

Permit ID: 5-5344-00001/00016

**Renewal Number: 4** 

Modification Number: 1 01/31/2020

**Facility Identification Data** 

Name: WHEELABRATOR HUDSON FALLS

Address: 93 RIVER ST

**HUDSON FALLS, NY 12839-1354** 

Owner/Firm

Name: WHEELABRATOR HUDSON FALLS LLC

Address: 93 RIVER ST

HUDSON FALLS, NY 12839, USA

Owner Classification: Corporation/Partnership

**Permit Contacts** 

Division of Environmental Permits:

Name: BETH A MAGEE

Address: NYSDEC - WARRENSBURG SUBOFFICE

232 GOLF COURSE RD

WARRENSBURG, NY 12885-1172

Phone:5186231281

Division of Air Resources: Name: RANDY L LAROSE Address: 232 GOLF COURSE RD WARRENSBURG, NY 12885

Phone:5186231212

Air Permitting Facility Owner Contact: Name: MAURICE C HOLCOMB

Address: WHEELABRATOR HUDSON FALLS LLC

93 RIVER ST

**HUDSON FALLS, NY 12839** 

Phone:5187472390

## Permit Description Introduction

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

#### **Summary Description of Proposed Project**

This modification is for an Administrative Amendment to make the Annual Compliance Certification due date consistent with the previous title V permit. No other changes were made to the issued title V permit, however some permit conditions were renumbered.



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#### **Attainment Status**

WHEELABRATOR HUDSON FALLS is located in the town of KINGSBURY in the county of WASHINGTON.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

#### Criteria Pollutant

#### Attainment Status

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Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	TRANSPORT REGION (NON-ATTAINMENT)
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

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## **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.

#### **Permit Structure and Description of Operations**

The Title V permit for WHEELABRATOR HUDSON FALLS

is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

combustion - devices which burn fuel to generate heat, steam or power

incinerator - devices which burn waste material for disposal

control - emission control devices

process - any device or contrivance which may emit air contaminants

that is not included in the above categories.

<sup>\*</sup> Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.

<sup>\*\*</sup> NOx has a separate ambient air quality standard in addition to being an ozone precursor.



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WHEELABRATOR HUDSON FALLS is defined by the following emission unit(s):

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

Emission unit U00001 is associated with the following emission points (EP): 00001

Process: 001 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.

Process: 002 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 unit 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.

Emission unit U00002 is associated with the following emission points (EP): 00002

Process: 003 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.

Process: 004 This process involves municipal solid waste and/or solid waste combustion (mass-burn) in a water wall refractory combustor to generate electricity for sale.

## Title V/Major Source Status

WHEELABRATOR HUDSON FALLS is subject to Title V requirements. This determination is based This facility is major for the following permitted emissions:

CONTAMINANT	Potential To Emit (PTE)	2017 Actual Emissions
NOx	359 TPY	236 TPY
CO	105 TPY	20 TPY
HCL	35.7 TPY	10.1 TPY



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Total HAPs 45 TPY 11 TPY

NOx and CO PTEs based on 2018 stack test flow of 28018 ACFM @ 7%

## **Program Applicability**

The following chart summarizes the applicability of WHEELABRATOR HUDSON FALLS with regards to the principal air pollution regulatory programs:

Regulatory Program	Applicability

PSD	YES
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	YES
NSPS	YES
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	NO
SIP	YES

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#### NOTES:

PSD Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR 231-5, 231-6) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61, 6 NYCRR 200.10) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

MACT Maximum Achievable Control Technology (40 CFR 63, 6 NYCRR 200.10) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.



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NSPS New Source Performance Standards (40 CFR 60, 6 NYCRR 200.10) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212-3, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH, 6 NYCRR 200.10) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

## **Compliance Status**

Facility is in compliance with all requirements.

#### **SIC Codes**

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

SIC Code Description

4953 REFUSE SYSTEMS

## **SCC Codes**

SCC or Source Classification Code is a code developed and used" by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information. Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.



