoring Performed For												
Emission Unit	U00001	Emission Point	Process	002	Emission Source								
Monitoring Performed For													
		M	lonitoring Performed	For									

				Monitoring	g Information	
X MONITORII	NG OF PRO	OCESS O	R CONTROL DI	EVICE PARAM	METERS AS SURROGATE	
Work Practice			Proc	ess Material		Ref Test Method
Туре	Code			Description	on	
			Paramete	r		Manufacturer Name/Model No.
Code	þ			Descriptio	on	
0074404	140			CARBON	I	
	Lir	nit			Limi	t Units
Uppe	r		Lower	Code		Description
		Per	f. Test Level	3	pounds per hour	
Averaging N	/lethod	Code	54	Desc	8-HOUR BLOCK - ARITHME	TIC MEAN
Monitoring	j Freq	Code	01	Desc	CONTINUOUS	
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDA	AR)



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

	Rule Citation												
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item												
40	CFR	60	Eb	58b									
X App	licable Federa	I Requirem	ent										

#### **Description**

40CFR 60-Eb.58b(m)(3) & (4):

- (3) The owner or operator of an affected facility shall estimate the total carbon usage of the plant (kilograms or pounds) for each calendar quarter by two independent methods, according to the procedures in paragraphs (m)(3)(i) and (m)(3)(ii) of this section.
- (i) The weight of carbon delivered to the plant.
- (ii) Estimate the average carbon mass feed rate in kilograms per hour or pounds per hour for each hour of operation for each affected facility based on the parameters specified under paragraph (m)(1) of this section, and sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter.
- (4) Pneumatic injection pressure or other carbon injection system operational indicator shall be used to provide additional verification of proper carbon injection system operation. The operational indicator shall provide an instantaneous visual and/or audible alarm to alert the operator of a potential interruption in the carbon feed that would not normally be indicated by direct monitoring of carbon mass feed rate (e.g., continuous weight loss feeder) or monitoring of the carbon system operating parameter(s) that are the indicator(s) of carbon mass feed rate (e.g., screw feeder speed). The carbon injection system operational indicator used to provide additional verification of carbon injection system operation, including basis for selecting the indicator and operator response to the indicator alarm, shall be included in section (e)(6) of the site-specific operating manual required under §60.54b(e) of this subpart.

				Monitoring	g Information			
X RECORD K	EEPING/MA	AINTENA	NCE PROCED	URES				
Work Practice			Pro	cess Material		Ref Test Method		
Туре	Code			Descriptio	on			
			Paramet	er		Manufacturer Name/Model No.		
Code	Code			Descriptio	on			
	Lim	nit			Limi	t Units		
Upper	•		Lower	Code		Description		
Averaging M	lethod	Code		Desc				
Monitoring	Freq	Code	14	Desc	AS REQUIRED - SEE PERM	T MONITORING DESCRIPTION		
Reporting I	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDAR)			



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	200		6						
X App	licable Federa	l Requirem	ent					•		

#### **Description**

No person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Department shall specify the degree and/or method of emission control required.

In order to evaluate the level of 1-hour NOx impacts associated with emission from this facility with respect to the National Ambient Air Quality Standard (NAAQS), the facility submitted an air dispersion model of ambient impacts. The modeled 1-hour NOx potential to emit was based on a concentrations of 260 ppm (dry, corrected to 7% oxygen) from both stacks and the 2018 stack test's flow rates. To assure the 1-hour maximum ambient concentration derived from the model is maintained, the facility shall limit NOx emissions to a combined stack average of no greater than 260 ppm (dry, corrected to 7% oxygen). The facility shall install, calibrate, maintain and operate a continuous emissions monitor for NOx according to a QA/QC plan approved by the Department.

	Monitoring Performed For								
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source			
_		М	onitoring	Performed I	For				
Emission Unit	U00002	Emission Point	00002	Process	004	Emission Source			

Capping	CAS No.	Contaminant Name
	0NY210-00-0	OXIDES OF NITROGEN

			ľ	Monitoring	Information	
X CONTINUO	US EMISSI	ON MON	IITORING (CEM)			
Work Practice			Proce	ss Material		Ref Test Method
Type	Code	Desc			n	
						PS-2
	•		Parameter	•		Manufacturer Name/Model No.
Code	Code			Descriptio	n	
						Thermo Environmental Instruments Model 42-
	Lin	nit			Lin	nit Units
Upper	r		Lower	Code		Description
260				274	parts per million by volume (	dry, corrected to 7% O2)
Averaging N	/lethod	Code	08	Desc	1-HOUR AVERAGE	
Monitoring	Freq	Code	01	Desc	CONTINUOUS	
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALEND	AR)



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	219	7	2						
X Stat	e Only Require	ement						•		

#### **Description**

The emission limit for mercury is of 28 ug/dscm (corrected to 7% oxygen) or 85% removal, whichever is less stringent. Compliance with the emission standard will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Stack testing for mercury shall follow the procedures contained in 40 CFR 60.58b(d)(2). Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department.

Emission control devices must be kept in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such devices effectively.

	Monitoring Performed For							
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source		
		М	onitoring	Performed	For			

Capping	CAS No.	Contaminant Name
	007439-97-6	MERCURY

	Monitoring Information									
X INTERMITT	ENT EMIS	SION TE	STING							
Work Practice			Proc	ess Material		Ref Test Method				
Туре	Code	Description								
					EPA Ref. Method 29					
				Manufacturer Name/Model No.						
Code	Code			Description	on					
	Lir	nit			Limit Units					
Uppe	r		Lower	Code		Description				
28				370	micrograms per dry standard	cubic meter (corrected to 7% oxygen)				
Averaging N	<b>V</b> lethod	Code	20	Desc	AVERAGING METHOD AS P	PER REFERENCE TEST METHOD INDICATE				
Monitoring	g Freq	Code	09	Desc	ANNUALLY					
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALEND)	AR)				



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	219	7	2						
X Stat	te Only Require	ement						•		

#### **Description**

The emission limit for mercury is of 28 ug/dscm (corrected to 7% oxygen) or 85% removal, whichever is less stringent. Compliance with the emission standard will be determined by conducting a stack emission test according to a protocol and schedule approved by the Department. Stack testing for mercury shall follow the procedures contained in 40 CFR 60.58b(d)(2). Subsequent stack emissions tests will be required on annual basis unless otherwise directed by the Department.

Emission control devices must be kept in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such devices effectively.

Monitoring Performed For								
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source		
Monitoring Performed For								
		М	onitoring	Performed	For			

Capping	CAS No.	Contaminant Name
	007439-97-6	MERCURY

				Monitoring	g Information	
X INTERMITT	ENT EMIS	SION TES	STING			
Work Practice			Prod	ess Material		Ref Test Method
Type	Code	Description				
				EPA Ref. Method 29		
·		•	Manufacturer Name/Model No.			
Code	Code				on	
	Lir	nit			Lim	it Units
Upper	r		Lower	Code		Description
			85	331	percent reduction by weight of	or volume (corrected to 7% O2, dry basis)
Averaging N	Averaging Method Code 20			Desc	AVERAGING METHOD AS P	PER REFERENCE TEST METHOD INDICATE
Monitoring	Freq	Code	09	Desc	ANNUALLY	
Reporting	Reqs	Code	14	Desc	SEMI-ANNUALLY (CALENDA	AR)



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation											
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item		
6	NYCRR	231	2									
Х Арр												

#### **Description**

The maximum annual potential (MAP) for NOx is 162 tons per year for each emission unit. This is based on the maximum allowable concentration of 205 ppm (dry, corrected to 7% O2) of NOx and an hourly design stack flow rate of 25,167 dscfm (corrected to 7% oxygen). The MAP shall be modified if the above design or allowable criteria are changed.

	Monitoring Performed For										
Emission Unit	nission Unit U00001 Emission Point Process Emission Source										
	Monitoring Performed For										
Emission Unit	U00002	Emission Point	Process	Emission Source							
		Mon	itoring Information	<u> </u>							

				Monitoring	g Information			
X RECORD K	EEPING/MA	AINTENA	NCE PROCED	URES				
Work Practice			Proc	ess Material		Ref Test Method		
Туре	Code			Description	on			
			Paramet	er		Manufacturer Name/Model No.		
Code	Code				on			
	Lim	nit			Lim	it Units		
Upper			Lower	Code		Description		
Averaging M	lethod	Code		Desc				
Monitoring	Freq	Code	01	Desc	CONTINUOUS			
Reporting	Reqs	Code	14	Desc	esc SEMI-ANNUALLY (CALENDAR)			



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# **Section III - Facility Information Facility Compliance Certification**

	Rule Citation											
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item											
6	NYCRR	617		11	d	5						
X Stat												

#### **Description**

Stack testing will be performed once per permit term unless additional testing is required by the permitting authority. Emissions of total polychlorinated dibenzo-p-dioxins and polychlorinated dibenzo furans (tetra-octa homologue groups as well as associated 2,3,7,8 substituted congeners) corrected to 7% oxygen, dry basis, and expressed as 2,3,7,8 tetrachlorinated dibenzo-para-dioxin equivalents using the 1989 EPA (International) Toxic Equivalency Factors, shall not exceed 9.0 ng/dscm for each incinerator.

