

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: Saratoga Biochar Solutions LLC
26 F Congress St # 346
Saratoga Springs, NY 12866

Facility: Saratoga Biochar Solutions LLC
Electric Dr
Moreau, NY 12828

Authorized Activity By Standard Industrial Classification Code:
3999 - MANUFACTURING INDUSTRIES, NEC

Permit Effective Date:

Permit Expiration Date:

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FEDERALLY ENFORCEABLE CONDITIONS****** Facility Level ********NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, 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 Commissioner shall specify the degree and/or method of emission control required.

Item C: Maintenance of Equipment - 6 NYCRR 200.7

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it 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 device effectively.

Item D: Unpermitted Emission Sources - 6 NYCRR 201-1.2

(a) Except as otherwise provided by this Part, construction or operation of a new, modified or existing air contamination source without a registration or permit issued pursuant to this Part is

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prohibited.

(b) If an existing facility or emission source was subject to the permitting requirements of this Part at the time of construction or modification, and the owner or operator failed to apply for a permit or registration as described in this Part, the owner or operator must apply for a permit or registration in accordance with the provisions of this Part. The facility or emission source is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing emission sources.

Item E: Recycling and Salvage - 6 NYCRR 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item F: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 201-1.8

No person shall unnecessarily remove, handle, or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

Item G: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 201-3.2 (a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source 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 which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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.

Item H: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR 201-3.3 (a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source 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 which contains emission sources or units subject to 6 NYCRR Subpart 201-3, 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.

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Item I: Required Emission Tests - 6 NYCRR 202-1.1

An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6 NYCRR Subpart 202-1.

Item J: Open Fires Prohibitions - 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.

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 applicable requirements as being enforceable under only state regulations.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: Acceptable Ambient Air Quality
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 200.6

Item 1.1:

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Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, 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 Commissioner shall specify the degree and/or method of emission control required.

Condition 2: Open Fires - Prohibitions
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 215.2

Item 2.1:

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

Item 2.2

Per Section 215.3, burning in an open fire, provided it is not contrary to other law or regulation, will be allowed as follows:

- (a) On-site burning in any town with a total population less than 20,000 of downed limbs and branches (including branches with attached leaves or needles) less than six inches in diameter and eight feet in length between May 15th and the following March 15th. For the purposes of this subdivision, the total population of a town shall include the population of any village or portion thereof located within the town. However, this subdivision shall not be construed to allow burning within any village.
- (b) Barbecue grills, maple sugar arches and similar outdoor cooking devices when actually used for cooking or processing food.
- (c) Small fires used for cooking and camp fires provided that only charcoal or untreated wood is used as fuel and the fire is not left unattended until extinguished.
- (d) On-site burning of agricultural wastes as part of a valid agricultural operation on contiguous agricultural lands larger than five acres actively devoted to agricultural or horticultural use, provided such waste is actually grown or generated on those lands and such waste is capable of being fully burned within a 24-hour period.
- (e) The use of liquid petroleum fueled smudge pots to prevent frost damage to crops.
- (f) Ceremonial or celebratory bonfires where not otherwise prohibited by law, provided that only untreated wood or other agricultural products are used as fuel and the fire is not left unattended until extinguished.
- (g) Small fires that are used to dispose of a flag or religious item, and small fires or other smoke producing process where not otherwise prohibited by law that are used in connection with a religious ceremony.
- (h) Burning on an emergency basis of explosive or other dangerous or contraband materials by police or other public safety organization.
- (i) Prescribed burns performed according to Part 194 of this Title.
- (j) Fire training, including firefighting, fire rescue, and fire/arson investigation training, performed under applicable rules and guidelines of the New York State Department of State's Office of Fire Prevention and Control. For fire training performed on acquired structures, the structures must be emptied and stripped of any material that is toxic, hazardous or likely to emit toxic smoke (such as asbestos, asphalt shingles and vinyl siding or other vinyl products) prior to burning and must be at least 300 feet from other occupied structures. No more than one structure per lot or within a 300 foot radius (whichever is bigger) may be burned in a training exercise.
- (k) Individual open fires as approved by the Director of the Division of Air Resources as may be required in response to an outbreak of a plant or animal disease upon request by the commissioner of the Department of Agriculture and Markets, or for the destruction of invasive

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plant and insect species.

(l) Individual open fires that are otherwise authorized under the environmental conservation law, or by rule or regulation of the Department.