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SCC Code	Description
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3-90-006-89	IN-PROCESS FUEL USE
	INDUSTRIAL PROCESSES - IN-PROCESS FUEL USE
	General
5-03-001-12	SOLID WASTE DISPOSAL - INDUSTRIAL
	SOLID WASTE DISPOSAL: INDUSTRIAL -
	INCINERATION
	SOL WST DISP-INDUSTRIAL: INCINERATION: MASS
	BURN WATERWALL COMBUSTOR

#### **Facility Emissions Summary**

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

<b>Cas No.</b> 001746-01-6	Contaminant 2,3,7,8- TETRACHLORODI BENZO-P- DIOXIN	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
007440-38-2	ARSENIC	21.9			
007440-39-3	BARIUM	87.6			
000050-32-8	BENZO(A)PYREN E	14.89			
007440-41-7	BERYLLIUM	0.081			
007440-43-9	CADMIUM	57.8			
000124-38-9	CARBON	375712896			
	DIOXIDE				
0NY750-00-0	CARBON DIOXIDE EOUIVALENTS	384211564			
000630-08-0	CARBON MONOXIDE	189901			
007440-47-3	CHROMIUM	1139			
018540-29-9	CHROMIUM(VI)	35			
007440-48-4	COBALT	52.56			
007440-50-8	COPPER	149			
000050-00-0	FORMALDEHYDE	13350			
007647-01-0	HYDROGEN CHLORIDE	71353			
007664-39-3	HYDROGEN	701			



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	FLUORIDE	
007439-92-1	LEAD	661
007439-96-5	MANGANESE	526
007439-97-6	MERCURY	46.24
000074-82-8	METHANE	132559
007440-02-0	NICKEL METAL	2015
	AND INSOLUBLE	
	COMPOUNDS	
010024-97-2	NITROUS OXIDE	17398
0NY210-00-0	OXIDES OF	648000
	NITROGEN	
0NY075-00-0	PARTICULATES	41283
0NY075-00-5	PM-10	41283
001336-36-3	POLYCHLORINAT	3.7
	ED BIPHENYL	
130498-29-2	POLYCYCLIC	149
	AROMATIC	
	HYDROCARBONS	
007782-49-2	SELENIUM	17.5
007446-09-5	SULFUR	125467
	DIOXIDE	
007664-93-9	SULFURIC ACID	24878
0NY100-00-0	TOTAL HAP	89940
007440-62-2	VANADIUM	6
0NY998-00-0	VOC	78840
007440-66-6	ZINC	13140

#### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

#### Item A: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)

The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

#### Item B: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(a)(4)

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

## Item C: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

## Item D: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for



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permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

## Item E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

## Item F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

## Item G: Property Rights - 6 NYCRR 201-6.4(a)(6)

This permit does not convey any property rights of any sort or any exclusive privilege.

## Item H: Severability - 6 NYCRR Part 201-6.4(a)(9)

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

## Item I: Permit Shield - 6 NYCRR Part 201-6.4(g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information



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from the permittee concerning the ability to enter, inspect and monitor the facility.

## Item J: Reopening for Cause - 6 NYCRR Part 201-6.4(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 2 01-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

## Item K: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

## Item L: Federally Enforceable Requirements - 40 CFR 70.6(b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its



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applicable requirements as being enforceable under only state regulations.

#### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

#### Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

- (a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
  - (2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;
  - (3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
  - (4) The facility owner or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- (c) This provision is in addition to any emergency or upset provision contained in any applicable requirement. item\_02

## Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with



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this and any other state and federal air pollution control requirements, regulations or law.