	Monitoring Performed For										
Emission Unit	Emission Unit   U00001   Emission Point   00001   Process   002   Emission Source										
Monitoring Performed For											

Capping	CAS No.	Contaminant Name
001746-01-6		2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN

				Monitoring	g Information							
X INTERMITT	X INTERMITTENT EMISSION TESTING											
Work Practice			Proc	cess Material		Ref Test Method						
Type	Code			Descriptio	1							
						40 CFR 60 App A RM23						
			Manufacturer Name/Model No.									
Code				Descriptio	n							
		<u> </u>										
	Lin	nit			Limit Units							
Upper	r		Lower	Code		Description						
9.0				354	nanogram toxicity equivalend	ce per dry standard cu meter, corrected to 7% (						
Averaging N	/lethod	Code	63	Desc	AVERAGING METHOD - SE	EE MONITORING DESCRIPTION						
Monitoring	Freq	Code	17	Desc	ONCE DURING THE TERM	OF THE PERMIT						
Reporting	Reqs	Code	01	Desc	ONCE / BATCH OR MONITO	ORING OCCURRENCE						



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

	Rule Citation											
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item											
6	NYCRR	617		11	d	5						
X Stat												

#### **Description**

Stack testing for formaldehyde will be performed once per permit term for each incinerator unless additional testing is required by the permitting authority.

Monitoring Performed For										
Emission Unit	mission Unit U00001 Emission Point 00001 Process 002 Emission Source									
		M	onitoring	Performed I	For					
Emission Unit	U00002	Emission Point	00002	Process	004	Emission Source				

Capping	CAS No.	Contaminant Name
	000050-00-0	FORMALDEHYDE

				Monitoring	g Information				
X INTERMITT	ENT EMIS	SION TE	STING						
Work Practice			Proc	ess Material		Ref Test Method			
Type	Code			Description	on				
					P&CAM 125				
			Paramet	er		Manufacturer Name/Model No.			
Code	Code			Description	on				
	Lin	nit			Lim	lit Units			
Uppei	•		Lower	Code		Description			
0.762				3	pounds per hour				
Averaging N	Averaging Method Code 20			Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE			
Monitoring	Freq	Code	17	Desc	Desc ONCE DURING THE TERM OF THE PERMIT				
Reporting	Reqs	Code	01	Desc	ONCE / BATCH OR MONITORING OCCURRENCE				



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# Section III - Facility Information Facility Compliance Certification

				R	ule Citation					
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	617		11	d	5				
X Stat	te Only Require	ement						•		

#### **Description**

Each municipal waste combustor shall not exceed 70,000 lb/hr of steam production on a rolling 24-hour average (based on a nominal unit design of 200 tons per day of municipal solid waste with a heat value of 6200 BTU per pound).

		Мо	nitoring Performed l	For		
Emission Unit	U00001	Emission Point	Process	002	Emission Source	
		Мо	nitoring Performed l	For		

				Monitorin	g Information	
X MONITORIN	IG OF PRO	OCESS O	R CONTROL D	EVICE PARA	METERS AS SURROGATE	
Nork Practice			Pro		Ref Test Method	
Туре	Code			Description	on	
			Paramet	er		Manufacturer Name/Model No.
Code				Description	on	]
53				STEAM OUT	PUT	
	Lir	nit			Lim	it Units
Upper	•		Lower	Code		Description
70000				210	pound steam per hour	
Averaging M	lethod	Code	09	Desc	24-HOUR AVERAGE	
Monitoring	Freq	Code	01	Desc	CONTINUOUS	
Reporting	Regs	Reporting Regs Code 13			QUARTERLY (CALENDAR)	



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
6	NYCRR	617		11	d	5				
X Stat	te Only Require	ement						•		

#### **Description**

The auxiliary burner installed in each municipal waste combustor unit shall be used to achieve a minimum temperature of 1500 degrees Fahrenheit after the last point of overfire air prior to commencing municipal solid waste feed during startup, during shutdown until complete burnout is accomplished, during normal or upset operation, and unless otherwise provided for in the Department approved operations and maintenance manual. Compliance with this requirement will be demonstrated by measuring surrogate temperature of 1100 degrees or higher at the incinerator's approved permanent thermocouple location.

		Monito	ring Performed F	or			
Emission Unit	U00001	Emission Point	Process	001	Emission Source		
Monitoring Performed For							
					Fusianian Course		
Emission Unit	U00001	Emission Point	Process	002	Emission Source		
	U00001	Monito	ring Performed F				
Emission Unit	U00001				Emission Source		
		Monitor Emission Point	ring Performed F	or 003			
		Monitor Emission Point	ring Performed F	or 003			

				Monitoring	g Information	
X MONITORIN	NG OF PRO	OCESS O	R CONTROL D	EVICE PARA	METERS AS SURROGATE	
Work Practice			Proc	cess Material		Ref Test Method
Туре	Code		Description			
			Paramet	er		Manufacturer Name/Model No.
Code				Description	on	
03				TEMPERATI	URE	
	Lir	nit			Limi	t Units
Uppei	r		Lower	Code		Description
			1500	44	degrees Fahrenheit	
Averaging N	<b>lethod</b>	Code	29	Desc	15-MINUTE RUNNING LIMIT	
Monitoring	Freq	Code	01	Desc	CONTINUOUS	
Reporting	Reqs	Code	13	Desc	QUARTERLY (CALENDAR)	



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

				R	ule Citation					
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
6	NYCRR	617		11	d	5				
X Stat	te Only Require	ement			•					

#### **Description**

The Permittee must maintain a surrogate temperature of 1100 degrees Fahrenheit or greater, based on a running 15 minute average of readings, recorded at each incinerator's approved permanent thermocouple location. This surrogate will demonstrate compliance with the requirement to maintain a 1500 degree or higher temperature after the last point of overfire air.

		Monito	ring Performed F	or					
Emission Unit	U00001	Emission Point	Process	002	Emission Source				
	Monitoring Performed For								
Emission Unit	U00002	Emission Point	Process	004	Emission Source				
		Monito	ring Performed F	or					
Emission Unit	U00001	Monito Emission Point	ring Performed F	or 001	Emission Source				
Emission Unit	U00001	Emission Point		001	Emission Source				

	Monitoring Information									
X MONITORII	NG OF PRO	OCESS O	R CONTROL D	EVICE PARAI	METERS AS SURROGATE					
Work Practice			Proc	ess Material		Ref Test Method				
Туре	Code			Description	on					
			Paramete		Manufacturer Name/Model No.					
Code	!			Descriptio	on					
03				TEMPERATU	JRE					
	Liı	mit			Limi	t Units				
Upper	r		Lower	Code		Description				
			1100	44	degrees Fahrenheit					
Averaging N	/lethod	Code	29	15-MINUTE RUNNING LIMIT						
Monitoring	Monitoring Freq Code 01 Desc CONTINU				CONTINUOUS					
Reporting	Reqs	Code	13	QUARTERLY (CALENDAR)						



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
6	NYCRR	617		11	d	5				
X Stat	te Only Require	ement						•		

#### **Description**

Stack testing for Hydrogen Fluoride will be performed once per permit term unless additional testing is required by the permitting authority. The emission limit is 0.04 lb/hr for each incinerator.

		М	onitoring	Performed I	For		
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source	
Emission Unit	U00002	M Emission Point	onitoring	Performed I	For 004	Emission Source	

Capping	CAS No.	Contaminant Name
	007664-39-3	HYDROGEN FLUORIDE

	Monitoring Information											
X INTERMITT	X INTERMITTENT EMISSION TESTING											
<b>Work Practice</b>	Work Practice Process Material Ref Test Method											
Туре	Code			Description	on							
				40 CFR 60 App A RM26A								
			Paramete		Manufacturer Name/Model No.							
Code	,			Descriptio	on							
	Lim	nit			Lim	it Units						
Upper	r		Lower	Code		Description						
0.04				3	pounds per hour							
Averaging N	Averaging Method Code 20		Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE							
Monitoring	Monitoring Freq Code 17				ONCE DURING THE TERM OF THE PERMIT							
Reporting	Reqs	Code	01	Desc	ONCE / BATCH OR MONITORING OCCURRENCE							



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item									Item
6	NYCRR	617		11	d	5				
X Stat	X State Only Requirement									

#### **Description**

The permittee shall make recordings of the following parameters and provide for their tamper-proof storage:

- A. Continuous emission and operational parameter monitoring data;
- B. Combustion index;
- C. Municipal solid waste charged to each incinerator in tons per day and daily average for each month;
- D. Hourly auxiliary fuel use in each incinerator (cubic feet per hour);
- E. Hourly average steam temperature (degrees Fahrenheit), steam pressure (psi), steam production (lbs/hr), and a rolling 24-hour average of steam production (lbs/hr);
- F. Hourly lime slurry flow (gpm) and lime usage (lbs/hr) for each incinerator's acid gas control device;
- G. Hourly readings, volts, amps and sparking rate, for all electrostatic precipitator fields and hourly average temperature (degrees Fahrenheit) at both inlet and outlet for each incinerator's particulate control device;
- H. Dosing rate (lbs carbon/hr and lbs carbon/calendar quarter), screw feeder speed (rpm), hopper refill frequency and carbon deliveries (dates and quantities) for each incinerator's powdered activated carbon injection system; and
- I. The frequency and duration of maintenance or cleaning periods when control devices are not operational.