**Condition 3: Maintenance of Equipment
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 200.7

Item 3.1:

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it 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 device effectively.

**Condition 4: Recycling and Salvage
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 201-1.7

Item 4.1:

Where practical, the owner or operator of an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of the ECL.

**Condition 5: Prohibition of Reintroduction of Collected Contaminants to the air
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 201-1.8

Item 5.1:

No person shall unnecessarily remove, handle or cause to be handled, collected air contaminants from an air cleaning device for recycling, salvage or disposal in a manner that would reintroduce them to the outdoor atmosphere.

**Condition 6: Exempt Sources - Proof of Eligibility
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 201-3.2 (a)

Item 6.1:

The owner or operator of an emission source or activity that is listed as being exempt may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all records necessary for demonstrating compliance with this Subpart on-site for a period of five years, and make them available to representatives of the department upon request.

**Condition 7: Trivial Sources - Proof of Eligibility
Effective for entire length of Permit**

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Applicable Federal Requirement:6 NYCRR 201-3.3 (a)

Item 7.1:

The owner or operator of an emission source or activity that is listed as being trivial in this Section may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request.

**Condition 8: Visible Emissions Limited
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 211.2

Item 8.1:

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

**Condition 9: Compliance Demonstration
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 212-1.6 (a)

Item 9.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: U-00SBS Emission Point: SBS01

Item 9.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

No person shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source, except only the emission of uncombined water. The Department reserves the right to perform or require the performance of an EPA Reference Test Method 9 opacity evaluation at any time during facility operation.

The facility owner or operator shall conduct a visible emissions observation of all emission points specified by this condition once per day while the process is in operation. The facility owner or operator will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard specified below.

The facility owner or operator shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions

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problem has been corrected. If visible emissions with the potential to exceed the limit specified (except the emission of uncombined water) are observed for three consecutive operating days from the same emission point, the facility owner or operator will notify the Department of the observations within one business day. The facility owner or operator will also perform an EPA Reference Test Method 9 opacity evaluation analysis of the affected emission point and submit the results to the Department.

Daily records of the visible emissions observations, any follow-up Method 9 observations, investigations, and corrective actions taken are to be maintained on site for a period of at least five years from the date of the record. Such records shall include the date and time of each observation, weather conditions, results of the observation, corrective actions taken, and explanations for days when weather conditions were prohibitive.

All records kept pursuant to this condition must be provided to the Department upon request.

Parameter Monitored: OPACITY
 Upper Permit Limit: 20 percent
 Reference Test Method: EPA Reference Test Method 9
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 10: Compliance Demonstration
 Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 212-1.7 (b)

Item 10.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS	
Process: CM1	Emission Source: BIOS1
Emission Unit: U-00SBS	
Process: CM1	Emission Source: CYCL1
Emission Unit: U-00SBS	
Process: CM1	Emission Source: VCYC1

Item 10.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The dry cyclone, venturi cyclone, and bio-scrubber shall be operated when the associated process equipment is operating. All equipment shall be installed, operated, monitored, and maintained in accordance

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with the manufacturer's instructions and specifications.

All operating, monitoring, and maintenance records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 11: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212-1.7 (b)

Item 11.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000335-67-1 PERFLUOROCTANOIC ACID (PFOA)

Item 11.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The pyrolysis chamber temperature shall be continuously monitored and recorded during the facility's emission performance tests. The process initial design has a minimum hourly average temperature of 900 degrees Fahrenheit with a residence time of 20 minutes. The conditions at which the process is operated during the air emission performance tests to show compliance with air emission regulations shall be recorded and become the operational limits for the process line. The facility must apply within 60 days of the department's approval of the test report for permit modification as necessary to ensure compliance with all the applicable air pollution control requirements.

The pyrolysis chamber must exhaust to the operational thermal oxidizer at all times while the associated process equipment is operational.

All equipment shall be installed and maintained in accordance with the manufacturer's instructions and specifications.

All operating, monitoring, and maintenance records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

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**Condition 12: Compliance Demonstration
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 12.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 12.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility shall record and store the moisture content testing results of received biosolids and wood waste as necessary to ensure the process stays at or closely around the target solids content based on biosolids at 77% moisture content and wood waste at 40% moisture content.

The facility shall submit an annual summary report of the moisture content testing of the biosolids and wood waste processed.