## **Regulatory Analysis**

Location Facility/EU/EP/Process/	Regulation ES	Condition	Short Description
FACILITY	ECL 19-0301	73	Powers and Duties of
111012111	202 27 0302	. 5	the Department with respect to air pollution control
FACILITY	40CFR 52-A.21(j)(2)	42	Best Available Control Technology (BACT) (see narrative)
FACILITY	40CFR 60-A.13(a)	43	General provisions - Monitoring requirements
FACILITY	40CFR 60-A.13(e)	44	General provisions - Monitoring requirements
FACILITY	40CFR 60- Cb.33b(a)(1)(i	45	Existing Large MWC's - emission limit for particulates
FACILITY	40CFR 60- Cb.33b(a)(1)(i	46	Existing Large MWC's - emission limit for opacity
FACILITY	40CFR 60- Cb.33b(a)(2)(i	47	Existing Large MWC's - emission limit for cadmium
FACILITY	40CFR 60-Cb.33b(a)(3)	48, 49	Existing Large MWC's - emission limit for mercury
FACILITY	40CFR 60-Cb.33b(a)(4)	50	Existing Large MWC's - emission limit for lead
FACILITY	40CFR 60- Cb.33b(b)(3)(i	51, 52	Existing Large MWC's - emission limit for sulfur dioxide
FACILITY	40CFR 60- Cb.33b(b)(3)(i	53, 54	Existing Large MWC's - emission limit for hydrogen chloride
FACILITY	40CFR 60- Cb.33b(c)(1)(i	55	Existing Large MWC's - emission limit for dioxin/furan utilizing an electrostatic precipitatior
U-00001/00001	40CFR 60-Cb.33b(d)	72	Existing Large MWC's - emission limit for oxides of nitrogen
FACILITY	40CFR 60-Cb.34b(a)	56	Existing Large MWC's - operating practices carbon monoxide limit
U-00001/-/002/00001	40CFR 60-Cb.34b(b)	70	Existing Large MWC's - operating practices MWC temperature requirements and unit load level
U-00001/-/002/00003	40CFR 60-Cb.34b(b)	71	Existing Large MWC's - operating practices



MWC temperature

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			requirements and unit load level
FACILITY	40CFR 60-Cb.35b	57, 58, 59	Municipal waste combustor operator training and certification.
FACILITY	40CFR 60-Cb.36b	60	Emission guidelines for municipal waste combustor futitive ash emissions.
FACILITY	40CFR 60-Cb.38b	61	Compliance and performance testing.
FACILITY FACILITY	40CFR 60-Cb.39b(a) 40CFR 60-Eb.58b	62 63, 64, 65, 66	Compliance and
FACILITY	40CFR 63-ZZZZ	67	performance testing. Reciprocating Internal Combustion
FACILITY	40CFR 68	19	Engine (RICE) NESHAP Chemical accident prevention provisions
FACILITY	40CFR 82-F	20	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1, 21	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	74	Unavoidable noncompliance and violations
FACILITY FACILITY	6NYCRR 201-1.7 6NYCRR 201-1.8	11 12	Recycling and Salvage Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2(a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	22, 68, 69	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	15	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	16	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201- 6.4(c)(3)(ii	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	23	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance



Certification

## Division of Air Resources Permit Review Report

Permit ID: 5-5344-00001/00016

Renewal Number: 4

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			Certification
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## **Applicability Discussion:**

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

#### ECL 19-0301

This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

## 6 NYCRR 200.6

Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

## 6 NYCRR 200.7

Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

## 6 NYCRR 201-1.4

This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

## 6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

## 6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air



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#### 6 NYCRR 201-3.2 (a)

An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

#### 6 NYCRR 201-3.3 (a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

#### 6 NYCRR Subpart 201-6

This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

#### 6 NYCRR 201-6.4 (a) (4)

This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

## 6 NYCRR 201-6.4 (a) (7)

This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

## 6 NYCRR 201-6.4 (a) (8)

This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

## 6 NYCRR 201-6.4 (c)

This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

## 6 NYCRR 201-6.4 (c) (2)



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This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

#### 6 NYCRR 201-6.4 (c) (3) (ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

#### 6 NYCRR 201-6.4 (d) (4)

This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

## 6 NYCRR 201-6.4 (e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

## 6 NYCRR 201-6.4 (f) (6)

This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

#### 6 NYCRR 202-1.1

This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

#### 6 NYCRR 202-2.1

Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calENDar year.

#### 6 NYCRR 202-2.5

This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

## 6 NYCRR 211.2

This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

## 6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

#### 40 CFR Part 68

This Part lists the regulated substances and there applicability thresholds and sets the requirements for



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stationary sources concerning the prevention of accidental releases of these substances.