	Monitoring Information										
X RECORD K	X RECORD KEEPING/MAINTENANCE PROCEDURES										
Work Practice		Process Material Ref Test Method									
Type	Code			Descriptio	n						
	Parameter Manufacturer Name/Model No.										
Code				Description	n						
	Lim	nit			Lim	it Units					
Upper	ŕ		Lower	Code		Description					
Averaging N	<b>l</b> lethod	Code		Desc							
Monitoring Freq Code 14		14	Desc	AS REQUIRED - SEE PERM	IT MONITORING DESCRIPTION						
Reporting Reqs Code 10			10	Desc	UPON REQUEST BY REGULATORY AGENCY						



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item									Item
6	NYCRR	617		11	d	5				
X Stat	X State Only Requirement									

#### **Description**

Stack testing for sulfuric acid will be performed once per permit term unless additional testing is required by the permitting authority. The emission limit is 1.42 lb/hr for each incinerator.

Emission limit represents emissions of sulfuric acid mist (as H2SO4).

	Monitoring Performed For							
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source		
Monitoring Performed For								
		М	onitoring	Performed	For			
Emission Unit	U00002	M Emission Point	onitoring 00002	Performed Process	<b>For</b> 004	Emission Source		

Capping	CAS No.	Contaminant Name
	007664-93-9	SULFURIC ACID

	Monitoring Information									
X INTERMITTENT EMISSION TESTING										
Work Practice	Work Practice Process Material Ref Test Method									
Туре	Code			Descriptio	n					
				40 CFR 60 App A RM8						
	•		Paramete		Manufacturer Name/Model No.					
Code				Descriptio	n					
	Lin	nit			it Units					
Upper	r		Lower	Code	Description					
1.42				3	pounds per hour					
Averaging N	<b>lethod</b>	Code	20	Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE				
Monitoring	Monitoring Freq Code			Desc	ONCE DURING THE TERM	OF THE PERMIT				
Reporting	Reqs	Code	01	Desc	ONCE / BATCH OR MONITO	DRING OCCURRENCE				



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item									Item
6	NYCRR	617		11	d	5				
X Stat	X State Only Requirement									

#### **Description**

The permittee shall submit to the Department an air emissions quarterly report covering availability of the required monitors during the period, and the performance audit of monitors and excess emissions. One out of every four reports shall include a relative accuracy test audit (RATA). The reports shall be submitted within thirty (30) days following the end of a calendar quarter to the following:

Bureau of Compliance Monitoring and Enforcement 625 Broadway Albany, NY 12233-3258

Regional Air Pollution Engineer 232 Hudson Street P.O. Box 220 Warrensburg, NY 12885-0220

				Monitoring	g Information					
X RECORD K	EEPING/M	AINTENA	NCE PROCED	URES						
Nork Practice		Process Material Ref Test Method								
Туре	Code			Description	on					
ļ			Paramet	er		Manufacturer Name/Model No.				
Code				Description	on					
	Lir	nit			Limi	t Units				
Upper			Lower	Code		Description				
Averaging M	lethod	Code		Desc	<del> </del>					
Monitoring Freq Code 07		Desc	QUARTERLY							
Reporting Reqs Code 13				Desc	; QUARTERLY (CALENDAR)					



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# **Section III - Facility Information Facility Compliance Certification**

	Rule Citation								
Title	Title Type Part Sub Part Section Sub Division Parag Sub Parag Clause Sub Clause Item								
6	6 NYCRR 617 11 d 5								
X Stat	X State Only Requirement								

#### **Description**

Stack testing will be performed once per permit term for each incinerator unless additional testing is required by the permitting authority for arsenic and the following metals:

Arsenic: - limit - 0.00125 lb/hr
Beryllium: - limit - 0.0000465 lb/hr
Vanadium: - limit - 0.000342 lb/hr
Barium: - limit - 0.005 lb/hr
Copper: - limit - 0.085 lb/hr
Zinc: - limit - 0.75 lb/hr

Chromium: - limit - 0.065 lb/hr (emissions of CR+3)

		М	onitoring	Performed l	For		
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source	
	Monitoring Performed For						
Emission Unit	U00002	Emission Point	00002	Process	004	Emission Source	

Capping	CAS No.	Contaminant Name
	007439-96-5	MANGANESE
007440-02-0		NICKEL METAL AND INSOLUBLE COMPOUNDS
	007440-38-2	ARSENIC
	007440-39-3	BARIUM
	007440-41-7	BERYLLIUM
	007440-47-3	CHROMIUM
	007440-48-4	COBALT
	007440-50-8	COPPER
	007440-62-2	VANADIUM
	007440-66-6	ZINC
	007782-49-2	SELENIUM



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# Section III - Facility Information Facility Compliance Certification

	Monitoring Information										
X INTERMITT	X INTERMITTENT EMISSION TESTING										
<b>Work Practice</b>			Proce	ss Material		Ref Test Method					
Туре	Code			Description	on						
					40 CFR 60 App A RM29						
			Parameter	•		Manufacturer Name/Model No.					
Code	!			Descriptio	on						
	Lir	nit			Lim	it Units					
Uppei	r		Lower	Code		Description					
0.0012	5			3	pounds per hour						
Averaging N	/lethod	Code	20	Desc	AVERAGING METHOD AS P	PER REFERENCE TEST METHOD INDICATE					
Monitoring	Freq	Code	17	Desc	ONCE DURING THE TERM OF THE PERMIT						
Reporting Reqs Code 01				Desc	ONCE / BATCH OR MONITORING OCCURRENCE						



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
6	NYCRR	617		11	d	5				
X Stat	te Only Require	ement						•		

#### **Description**

Stack testing for Chromium (VI) will be performed once per permit term unless additional testing is required by the permitting authority. The emission limit is 0.002 lb/hr for each incinerator.

	Monitoring Performed For						
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source	
		M	onitoring	Performed l	For		
Emission Unit	U00002	Emission Point	00002	Process	004	Emission Source	

Capping	CAS No.	Contaminant Name
	018540-29-9	CHROMIUM(VI)

	Monitoring Information									
X INTERMIT	X INTERMITTENT EMISSION TESTING									
Work Practice			Pro	cess Material		Ref Test Method				
Type	Code	Description			on					
					SW-846-0013					
		•	Paramet		Manufacturer Name/Model No.					
Code	•			Descriptio	on					
	Lir	nit			Limit Units					
Uppe	r		Lower	Code		Description				
0.002	2			3	pounds per hour					
Averaging I	Method	Code	20	Desc	AVERAGING METHOD AS P	ER REFERENCE TEST METHOD INDICATE				
Monitoring	g Freq	Code	17	Desc	ONCE DURING THE TERM	OF THE PERMIT				
Reporting	Reqs	Code	01	Desc	SC ONCE / BATCH OR MONITORING OCCURRENCE					



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	617		11	d	5				
X Stat	te Only Require	ement								

#### **Description**

Stack testing for VOCs will be performed once per permit term unless additional testing is required by the permitting authority. Emission limit represents emissions of methane. The emission limit for VOC is 4.5lb/hr for each incinerator.

Monitoring Performed For							
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source	
Monitoring Performed For							
Emission Unit	U00002	M Emission Point	onitoring	Performed I	F <b>or</b>	Emission Source	

Capping	CAS No.	Contaminant Name
	0NY998-00-0	voc

	Monitoring Information										
X INTERMITT	X INTERMITTENT EMISSION TESTING										
Work Practice			Pro	cess Material		Ref Test Method					
Туре	Code	Description			on						
					40 CFR 60 App A RM25A						
	•	•		Manufacturer Name/Model No.							
Code	)			Description	on						
	Liı	mit			Lim	it Units					
Uppe	r		Lower	Code		Description					
4.5				3	pounds per hour						
Averaging N	Method	Code	20	Desc	AVERAGING METHOD AS F	PER REFERENCE TEST METHOD INDICATE					
Monitoring	Freq	Code	17	Desc	ONCE DURING THE TERM	OF THE PERMIT					
Reporting	Reqs	Code	01	Desc	c ONCE / BATCH OR MONITORING OCCURRENCE						



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# Section III - Facility Information Facility Compliance Certification

	Rule Citation									
Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	ltem
6	NYCRR	617		11	d	5				
X Stat	te Only Require	ement						•		

#### **Description**

Stack testing will be performed once per permit term for each incinerator unless additional testing is required by the permitting authority for PAH and the following organic compounds:

PAH: limit- 0.0085 lb/hr

Benzo(A)pyrene: limit - 0.00085 lb/hr

PCB: limit 0.000213 lb/hr

Monitoring Performed For							
Emission Unit	U00001	Emission Point	00001	Process	002	Emission Source	
		М	onitoring	Performed	For		
Emission Unit	U00002	M Emission Point	onitoring 00002	Performed   Process	<b>For</b> 004	Emission Source	