## 40 CFR Part 82, Subpart F

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act Amendments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

## **Facility Specific Requirements**

In addition to Title V, WHEELABRATOR HUDSON FALLS has been determined to be subject to the following regulations:

## 40 CFR 52.21 (j) (2)

BACT determinations are made on a case-by-case basis and can be no less stringent than any requirement that exists in the current State Implementation Plan (SIP) or 40 CFR 60 and 61. Emission and operational limitations required from a BACT determination will have to be entered into the **special** permit conditions, separately by the permit reviewer.

#### 40 CFR 60.13 (a)

This regulation specifies that all New Source Performance Standard (NSPS) affected sources that are required to have continuous monitoring systems (CMS) are subject to the requirements of Appendix B of 40 CFR Part 60 and if the CMS is used to demonstrate compliance with emission limits on a continuous basis, then it is also subject to Appendix F of 40 CFR Part 60.

#### 40 CFR 60.13 (e)

This regulation specifies minimum frequency of operation requirements for continuous monitoring systems required by 40 CFR Part 60.

## 40 CFR 60.33b (a) (1) (i)

This section sets forth the emission limit for particulate matter contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for particulate matter is 25 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

## 40 CFR 60.33b (a) (1) (iii)

This section sets forth the emission limit for opacity exhibited by the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for opacity is 10 percent (6 minute average).

40 CFR 60.33b (a) (2) (i)



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This section sets forth the emission limit for cadmium contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for cadmium is 35 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

## 40 CFR 60.33b (a) (3)

This section sets forth the emission limit for mercury contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for mercury is 50 micrograms per dry standard cubic meter or 15 percent of the potential mercury emission concentration (an 85 - percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent.

## 40 CFR 60.33b (a) (4)

This section sets forth the emission limit for lead contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for lead is 400 micrograms per dry standard cubic meter, corrected to 7 percent oxygen.

## 40 CFR 60.33b (b) (3) (i)

This section sets forth the emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for sulfur dioxide is 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), whichever is less stringent. Compliance

with this emission limit is based on a 24 - hour daily geometric mean.

#### 40 CFR 60.33b (b) (3) (ii)

This section sets forth the emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. The emission limit for hydrogen chloride is 29 parts per million

by volume or 5 percent of the potential hydrogen chloride emission concentration (95 - percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent.

## 40 CFR 60.33b (c) (1) (ii)

This section sets forth the emission limit for dioxins/furans contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb which does employ an electrostatic precipitator-based emission control system. The emission limit for dioxins/furans is 35 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen

#### 40 CFR 60.33b (d)

This section sets forth emission limits for nitrogen oxides, by municipal waste combustor technology, for



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nitrogen oxides contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. A limit of 205 parts per million (ppm) applies to mass burn waterwall combustors, 210 ppm to mass burn rotary waterwall, 250 ppm to refuse-derived fuel combustors, and 180 ppm to fluidized bed combustors, all corrected to 7 percent oxygen (dry basis).

#### 40 CFR 60.34b (a)

This section sets forth emission limits for carbon monoxide, by municipal waste combustor technology, for carbon monoxide contained in the gases discharged to the atmosphere from a municipal waste combustor subject to the requirements of the Emission Guidelines, 40 CFR 60, Subpart Cb. Limits are established as follows: 100 parts per million by volume (ppmv) for mass burn waterwall, mass burn refractory, mass burn rotary refractory, and fluidized-bed MWCs; 250 ppmv for mass burn rotary waterwall MWCs; 50 ppmv for modular starved - air and excess air MWCs; 150 ppmv mixed fuel-fired pulverized coal/refuse derived fuel (RDF) MWCs; 200 ppmv for spreader stoker mixed fuel-fired pulverized coal/RDF and RDF stoker MWCs, all corrected to 7 percent oxygen (dry basis).

## 40 CFR 60.34b (b)

This section sets forth municipal waste combustor operating practices which include maximum load level and temperature requirements. The operating range for the combustor must be no more than 110 percent of the maximum load level demonstrated during the most recent performance test demonstrating compliance with the applicable dioxin/furan limit. The temperature at the inlet of the particulate matter control device must be no more than 17degrees C (30.6 F) above the maximum demonstrated particulate matter control device temperature measured during the most recent dioxin/furan performance test demonstrating compliance with the applicable dioxin/furan limit.