#### **Contaminants**

Capping	CAS No.	Contaminant Name
	000050-32-8	BENZO(A)PYRENE
	001336-36-3	POLYCHLORINATED BIPHENYL
	130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS

	Monitoring Information												
X INTERMITT	ENT EMIS	SION TE	STING										
Work Practice				Ref Test Method									
Туре	Code			Description	on								
						40 CFR 60 App A RM23							
			Paramet	er		Manufacturer Name/Model No.							
Code	Code				on								
	Lin	nit			Limit Units								
Upper	r		Lower	Code		Description							
0.0085	5			3	pounds per hour								
Averaging N	Averaging Method Code		20	Desc	AVERAGING METHOD AS PER REFERENCE TEST METHOD IN								
Monitoring	Freq	Code	17	Desc	ONCE DURING THE TERM OF THE PERMIT								
Reporting	Reqs	Code	01	Desc	ONCE / BATCH OR MONITO	RING OCCURRENCE							

### **Facility Emissions Summary**

Cas No.	Contaminant Name	Р	TE	Act	tual
		(lbs/yr)	(tons/yr)	(lbs/yr)	(tons/yr)
001746-01-6	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN	0.058	2.89E-05	3.94E-03	1.97E-06
001746-01-6	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN	0.015			



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# **Section III - Facility Information**

**Facility Emissions Summary** 

Cas No.	Contaminant Name	P	ΓE	Actual		
		(lbs/yr)	(tons/yr)	(lbs/yr)	(tons/yr)	
007440-38-2	ARSENIC	21.9	1.10E-02	7.48E-01	3.74E-04	
007440-38-2	ARSENIC	21.9				
007440-39-3	BARIUM	87.6	4.38E-02	4.29E+00	2.15E-03	
007440-39-3	BARIUM	87.6				
000050-32-8	BENZO(A)PYRENE	14.89	7.45E-03	4.00E-03	2.00E-06	
000050-32-8	BENZO(A)PYRENE	14.89				
007440-41-7	BERYLLIUM	0.081	4.05E-05	5.52E-02	2.76E-05	
007440-41-7	BERYLLIUM	0.081				
007440-43-9	CADMIUM	58.0	2.90E-02	9.92E+00	4.96E-03	
007440-43-9	CADMIUM	57.8				
000124-38-9	CARBON DIOXIDE	383,873,555	1.92E+05	2.75E+08	1.37E+05	
000124-38-9	CARBON DIOXIDE	375712896				
0NY750-00-0	CARBON DIOXIDE EQUIVALENTS	392,556,818	1.96E+05	2.84E+08	1.42E+05	
0NY750 00 0	CARBON DIOXIDE EQUIVALENTS	384211564				
000630-08-0	CARBON MONOXIDE	210,110	1.05E+02	6.44E+04	3.22E+01	
000630-08-0	CARBON MONOXIDE	189901				
007440-47-3	CHROMIUM	1139	5.70E-01	4.00E+00	2.00E-03	
007440-47-3	CHROMIUM	1139				
018540-29-9	CHROMIUM(VI)	35	1.75E-02	6.31E-01	3.16E-04	
018540 29 9	CHROMIUM(VI)	35				
007440-48-4	COBALT	52.56	2.63E-02	2.24E-01	1.12E-04	
007440-48-4	COBALT	52.56				
007440-50-8	COPPER	149	7.45E-02	2.40E+01	1.20E-02	
007440-50-8	COPPER	149				
000050-00-0	FORMALDEHYDE	13350	6.68E+00	6.90E+02	3.45E-01	
000050-00-0	FORMALDEHYDE	13350				
007647-01-0	HYDROGEN CHLORIDE	72,657	3.63E+01	4.38E+04	2.19E+01	
007647-01-0	HYDROGEN CHLORIDE	71353				
007664-39-3	HYDROGEN FLUORIDE	701	3.51E-01	2.45E+02	1.23E-01	
007664-39-3	HYDROGEN FLUORIDE	701				
007439-92-1	LEAD	661	3.30E-01	8.93E+01	4.47E-02	
007439-92-1	LEAD	661				
007439-96-5	MANGANESE	526	2.63E-01	5.80E+00	2.90E-03	
007439-96-5	MANGANESE	526				
007439-97-6	MERCURY	82.62	4.13E-02	5.80E+00	2.90E-03	
007439 97 6	MERCURY	46.24				
000074-82-8	METHANE	132559	6.63E+01	9.35E+04	4.68E+01	



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# **Section III - Facility Information**

**Facility Emissions Summary** 

Cas No.	Contaminant Name	Р	TE	Act	tual
		(lbs/yr)	(tons/yr)	(lbs/yr)	(tons/yr)
000074-82-8	METHANE	132559			
007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS	2015	1.01E+00	3.11E+00	1.56E-03
007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS	2015			
010024-97-2	NITROUS OXIDE	17398	8.70E+00	1.23E+04	6.14E+00
010024-97-2	NITROUS OXIDE	17398			
0NY210-00-0	OXIDES OF NITROGEN	677,504	3.39E+02	4.03E+05	2.02E+02
0NY210-00-0	OXIDES OF NITROGEN	648000			
0NY075-00-0	PARTICULATES	42,885	2.14E+01	6.59E+03	3.29E+00
0NY075 00 0	PARTICULATES	41283			
0NY075-00-5	PM-10	42,885	2.14E+01	6.59E+03	3.29E+00
0NY075-00-5	PM-10	41283			
001336-36-3	POLYCHLORINATED BIPHENYL	3.7	1.87E-03	8.66E-03	4.33E-06
001336-36-3	POLYCHLORINATED BIPHENYL	3.7			
130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS	149	7.45E-02	3.53E-01	1.76E-04
130498 29 2	POLYCYCLIC AROMATIC HYDROCARBONS	149			
007782-49-2	SELENIUM	17.5	8.75E-03	2.22E-01	1.11E-04
007782-49-2	SELENIUM	17.5			
007446-09-5	SULFUR DIOXIDE	127,794	6.39E+01	2.42E+04	1.21E+01
007446-09-5	SULFUR DIOXIDE	125467			
007664-93-9	SULFURIC ACID	24878	1.24E+01	1.70E+03	8.48E-01
007664-93-9	SULFURIC ACID	24878			
0NY100-00-0	TOTAL HAP	89940	4.50E+01	4.49E+04	2.24E+01
0NY100-00-0	TOTAL HAP	89940			
007440-62-2	VANADIUM	6	3.00E-03	2.22E-01	1.11E-04
007440-62-2	VANADIUM	6			
0NY998-00-0	VOC	79,999	4.00E+01	1.81E+03	9.03E-01
0NY998-00-0	VOC	78840			
007440-66-6	ZINC	13140	6.57E+00	3.91E+02	1.96E-01
007440-66-6	ZINC	13140			



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#### **Section IV - Emission Unit Information**

### **Emission Unit Description**

Emission Unit U00001
----------------------

This emission unit consists of one of two identical municipal waste combustors (Source ID 00001) followed by a powdered activated carbon (PAC) injection system (source ID 00007) for mercury control, a dry scrubber absorber (Source ID 00002) for acid gas control and an electrostatic precipitator (Source ID 00003) for particulate control. Each municipal waste combustor is discharged via a dedicated flue in a common stack

### **Building**

Building	Building Name	Length	Width	Orient.
1	BOILER BLD	74	78	

### **Emission Point**

Emission Unit	U00001	Emission Pt.	00001			
Ground Elev	Height	Height Above	Inside Diameter	Exit Temp	Cross S	Section
(ft)	(ft)	Structure (ft)	(in)	(`F)	Length (in)	Width (in)
230	316	188	48	321		
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal
94.7	71371	614.222	4795.713			

#### **Emission Source / Control**

Emission Unit	U00001	Emission So	urce	0000	)1			
Source Type	Date of Construction	Date of Operation		e of loval		Manufacturer's Name/Model No.		
R	02/01/1989	11/01/1991				FOSTER WHEELER		
Design Capacity	275	Units Code	3	37	Desc	tons per day		
Control Type	Code		Desc					
Waste Feed	Code	02	Desc		CHUTE FED			
Waste Type	Code	01	Desc	MU		MUNICIPAL SOLID WASTE AND/OR SOLID WASTE		

Emission Unit	U00001	Emission So	urce	urce 0000		
Source Type	Date of Construction	Date of Operation	Date of Removal			Manufacturer's Name/Model No.
K	02/01/1989	11/01/1991				BELCO DRY SCRUBBER
Design Capacity		Units Code				
Control Type	Code	067	Desc	sc		WET LIME SLURRY SCRUBBING
Waste Feed	Code		Desc			
Waste Type	Code		Desc			



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#### **Section IV - Emission Unit Information**

#### **Emission Source / Control**

<b>Emission Unit</b>	U00001	Emission So	urce 0000		003	
Source Type	Date of Construction	Date of Operation		Date of Removal		Manufacturer's Name/Model No.
K	02/01/1989	11/01/1991				BELCO ESP
Design Capacity		Units Code			Desc	
Control Type	Code	010	Desc			ELECTROSTATIC PRECIPITATOR
Waste Feed	Code		Desc			
Waste Type	Code		Desc			

<b>Emission Unit</b>	U00001	Emission So	urce	000	007	
Source Type	Date of Construction	Date of Operation	Date of Removal			Manufacturer's Name/Model No.
K	04/01/2000	12/01/2000				Norit Americas
Design Capacity		Units Code			Desc	
Control Type	Code	048	Desc			ACTIVATED CARBON ADSORPTION
Waste Feed	Code		Desc			
Waste Type	Code		Desc			

### **Process Information**

Emission Unit	J00001 <b>Proc</b>	<b>ess</b> 001						
		hruput		Thruput Quantity Units				
Code (SCC)	Code (SCC) Quantity / Hr		r Code		Description			
39000689								
Confidential	Confidential		Schedule	Building	Floor / Location			
			Days / Yr					
Operating At Maxim								

#### **Description**

This process involves natural gas combustion during upset conditions and as supplemental fuel during startup and shutdown. In addition, this unit is operated on natural gas during warm up prior to introducing waste. All the emission limits and compliance are associated with process 002 for this emission unit.