#### 40 CFR 60.35b

This section requires that the applicant develop and update on a yearly basis a site-specific operating manual that must, at a minimum, address the elements of municipal waste combustor unit operation specified in 40 CFR 60.54b of Subpart Eb.

In addition, a training program is required to review the operating manual with each person who has responsibilities affecting the operation of a municipal waste combustor including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.

This section also requires that each chief facility operator and shift supervisor obtain and maintain a current provisional operator certification from either the American Society of Mechanical Engineers (QRO-1-1994) or from another certification program acceptable to the Department.

## 40 CFR 60.36b

This section sets forth the emission limit for municipal waste combustor fugitive ash emissions. It requires that discharge to the atmosphere of visible emissions of combustion ash from the ash conveying system (including conveyor transfer points) may not exceed 5 percent of the observation period (i.e. 9



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minutes per 3-hour period), as determined by EPA Reference Method 22 observations. This emission limit does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, it does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems. This emission limit does not apply during maintenance and repair of ash conveying systems.

#### 40 CFR 60.38b

This section sets forth compliance and performance testing requirements for municipal waste combustors.

## 40 CFR 60.39b (a)

This section requires that the applicant meet the municipal waste combustor reporting and recordkeeping provisions listed in 40 CFR 60.59b of Subpart Eb, as applicable.

## 40 CFR 60.58b

This section requires that the applicant meet specific municipal waste combustor compliance and performance testing requirements

## 40 CFR Part 63, Subpart ZZZZ

This regulation defines performance standards for stationary reciprocating internal combustion engines

#### 6 NYCRR 211.1

This regulation requires that no person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property.

#### 6 NYCRR 219-7.2

Section 219-7.2 sets forth annual compliance requirements including stack testing procedures to demonstrate compliance with a mercury emission limitation of 28 micrograms/dscm (corrected to 7% oxygen) or 85% removal, whichever is less stringent, for each municipal waste combustor unit.

## 6 NYCRR 617.11 (d) (5)

#### 617.11 DECISION-MAKING AND FINDINGS REQUIREMENTS.

- (a) Prior to the lead agency's decision on an action that has been the subject of a final EIS, it shall afford agencies and the public a reasonable time period (not less than 10 calendar days) in which to consider the final EIS before issuing its written findings statement. If a project modification or change of circumstance related to the project requires a lead or involved agency to substantively modify its decision, findings may be amended and filed in accordance with subdivision 617.12(b) of this Part.
- (b) In the case of an action involving an applicant, the lead agency's filing of a written findings statement and decision on whether or not to fund or approve an action must be made within 30 calendar days after the filing of the final EIS.



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- (c) No involved agency may make a final decision to undertake, fund, approve or disapprove an action that has been the subject of a final EIS, until the time period provided in subdivision 617.11(a) of this section has passed and the agency has made a written findings statement. Findings and a decision may be made simultaneously.
  - (d) Findings must:
- (1) consider the relevant environmental impacts, facts and conclusions disclosed in the final EIS:
- (2) weigh and balance relevant environmental impacts with social, economic and other considerations:
  - (3) provide a rationale for the agency's decision;
  - (4) certify that the requirements of this Part have been met;
- (5) certify that consistent with social, economic and other essential considerations from among the reasonable alternatives available, the action is one that avoids or minimizes adverse environmental impacts to the maximum extent practicable, and that adverse environmental impacts will be avoided or minimized to the maximum extent practicable by incorporating as conditions to the decision those mitigative measures that were identified as practicable.
- (e) No state agency may make a final decision on an action that has been the subject of a final EIS and is located in the coastal area until the agency has made a written finding that the action is consistent with applicable policies set forth in 19 NYCRR 600.5. When the Secretary of State has approved a local government waterfront revitalization program, no state agency may make a final decision on an action, that is likely to affect the achievement of the policies and purposes of such program, until the agency has made a written finding that the action is consistent to the maximum extent practicable with that local waterfront revitalization program.