	Emission Point Identifier(s)										
	Emission Source / Control Identifier(s)										
00001 00002 00003 00007											



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#### **Section IV - Emission Unit Information**

#### **Process Information**

J00001	Process	002							
To	otal Thrupi	ut		Thruput Quantity Units					
Quantity /	Hr Qu	antity / `	Yr	Code		Description			
Confidential		Operating Sched			Building	Floor / Location			
Operating At Maximum Capacity			ıy Days / Yr						
	Quantity /	Total Thrups Quantity / Hr Qu Op Hrs	Total Thruput Quantity / Hr Quantity / Operating Hrs / Day	Total Thruput Quantity / Hr Quantity / Yr  Operating Sche Hrs / Day Day	Total Thruput Quantity / Hr Quantity / Yr Code  Operating Schedule Hrs / Day Days / Yr	Total Thruput TI Quantity / Hr Quantity / Yr Code  Operating Schedule Building Hrs / Day Days / Yr			

#### Description

This process involves municipal solid waste and/or solid waste combustion (mass-burn) in a water wall refractory combustor to generate electricity for sale.

Emission Point Identifier(s)										
Emission Source / Control Identifier(s)										
00001	00002	00003	00007							

# **Emission Unit Applicable Federal Requirements**

					лик дрр				94411-011		<u> </u>			
Emission	Unit	U-0	0001	Emissio	n Point	Process		ess	002 Emission Source			urce	00001	
Title	Ту	ре	Part	Sub Part	Section	Sub Div	ision	Parag	Sub Pa	arag	Clause	Sub Cl	ause	Item
40	CF	-R	60	Cb	34b	b								
Emission	Unit	U-0	0001	Emissio	n Point		Proc	ess	002	Em	ission So	urce	(	00003
Title	Ту	ре	Part	Sub Part	Section	Sub Div	Sub Division		Sub Pa	Sub Parag Clause		Sub Cl	ause	Item
40	CF	-R	60	Cb	34b	b								
Emission	Unit	U-0	0001	Emissio	n Point	00001	Proc	ess		Em	ission So	urce		
Title	Ту	pe	Part	Sub Part	Section	Sub Div	ision	Parag	Sub Pa	arag	Clause	Sub Cl	ause	Item
40	CF	-R	60	Cb	33b	d						1		



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

#### **Section IV - Emission Unit Information**

### **Emission Unit Description**

<b>Emission Unit</b>	U00002

This emission unit consists of one of two identical municipal waste combustors (Source ID 00004) followed by a powdered activated carbon (PAC) injection system (Source ID 00008) for mercury control, a dry scrubber (Source ID 00005) for acid gas control and an electrostatic precipitator (Source ID 00006) for particulate control. Each municipal waste combustor discharged via a dedicated flue in a common stack.

#### **Building**

Building	Building Name	Length	Width	Orient.
1	BOILER BLD	74	78	

#### **Emission Point**

Emission Unit	U00002	Emission Pt.	00002				
Ground Elev	Height	Height Above	Inside Diameter	Exit Temp	Cross Section		
(ft)	(ft)	Structure (ft)	(in)	(`F)	Length (in)	Width (in)	
230	316	188	48	300			
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal	
95	71639	614.224	4795.711				

#### **Emission Source / Control**

Emission Unit	U00002	Emission So	ource 0000		04				
Source Type	Date of Construction	Date of Operation	Date of Removal		Manufacturer's Name/Model No.				
R	02/01/1989	11/01/1991			FOSTER		FOSTER WHEELER		
Design Capacity	275	Units Code	;	37	Desc		tons per day		
Control Type	Code		Desc						
Waste Feed	Code	02	Desc	CHUTE FED			CHUTE FED		
Waste Type	Code	01	Desc	MUNICIPAL SOLID WASTE AND/OR SOLID WASTE					

Emission Unit	U00002	Emission So	urce	urce 0000		
Source Type	Date of Construction	Date of Operation	Date of Removal			Manufacturer's Name/Model No.
K	02/01/1989	11/01/1991				BELCO DRY SCRUBBER
Design Capacity		Units Code			Desc	
Control Type	Code	067	Desc		_	WET LIME SLURRY SCRUBBING
Waste Feed	Code		Desc			
Waste Type	Code		Desc			

Emission Unit	U00002	Emission Source		rce 0000				
Source Type	Date of Construction	Date of Operation	Date of Removal		Manufacturer's Name/Model No.			
K	02/01/1989	11/01/1991				BELSO ESP		
Design Capacity		Units Code			Desc			
Control Type	Code	010	Desc			ELECTROSTATIC PRECIPITATOR		
Waste Feed	Code		Desc					
Waste Type	Code		Desc					



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

#### **Section IV - Emission Unit Information**

#### **Emission Source / Control**

<b>Emission Unit</b>	U00002	Emission So	urce	000	80	
Source Type			Manufacturer's Name/Model No.			
K	04/01/2000	12/01/2000				Norit Americas
Design Capacity		Units Code			Desc	
Control Type	Code	048	Desc			ACTIVATED CARBON ADSORPTION
Waste Feed	Code		Desc			
Waste Type	Code		Desc			

#### **Process Information**

	Emission Unit	J00002	Process	003							
	Source Classification	•	Total Thrup	ut		Thruput Quantity Units					
ΙL	Code (SCC)	Quantity	/ Hr Qu	ıantity / Y	r Code		Description				
	39000689										
	☐ Confidential ☐ Operating At Maximum Capacity			perating S	Schedule	Building	Floor / Location				
Ш				Irs / Day Days / Yr							
ഥ						!	<u> </u>				

### Description

This process involves natural gas combustion during upset conditions and as supplemental fuel during startup and shutdown. In addition, this unit is operated on natural gas during warm up prior to introducing waste. All the emission limits and compliance are associated with process 004 for this emission unit.

	•				
Emission Point Identifier(s)					
Emission Source / Control Identifier(s)					
	00004	00005	00006	80000	

Emission Unit	00002 <b>F</b>	rocess	004				
Source Classification	Total Thruput			Thruput Quantity Units			
Code (SCC)	Quantity / H	r Qu	Quantity / Yr		Code	Description	
50300112							
Confidential		Op	Operating Sche			Building	Floor / Location
Operating At Maximum Capacity			/ Day	Da	ys / Yr		
				·			

#### Description

This process involves municipal solid waste and/or solid waste combustion (mass-burn) in a water wall refractory combustor to generate electricity for sale.

Emission Point Identifier(s)						
Emission Source / Control Identifier(s)						
	00004	00005	00006	80000		



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

	Supporting Documentation
	Aerial Photo (/)
	Air Quality Model (/)
	Air State Facility Permit (//) Air Title V Facility Permit (//)
	Alternative Fuel Monitoring Schedule (/)
	Ambient Air Monitoring Plan (//
	Analysis of Contemporaneous Emission Increase/Decrease (//)
	Article 11, Title 5 Permit for Interference with Fish & Wildlife (//)
	Authorized Agent Letter (/)
	BACT Demonstration (/)
_	Baseline Period Demonstration (/)
	Beneficial Use Determination (BUD) (//)
	Blasting Chart - Ground Vibration Limits (/)
	Building Identification Table (/)
X	Calculations (//)
	Capping Letter/Package (//)
	Certificate of Capacity (Resource Recovery Facility) (/)
	CLCPA analysis (/)
	Compliance Assurance Monitoring Plan (CAM) (/)
	Confidentiality Justification (//)
	Construction and Demolition Debris Tracking Document (/)
	Construction Detail Drawings (/)
	Continuous Emissions Monitoring Plans/QA/QC (/)
	Control Equipment Layout (/)
	Custom Schedule for Fuel Nitrogen and Sulfur Monitoring (/)
	Dispersion modeling (/)
	Drawings/Blueprints (/)
	Elevations/Sections (/)
	Emission Inventory Report (/)
	Emission Survey (//)
	Emission Unit Summary (//)
	EPA Memo Re: Technical Infeasibility of Monitoring Nitrogen in Fuel (/)
	Episode Action Plan (/)
	Equipment Manufacturers Information (/)  ERC Quantification (/)
	Exemption Related Document (/)  Existing Certificates to Operate and/or Permits to Construct (/)
	Existing Consent Order (/)
	Existing Methane Migration & Recovery Well Plan (/)
	Existing Permit Figures (/)
	Facility Location Map (/)
_	·