## 6 NYCRR Subpart 231-2

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

## **Compliance Certification**

**Summary of monitoring activities at WHEELABRATOR HUDSON FALLS:** 

Location Facility/EU/EP/Process/ES	Cond N	o. Type of Monitoring
FACILITY FACILITY FACILITY	42 44 45	continuous emission monitoring (cem) record keeping/maintenance procedures intermittent emission testing
FACILITY	46	monitoring of process or control device parameters as surrogate
FACILITY	47	intermittent emission testing
FACILITY	48	intermittent emission testing
FACILITY	49	intermittent emission testing
FACILITY	50	intermittent emission testing



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FACILITY	51	continuous emission monitoring (cem)
FACILITY	52	continuous emission monitoring (cem)
FACILITY	53	intermittent emission testing
FACILITY	54	intermittent emission testing
FACILITY	55	intermittent emission testing
U-00001/00001	72	continuous emission monitoring (cem)
FACILITY	56	continuous emission monitoring (cem)
U-00001/-/002/00001	70	monitoring of process or control device parameters
		as surrogate
U-00001/-/002/00003	71	monitoring of process or control device parameters
		as surrogate
FACILITY	59	record keeping/maintenance procedures
FACILITY	60	monitoring of process or control device parameters
		as surrogate
FACILITY	62	record keeping/maintenance procedures
FACILITY	63	record keeping/maintenance procedures
FACILITY	64	record keeping/maintenance procedures
FACILITY	65	record keeping/maintenance procedures
FACILITY	66	monitoring of process or control device parameters
		as surrogate
FACILITY	21	continuous emission monitoring (cem)
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	76	intermittent emission testing
FACILITY	77	intermittent emission testing
FACILITY	25	record keeping/maintenance procedures
FACILITY	29	intermittent emission testing
FACILITY	30	intermittent emission testing
FACILITY	31	intermittent emission testing
FACILITY	32	intermittent emission testing
FACILITY	33	intermittent emission testing
FACILITY	34	intermittent emission testing
FACILITY	35	intermittent emission testing
FACILITY	36	intermittent emission testing
FACILITY	37	record keeping/maintenance procedures
FACILITY	38	monitoring of process or control device parameters
		as surrogate
FACILITY	39	monitoring of process or control device parameters
		as surrogate
FACILITY	40	monitoring of process or control device parameters
		as surrogate
FACILITY	41	record keeping/maintenance procedures

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## **Basis for Monitoring**

Title V permits must contain sufficient periodic monitoring to assure compliance with the applicable requirements. In some cases, in order to provide reasonable compliance assurance with applicable requirements, it is necessary to develop facility specific operating/monitoring activities/conditions, which may include testing, monitoring, work practices, recordkeeping and reporting requirements. The basis of monitoring for these permit conditions is as follows:

## DECISION-MAKING AND FINDINGS REQUIREMENTS (6 NYCRR 617.11(d)(5)) -

In accordance with the State Environmental Quality Review Act (SEQR), the Department shall conduct their affairs with an awareness that they are stewards of the air, water, land and living resources, and the obligation to protect the environment. Based on hearings and the Commissioner's decision, the Department imposed substantive conditions to ensure compliance



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with SEQR requirements. These requirements are cited in the permit under 6 NYCRR 617.11(d)(5). However, some of these limitations have since been streamlined with more restrictive requirements (e.g., 6 NYCRR 219-7 and 40 CFR 60, Subpart Cb), which later became effective. The following are emission limitations which are unique to the Commissioner's decision and are included in permit conditions.

Periodic Stack Testing - State Only Enforceable emission limits for Formaldehyde, Polycyclic Aromatic Hydrocarbons, Volatile Organic Compounds, Sulfuric Acid Mist, Benzo(A)Pyrene, PCB's, Fluorides and numerous metals are subject to testing once every five (5) years. Initial stack testing was required twice within 18-months, and gradually reduced to once every five (5) years as evidence of reasonable continuous compliance was demonstrated.