Facility-Wide Operating Permit Submittal Schedule (\_\_\_/\_\_\_)

☐ Fugitive Dust Control Plan (\_\_\_/\_\_\_\_)
☐ General Flow Diagram (\_\_\_/\_\_\_)

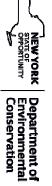
Generating Plant Site & Section Sheet (\_\_\_/\_\_\_)



Facility: WHEELABRATOR HUDSON FALLS Mar 29, 2024 10:40 am

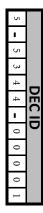
	Supporting Documentation
	LAER Demonstration (/)
	Letter of Intent to Commence Work (/)
X	List of Exempt Activities (form attached) (/)
	MACT Demonstration (/)
X	Methods Used To Determine Compliance (form attached) ( / /)
	Miscellaneous Attachments - Not Otherwise Specified ( / / )
	Miscellaneous Correspondence (/)
	Mitigation Planting Plan (/)
	MSDS Information Sheets (/)
	Non-CEM: Custom Monitoring, Recordkeeping and/or Reporting Plan (/)
	Notice Covenant (/)
	Notice of Intent to Commence Work (/)
	NOx RACT Compliance Plan (/)
	NOx RACT Operating Plan (/)
	Opacity Compliance Plan (/)
	Operational Flexibility:Desc of Alternative Operating Scenarios and Protocols (/)
X	P.E. Certification (form attached) (/)
	Permit Sign (/)
	Pesticide Treatment Area Map (/)
	Photograph(s) (/)
	Plot Plan (/)
	Process Flow Diagram(s) ( / )
	Process Material Specification Data (/)
	Process Operation Log Sheet(s) (//)
X	Project Location Map (/)
	PSD Permit Correlation Tables (//)
	RACT Demonstration (/)
	Regulatory Analysis Summary (/)
	Results of SEQR Review (//)
	Seed Mixture Recommendations (/)
	Short Environmental Assessment Form ( / / )
	Site Plan (/)
	Solid Waste Annual Report Form (/)
	SPDES Permit (/)
	Stack Test Protocols/Reports (/)
	Title IV Acid Rain Permit Application (/)
	Transfer Form (/)
	VOC RACT Compliance Plan (/)
	Wood Waste Specifications (/)
	WQC - Basis for Conditions (//)

# Attachment C List of Exempt Activities



Date of Form

May 2024



#### **List of Exempt Activities**

#### Instructions

corresponding information blank. used in the Title V permit application. Provide all additional information where requested. If a listed activity is not operated at the facility, leave the In order to complete this form, enter the number and building location of each exempt activity conducted. Building IDs used on this form should match those facility. This form must be provided with each application for a new Title V facility permit and Title V facility permit renewal, or whenever changes are necessary. Applicants for Title V facility permits must provide a listing of each exempt activity, as described in 6 NYCRR Part 201-3.2(c), that is currently operated at the

Rule Citation 201-3.2(c)	Description	Number of Activities	Building Location
	Combustion		
(1)	Stationary or portable combustion installations where the furnace has a maximum rated heat input capacity less than 10 MMBtu/hr burning liquid or gaseous fuels; or a maximum heat input capacity of less than 1 MMBtu/hr burning solid fuels. This activity does not include combustion installations burning any material classified as solid waste, as defined in 6 NYCRR Part 371, or waste oil, as defined in 6 NYCRR Subpart 225-2.	12	10 at Boiler Bldg., 2 at Water
	For each activity listed, attach documentation indicating the date of construction, heat input (MMBtu/hr), and the type of fuel combusted.		Bldg.
(2)	Space heaters burning waste oil at eligible facilities, as defined in 6 NYCRR Subpart 225-2, generated on-site or at a facility under common control, alone or in conjunction with used oil generated by a do-it-yourself oil changer as described in 6 NYCRR Subpart 374-2.	0	
(3)(i)	Stationary or portable internal combustion engines that are liquid or gaseous fuel powered and located within the New York City metropolitan area or the Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, or Woodbury, and have a maximum mechanical power rating of less than 200 brake horsepower.  For each activity listed, attach documentation indicating the date of construction, engine model year, engine rating (hp), displacement (L/cylinder), type of fuel combusted, and EPA issued certificate of conformity.	0	



5 3 4	DEC ID  DEC ID	Date of Form	rm
Rule Citation 201-3.2(c)	Description	Number of Activities	Building Location
(3)(ii)	Stationary or portable internal combustion engines that are liquid or gaseous fuel powered and located outside of the New York City metropolitan area or the Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, or Woodbury, and have a maximum mechanical power rating of less than 400 brake horsepower.	1	Fire Pump
	For each activity listed, attach documentation indicating the date of construction, engine model year, engine rating (hp), displacement (L/cylinder), type of fuel combusted, and EPA issued certificate of conformity.		Room
(3)(iii)	Stationary or portable internal combustion engines that are gasoline powered and have a maximum mechanical power rating of less than 50 brake horsepower.	0	
(4)	Reserved.		
(5)	Gas turbines with a heat input at peak load less then 10 MMBtu/hour	0	
(6)	Emergency power generating stationary internal combustion engines, as defined in 6 NYCRR Part 200.1(cq). Stationary internal combustion engines used for peak shaving and/or demand response programs are not exempt.	0	
	For each activity listed, attach documentation indicating the date of construction, engine model year, engine rating (hp), displacement (L/cylinder), type of fuel combusted, and EPA issued certificate of conformity.		
	Combustion Related		
(7)	Non-contact water cooling towers and water treatment systems for process cooling water and other water containers designed to cool, store or otherwise handle water that has not been in direct contact with gaseous or liquid process streams.	0	
	Agricultural		
(8)	Feed and grain milling, cleaning, conveying, drying and storage operations including grain storage silos, where such silos exhaust to an appropriate emissions control device, excluding grain terminal elevators with permanent storage capacities over 2.5 million U.S. bushels, and grain storage elevators with capacities above one million bushels.	0	



NEWYORK Department of STATE OF Date of Form

	0	Gasoline dispensing sites registered with the department pursuant to 6 NYCRR Part 613.	(16)
		Commercial - Other	
	0	Graphic arts processes which are specifically exempted from regulation under 6 NYCRR Part 234, with respect to emissions of volatile organic compounds which are not given an A rating as described in 6 NYCRR Part 212.	(15)
	0	Graphic label and/or box labeling operations where the inks are applied by stamping or rolling.	(14)
	0	Graphic arts processes at facilities located outside the New York City metropolitan area or the Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, or Woodbury whose facility-wide total emissions of volatile organic compounds from inks, coatings, adhesives, fountain solutions and cleaning solutions are less than three tons during any 12-month period.	(13)
	0	Screen printing inks/coatings or adhesives which are applied by a hand-held squeegee. A hand-held squeegee is one that is not propelled though the use of mechanical conveyance and is not an integral part of the screen printing process.	(12)
		Commercial - Graphic Arts	
	0	Emissions from flavorings added to a food product where such flavors are manually added to the product.	(11)
	0	Flour silos at bakeries, provided all such silos are exhausted through an appropriate emission control device.	(10)
		Commercial - Food Service Industries	
	0	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.	(9)
Building Location	Number of Activities	Description	Rule Citation 201-3.2(c)
	May 2024	4 4 - 0 0 0 0 1	5 🕳 5 3

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NEWYORK Department of STATE OF Date of Form May 2024

Rule Citation 201-3.2(c)	Description	Number of Activities	Building Location
	Surface coating and related activities at facilities which use less than 25 gallons per month of total coating materials, or with actual volatile organic compound emissions of 1,000 pounds or less from coating materials in any 12-month period. Coating materials include all paints and paint components, other materials mixed with paints prior to application, and cleaning solvents, combined. This exemption is subject to the following:		
(17)	(i) The facility is located outside of the New York City metropolitan area or the Orange County towns of Blooming Grove, Chester, Highlands, Monroe, Tuxedo, Warwick, or Woodbury; and	0	
	(ii) All abrasive cleaning and surface coating operations are performed in an enclosed building where such operations are exhausted into appropriate emission control devices.		
(18)	Abrasive cleaning operations which exhaust to an appropriate emission control device.	0	
(19)	Ultraviolet curing operations.	0	
	Municipal/Public Health Related		
(20)	Landfill gas ventilating systems at landfills with design capacities less than 2.5 million megagrams (3.3 million tons) and 2.5 million cubic meters (2.75 million cubic yards), where the systems are vented directly to the atmosphere, and the ventilating system has been required by, and is operating under, the conditions of a valid 6 NYCRR Part 360 permit, or order on consent.	0	
	Storage Vessels		
(21)	Distillate fuel oil, residual fuel oil, and biodiesel storage tanks with storage capacities below 300,000 barrels.	0	
(22)	Pressurized fixed roof tanks which are capable of maintaining a working pressure at all times to prevent emissions of volatile organic compounds to the outdoor atmosphere.	0	
(23)	External floating roof tanks which are of welded construction and are equipped with a metallic-type shoe primary seal and a secondary seal from the top of the shoe seal to the tank wall.	0	



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5 - 5 3 4	4 - 0 0 0 0 1	May 2024	
Rule Citation 201-3.2(c)	Description	Number of Activities	Building Location
	External floating roof tanks which are used for the storage of a petroleum or volatile organic liquid with a true vapor pressure less than 4.0 psi (27.6 kPa), are of welded construction and are equipped with one of the following:		
	(i) a metallic-type shoe seal;		
(24)	(ii) a liquid-mounted foam seal;	0	
	(iii) a liquid-mounted liquid-filled type seal; or		
	(iv) equivalent control equipment or device.		
(25)	Storage tanks, including petroleum liquid storage tanks as defined in 6 NYCRR Part 229, and liquid asphalt storage tanks with capacities less than 10,000 gallons, except those subject to 6 NYCRR Part 229 or Part 233.	0	
(26)	Horizontal petroleum or volatile organic liquid storage tanks. 2 Diesel, 1 Kerosene	3	Outside
(27)	Storage of solid materials, provided all such storage is exhausted through an appropriate emission control device. This exemption does not include raw material, clinker, or finished product storage at Portland cement plants.	2	Outside
	Industrial		
(28)	Processing equipment at existing sand and gravel and stone crushing plants which were installed or constructed before August 31, 1983, where water is used for operations such as wet conveying, separating, and washing. This exemption does not include processing equipment at existing sand and gravel and stone crushing plants where water is used for dust suppression.	0	
(29)(i)	Sand and gravel, crushed stone, concrete, or recycled asphalt processing lines at non-metallic mineral processing facilities that are a permanent or fixed installation with a maximum rated processing capacity of 25 tons of minerals per hour or less.	0	
(29)(ii)	Sand and gravel, crushed stone, concrete, or recycled asphalt processing lines at non-metallic mineral processing facilities that are a portable emission source with a maximum rated processing capacity of 150 tons of minerals per hour or less.	0	



NEWYORK Department of STATE OF

5 - 5 3 4	DEC ID   D:	Date of Form  May 2024	Ä
Rule Citation 201-3.2(c)	Description	Number of Activities	Building Location
(29)(iii)	Sand and gravel, crushed stone, concrete, or recycled asphalt processing lines at non-metallic mineral processing facilities that are used exclusively to screen minerals at a facility where no crushing or grinding takes place.	0	
(30)	Reserved.		
(31)	Surface coating operations which are specifically exempted from regulation under 6 NYCRR Subparts 228-1 and 228-2, with respect to emissions of volatile organic compounds which are not given an A rating pursuant to 6 NYCRR Part 212.	0	
(32)	Pharmaceutical tablet branding operations.	0	
(33)	Thermal packaging operations, including, but not limited to, therimage labeling, blister packing, shrink wrapping, shrink banding, and carton gluing.	0	
(34)	Powder coating operations.	0	
(35)	All tumblers used for the cleaning and/or deburring of metal products without abrasive blasting.	0	
(36)	Presses used exclusively for molding or extruding plastics except where halogenated polymers are used or where halogenated carbon compounds or hydrocarbon solvents are used as foaming agents.	0	
(37)	Concrete batch plants where the cement weigh hopper and all bulk storage silos are exhausted through fabric filters, and the batch drop point is controlled by a shroud or other emission control device.	0	
(38)	Cement storage operations not located at Portland cement plants where materials are transported by screw or bucket conveyors.	0	
(39)(i)	Cold cleaning degreasers with an open surface area of 11 square feet or less and an internal volume of 93 gallons or less or, having an organic solvent loss of 3 gallons per day or less.	0	
39(ii)	Conveyorized degreasers with an air/vapor interface smaller than 22 square feet (2 square meters), unless subject to the requirements of 40 CFR 63 Subpart T.	0	
(39)(iii)	Open-top vapor degreasers with an open-top area smaller than 11 square feet (1.0 square meter), unless subject to the requirements in 40 CFR 63, Subpart T.	0	
	Miscellaneous		
(40)	Ventilating and exhaust systems for laboratory operations. This exemption does not include laboratory operations used to produce products for sale except in a de minimis manner.	1	Boiler Bldg.



5 3 4	4 - 0 0 0 0 1	May 2024	
Rule Citation 201-3.2(c)	Description	Number of Activities	Building Location
(41)	Exhaust or ventilating systems for the melting of gold, silver, platinum and other precious metals.	0	
(42)	Exhaust systems for paint mixing, transfer, filling or sampling and/or paint storage rooms or cabinets, provided the paints stored within these locations are stored in closed containers when not in use.	1	Boiler Bldg.
(43)	Exhaust systems for solvent transfer, filling or sampling, and/or solvent storage rooms provided the solvents are stored in closed containers when not in use.	0	
(44)	Reserved		
(45)	The application of odor counteractants and/or neutralizers.	1	Boiler Bldg.
(46)	Hydrogen, natural gas, and methane fuel cells.	0	
(47)	Dry cleaning equipment that uses only water-based cleaning processes or those using liquid carbon dioxide.	0	
(48)	Manure spreading, handling and storage at farms and agricultural facilities.	0	
(49)	Covered manure storage at farms that exhausts to a flare or other appropriate emission control device. This activity does not include anaerobic digestion processes operating with or without stationary or portable combustion installations.	0	
(50)	Coffee roasting processes which have a maximum operating capacity of 3 kilograms or less of green coffee beans per batch and no greater than 25 tons of green coffee beans per year, that are vented through an unobstructed, vertical stack that ensures proper dispersion of air contaminants.	0	
(51)	Process emission sources at breweries with total combined beer and/or malt liquor production of 60,000 barrels per year or less.	0	
(52)	Process emission sources at wineries with total combined wine and/or brandy production of 700,000 gallons per year or less.	0	
(53)	Process emission sources at distilleries with 10,000 distiller's bushels of grain input per year or less.	0	
(54)	Process emission sources at wood and lumber drying kilns with an annual throughput of untreated wood of 275,000 board feet or less.	0	

#### Attachment D Methods Used to Determine Compliance



**DEC ID**5 | - | 5 | 3 | 4 | 4 | - | 0 | 0 | 0 | 1

		Methods Used to Determine Compliance	
Emission Unit ID	Applicable Requirement	Method Used to Determine Compliance	Compliance Date
U-00001 U-00002	6 NYCRR 231-2	The maximum annual potential (MAP) for NOx is 162 tons per year for each emission unit, and based on the maximum allowable concentration of 205 ppm (dry, corrected to 7% O2) of NOx and an hourly design stack flow rate of 25,167 dscf (corrected to 7% oxygen). The facility has not requested a modification to the MAP as these allowable criteria are unchanged.	
U-00001 U-00002	40 CFR 52.21(j)(2)	Nitrogen oxide emissions shall not exceed 372 ppmvd at 7% O2 (1-hour average). Nitrogen oxide emissions shall be measured continuously by CEMS. Monitoring data shall be reported semi-annually to NYSDEC.	
U-00001 U-00002	40 CFR 60.13(a)	Continuous monitoring systems for measuring opacity complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period. Continuous monitoring systems for measuring emissions other than opacity complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.	
U-00001 U-00002	40 CFR 60.33b(a)(1)(i)	Particulate emissions shall not exceed 25 mg/dscm at 7% O2. There is an additional stack limit of 0.1 lb/MMBtu required under 40 CFR 52.21(j)(2). Stack testing shall be conducted annually to measure particulate emissions in accordance with EPA Method 5. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	40 CFR 60.33b(a)(1)(iii )	Visible emissions shall not exceed 10% opacity (6-minute average).  Opacity shall be measured continuously by COMS. Monitoring data shall be reported semi-annually to NYSDEC.	
U-00001 U-00002	40 CFR 60.33b(a)(2)(i)	Cadmium emissions shall not exceed 35 ug/dscm at 7% O2. Stack testing shall be conducted annually to measure cadmium emissions in accordance with EPA Method 29. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	40 CFR 60.33b(a)(3)	Mercury emissions shall not exceed 50 ug/dscm at 7% O2 or 85% reduction by weight, whichever is less stringent. Stack testing shall be conducted annually to measure mercury emissions in accordance with Method 29. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	40 CFR 60.33b(a)(4)	Emissions of lead shall not exceed 400 micrograms per dry standard cubic meter, corrected to 7 percent oxygen. Stack testing shall be conducted annually to measure lead emissions in accordance with Method 29. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	40 CFR 60.33b(b)(3)(i)	Each MWC unit is required to meet the less stringent of either of the following: an emission limit for sulfur dioxide not to exceed 29 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis). Compliance with these limits is based on a 24-hour daily geometric mean. To demonstrate compliance with the emission limit the owner or operator of the facility shall install, calibrate, maintain and and operate a continuous emissions monitor for sulfur dioxide.	
U-00001 U-00002	40 CFR 60.33b(b)(3)(ii )	Each MWC unit is required to meet the less stringent of either of the following: an emission limit for hydrogen chloride not to exceed 29 parts per million by volume, corrected to 7 percent oxygen (dry basis) or, a 95 percent reduction by weight or volume of the potential hydrogen chloride emission concentration. Compliance with the latter (percent reduction) limit will be determined by conducting an annual stack emission test in accordance with EPA Method 26/26A. Reporting shall be done in accordance with 40 CFR 60.39b, as applicable.	