Operating Limits - The plant loading rate is limited to a steaming rate of 70000 pounds per 24-hour period. This limit establishes the facility's daily allowable loading (based on a nominal load unit design of 200 tons per day of municipal solid waste with a heat value of 6200 Btu per pound). There is also a requirement to operate natural gas auxiliary burners to assure that a minimum temperature of  $1500 \,\Box$  at last point of overfire air injection (or a surrogate temperature of  $1100 \,\Box$  F at an approved location) is achieved. This temperature limit helps assure good combustion at all times, including periods of startup, shutdown, and malfunctions. The facility is not allowed to combust municipal solid waste if the air pollution controls are not operational or, if operational, are not performing properly in accordance to certain operational parmeters and continuous emission monitors. The permit identifies additional operating parameters which the facility is required to monitor and record in order to further demonstrate proper operations and maintenance upon request.

Reporting – In accordance with Part 617 requirements, the facility must submit quarterly excess emission/CEMS downtime reports. Since this is more restrictive than 40 CFR 60, Subpart Cb, semiannual reporting requirements, the facility is required to submit these reports at this frequency. Quarterly reporting provides the Department a better opportunity to review operational and compliance trends for compliance assurance.

Prevention of Significant Deterioration (PSD) (40 CFR 52.21) - The facility was issued a PSD construction permit in 1985 as a new major source with respect to the Federal PSD rule. The Clean Air Act identifies primary and secondary national ambient air quality standards (NAAQS) for six principal pollutants, which are called "criteria" air pollutants. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings. To assure compliance with the NAAQS, the State established PSD emission limits along with monitoring, recordkeeping, and reporting requirements. These requirements are based on the following criteria: installation of Best Available Control Technology (BACT), an Air Quality Analysis, additional Impacts Analysis, and Public involvement.

<u>Federal Emission Guideline for existing Large MSW combustors (40 CFR 60 Subpart Cb)</u> - This Federal emission guideline was adopted in December 1995, fully implemented in December



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2000, and amended in May 2006. The State adopted this rule by reference in 6 NYCRR Part 200. These guidelines establish emission standards for limiting emissions of nine air pollutants (i.e., particulate matter, carbon monoxide, dioxins/furans, sulfur dioxide, nitrogen oxides, hydrogen chloride, lead, mercury, and cadmium). These emission guidelines require compliance with emission limitations that reflect the performance of maximum achievable control technology (MACT). Note that this rule refers to sections of 40 CFR 60 Subpart Eb for several requirements, particularly those involving testing, monitoring, operator training/certification and reporting.

NYS MSW incinerator rule for mercury emissions (6 NYCRR Part 219-7) - This rule became effective in 2002 and regulates mercury emissions from large MSW combustors. The emission limits and monitoring requirements specified by the rule are incorporated into the facility's Title V air permit on the "State enforceable requirements" section of the permit.

NYS Acceptable Ambient Air Quality (6 NYCRR Section 200.6) - In order to evaluate the level of 1-hour NOx impacts associated with emission from this facility for comparison 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 stack concentration of 260 ppm (dry, corrected to 7% oxygen) and the exhaust flow rates measured during the 2018 stack test. To assure the 1-hour maximum ambient impact concentration derived from the model is maintained, the facility shall limit NOx emissions to no greater than 260 ppm (dry, corrected to 7% oxygen), combined stack average concentration. The facility shall install, calibrate, maintain and operate a continuous emission monitoring system for NOx (1 hour average).

<u>Streamlining of Regulatory Emissions</u> - In general, the permit only contains the most stringent requirements that apply in situations where more than one rule regulates a given pollutant. This is done to minimize confusion in the permit with respect to demonstrating compliance with the most stringent limits; however, the less restrictive emission limitations are also incorporated in to the permit conditions. Where regulations overlap in the type of emissions, unit conversions were calculated to assure the more stringent requirement is selected.

Continuous Emission Monitors (CEMs) and Continuous Opacity Monitors (COMs) (40 CFR 60 Subpart A and Appendix B)- Carbon Monoxide, Sulfur Dioxide (inlet and outlet to scrubber), Nitrogen Oxides, Oxygen, Carbon Dioxide and Opacity are monitored continuously to ensure that emissions do not exceed permit limits. These rules outline CEMs/COMs requirements for design, installation, data computation, and performance evaluations. QA/QC requirements include daily calibration checks, quarterly certified gas audits (CGAs) and annual relative accuracy test audits conducted by an independent firm in lieu of one quarterly CGA.