Sheet <u>1</u> of <u>4</u>



**DEC ID**5 - 5 3 4 4 - 0 0 0 0 1

		Methods Used to Determine Compliance	
Emission Unit ID	Applicable Requirement	Method Used to Determine Compliance	Compliance Date
U-00001 U-00002	40 CFR 60.33b(c)(1)(ii )	Each MWC unit which employs an electrostatic precipitator for emission controls is required to meet an emission concentration limit for dioxin/furan not to exceed 35 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen. Compliance with the limit will be determined by conducting an annual stack test in accordance with EPA Method 23. Reporting shall be done in accordance with 40 CFR 60.39b, as applicable.	
U-00001 U-00002	40 CFR 60.34b(a)	Carbon monoxide emissions shall not exceed 100 ppmvd at 7% O2 (4-hour block average). In addition, the source owner or operator shall not exceed, 6NYCRR 617.11(d)(5), minimum combustion index (CI) requirements of 99.5% and 99.8% based on 8-hour and 7-day running averages, respectively. Compliance with the 100 ppm CO limit also serves to demonstrate compliance with these CI limits. Carbon monoxide emissions shall be measured continuously by CEMS. Monitoring data shall be reported semi-annually to NYSDEC.	
U-00001 U-00002	40 CFR 60.35b	A site-specific operating manual will be developed and updated on a yearly basis that must, at a minimum, address the elements of the MWC unit operation specified within the condition.	
U-00001 U-00002	40 CFR 60.35b	All chief facility operators, shift supervisors, and control room operators must complete a municipal waste combustor operator training course which is acceptable to the Department prior to the date they assume responsibilities that affect operation of the municipal waste combustor unit.	
U-00001 U-00002	40 CFR 60.36b	The discharge of visible emissions from the ash conveying system shall not exceed 5% of the observation period (i.e., 9 minutes per 3-hour period). Visible emission testing shall be conducted as required in accordance with Method 22. Test data shall be reported semi-annually to NYSDEC.	
U-00001 U-00002	40 CFR 60.38b	If the MWC achieves a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter total mass, corrected to 7 percent oxygen, the alternative performance testing schedule for dioxins/furans specified in 40 CFR 60.58b(g)(5)(iii) may be used.	
U-00001 U-00002	40 CFR 60.58b	During the performance tests for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed. An average carbon mass feed rate in kilograms or pounds per hour shall be estimated during the initial performance test and each subsequent performance test.	
U-00001 U-00002	40 CFR 60.58b	The owner or operator of an affected facility shall estimate the total carbon usage of the plant (kilograms or pounds) for each calendar quarter by two independent methods, according to the procedures in paragraphs $(m)(3)(i)$ and $(m)(3)(ii)$ . Pneumatic injection pressure or other carbon injection system operational indicator shall be used to provide additional verification of proper carbon injection system operation.	
U-00001 U-00002	40 CFR 60.58b	The carbon feeder screw speed (rpm), which is the primary indicator of the carbon mass feed rate will be monitored to show it equals or exceeds the level documented during the performance test (based on an 8-hour block average) specified under paragraphs (m)(1)(i) of this section or the corrected screw feeder speed obtained during periodic calibration.	
U-00001 U-00002	40 CFR 60.34b(b)	Each MWC unit shall not be operated at a steam load level exceeding 110 percent of the maximum demonstrated municipal waste combustor unit load (highest 4-hour block arithmetic average unit steam load, measured in pounds per hour) reached during the most recent performance test where compliance with the dioxin/furan emission limit was demonstrated).	

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		Methods Used to Determine Compliance	
Emission Unit ID	Applicable Requirement	Method Used to Determine Compliance	Compliance Date
U-00001 U-00002	40 CFR 60.34b(b)	Each MWC unit will be operated at a temperature not to exceed 17C above the maximum demonstrated particulate matter control device temperature, as measured at the particulate matter control device inlet, during four consecutive hours (4-hour block arithmetic average) determined at the most recent dioxin/furan performance test demonstrating compliance with the applicable dioxin/furan limit.	
U-00001 U-00002	40 CFR 60.33b(d)	Nitrogen oxide emissions shall not exceed 205 ppmvd at 7% O2 (24-hour daily average). Nitrogen oxide emissions shall be measured continuously by CEMS. Monitoring data shall be reported semi-annually to NYSDEC.	
U-00001 U-00002	6 NYCRR 219-7.2	The carbon feeder screw speed (rpm), which is the primary indicator of the carbon mass feed rate will be monitored to show it equals or exceeds the level documented during the performance test (based on an 8-hour block average) or the corrected speed obtained during periodic calibration.	
U-00001 U-00002	6 NYCRR 219-7.2	Mercury emissions shall not exceed 28 ug/dscm at 7% O2 or 85% reduction by weight, whichever is less stringent. Stack testing shall be conducted to measure emissions in accordance with Method 29. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	Polycyclic aromatic hydrocarbons (PAH), benzo(a) pyrene (BaP), and polychlorinated biphenyls (PCB) emissions shall not exceed the following: PAH: 0.0085 lb/hr, BaP: 0.00085 lb/hr, PCB: 0.000213 lb/hr. Stack testing shall be conducted upon request of NYSDEC to measure PAH, BaP and PCB in accordance with EPA Method 23. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	Volatile organic compound (VOC) emissions shall not exceed 4.5 lb/hr. Stack testing shall be conducted upon request of NYSDEC to measure VOC emissions in accordance with EPA Method 25A. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	Sulfuric acid emissions shall not exceed 1.42 lb/hr. Stack testing shall be conducted upon request of NYSDEC to measure sulfuric acid emissions in accordance with EPA Method 8. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	Hydrogen fluoride emissions shall not exceed 0.04 lb/hr. Stack testing shall be conducted upon request of NYSDEC to measure hydrogen fluoride emissions in accordance with EPA Method 26A. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	Total PCDD and PCDF emission (tetra-through octa-homologue groups, as well as 2,3,7,8 substituted congeners) shall not exceed 9.0 ng/dscm at 7% O2, expressed in terms of 2,3,7,8-TCDD Toxic Equivalents (using 1989 EPA Toxic Equivalency Factors). Stack testing shall be conducted upon request of NYSDEC to measure total PCDD and PCDF emissions in accordance with EPA Method 23. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	Formaldehyde emissions shall not exceed 0.762 lb/hr. Stack testing shall be conducted upon request of NYSDEC to measure hydrogen fluoride emissions in accordance with P&CAM 125. Stack test data shall be reported to NYSDEC.	

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**DEC ID**5 | - | 5 | 3 | 4 | 4 | - | 0 | 0 | 0 | 1

		Methods Used to Determine Compliance	
Emission Unit ID	Applicable Requirement	Method Used to Determine Compliance	Compliance Date
U-00001 U-00002	6 NYCRR 617.11(d)(5)	Chromium(VI) emissions shall not exceed 0.002 lb/hr. Stack testing shall be conducted upon request of NYSDEC to measure chromium(VI) emissions in accordance with SW-846-0013. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	Trace metal emissions shall not exceed the following: Arsenic: 0.00125 lb/hr; Barium: 0.005 lb/hr; Beryllium: 0.00000465 lb/hr; Chromium: 0.065 lb/hr; Cobalt: 0.003 lb/hr; Copper: 0.0085 lb/hr; Manganese: 0.03 lb/hr; Nickel: 0.115 lb/hr; Selenium: 0.001 lb/hr; Vanadium: 0.000342 lb/hr; Zinc: 0.75 lb/hr. Stack testing shall be conducted upon NYSDEC request to measure the required metals in accordance with Method 29. Stack test data shall be reported to NYSDEC.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	The Permittee must maintain a surrogate temp. of 1100 F or greater, based on a running 15 minute avg. of readings, recorded at each incinerator's approved permanent thermocouple location. This surrogate will demonstrate compliance with requirement to maintain a 1500 F or higher temp. after last point of overfire air.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	The auxiliary burner installed in each MWC unit shall be used to achieve a min. temp of 1500 F after the last point of overfire air prior to commencing waste feed. Compliance will be demonstrated by measuring surrogate temp. of 1100 F or higher at the incinerator's approved permanent thermocouple location.	
U-00001 U-00002	6 NYCRR 617.11(d)(5)	Each municipal waste combustor shall not exceed 70,000 lb/hr of steam production (24-hour rolling average). The steam production rate shall be monitored continuously and will be reported quarterly to NYSDEC.	
Facility	40 CFR 63 Subpart ZZZZ	Records of maintenance conducted in order to demonstrate operation and maintenance of the engine and after-treatment control device (if any) are in accordance with the manufacturer's emission-related operation and maintenance instructions or the facility maintenance plan.	
Facility	40 CFR 63 Subpart ZZZZ	Records of the hours of operation of the engine from the non-resettable hour meter must be maintained, as follows:  (1) Hours for emergency operation of the engine, including what classified the operation as emergency;  (2) Hours for non-emergency operation of the engine including the purpose of non-emergency operating hours; and  (3) If the engine is used for demand response operation, keep records of the notification of the emergency situation, and the time the engine was operated as part of a demand response.	

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