Testing records and supporting information shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 12 calendar month(s).

**Condition 13: Compliance Demonstration
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 13.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: U-00SBS

Process: CM1

Emission Source: THOX1

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

CAS No: 000335-67-1 PERFLUOROOCCTANOIC ACID (PFOA)

Item 13.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE

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Monitoring Description:

The thermal oxidizer shall be operated when the associated process equipment is operating. The oxidizing zone (third stage) must be maintained at a manufacturer's recommended minimum temperature of 1,800 degrees Fahrenheit with a residence time of 1 second to comply with 6 NYCRR Part 212-2.3(b).

The oxidizing zone temperature shall be monitored and recorded on a continuous basis when the thermal oxidizer is operating, except during quality assurance and routine maintenance activities. If the one hour average temperature falls below the specified limit in this condition, it shall be recorded and included in the facility's annual report.

All equipment shall be installed and maintained in accordance with the manufacturer's instructions and specifications. The minimum temperature may be modified once stack test results have been

All monitoring, operating, and maintenance records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Parameter Monitored: TEMPERATURE
 Lower Permit Limit: 1800 degrees Fahrenheit
 Monitoring Frequency: CONTINUOUS
 Averaging Method: 1-HOUR AVERAGE
 Reporting Requirements: ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 Subsequent reports are due every 12 calendar month(s).

Condition 14: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212-1.7 (b)

Item 14.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS
 Process: CM1 Emission Source: THOX1

Regulated Contaminant(s):
 CAS No: 0NY998-00-0 VOC
 CAS No: 000335-67-1 PERFLUOROCTANOIC ACID (PFOA)

Item 14.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
 PARAMETERS AS SURROGATE

Monitoring Description:

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The thermal oxidizer shall be operated when the associated process equipment is operating. The conditioning zone (second stage) must be maintained at a manufacturer's recommended minimum temperature of 1,650 degrees Fahrenheit to comply with 6 NYCRR Part 212-2.3(b).

The conditioning zone temperature shall be monitored and recorded on a continuous basis when the thermal oxidizer is operating, except during quality assurance and routine maintenance activities. If the one hour average temperature falls below the specified limit in this condition, it shall be recorded and included in the facility's annual report.

All equipment shall be installed and maintained in accordance with the manufacturer's instructions and specifications.

All monitoring, operating, and maintenance records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 1650 degrees Fahrenheit
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

**Condition 15: Compliance Demonstration
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 15.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: U-00SBS
Process: CM1 Emission Source: NH3S1

Regulated Contaminant(s):
CAS No: 007664-41-7 AMMONIA

Item 15.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

The Ammonia Scrubber (Sulfuric Acid Scrubber) shall be operated when the associated process equipment is operating. Scrubber liquid pH must be maintained at 4.5 or below, the maximum value according to manufacturer's specifications.

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The scrubber liquid pH shall be monitored and recorded on a continuous basis when the scrubbers are operating except during quality assurance and routine maintenance activities.

All equipment shall be installed and maintained in accordance with the manufacturer's instructions and specifications.

All operating, monitoring and maintenance records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Parameter Monitored: ACIDITY/ALKALINITY
 Upper Permit Limit: 4.5 pH (STANDARD) units
 Monitoring Frequency: CONTINUOUS
 Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 16: Compliance Demonstration Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212-1.7 (b)

Item 16.1:
 The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS
 Process: CMI Emission Source: NH3S1

Regulated Contaminant(s):
 CAS No: 007664-41-7 AMMONIA

Item 16.2:
 Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE

Monitoring Description:

The Ammonia Scrubber (Sulfuric Acid Scrubber) shall be operated when the associated process equipment is operating. Scrubber water recirculation flow rate must be maintained at or above 350 gallons per minute, the recommended minimum rate according to the manufacturer's specifications.

The scrubber water recirculation flow rate shall be monitored and recorded on a continuous basis when the scrubbers are operating except during quality assurance and routine maintenance activities.

All equipment shall be installed and maintained in accordance with the manufacturer's instructions and specifications.

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All operating, monitoring and maintenance records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Parameter Monitored: FLOW RATE
Lower Permit Limit: 350 gallons per minute
Monitoring Frequency: CONTINUOUS
Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 17: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212-1.7 (b)

Item 17.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: U-00SBS
Process: CM1 Emission Source: SO2S1
Regulated Contaminant(s):
CAS No: 007664-39-3 HYDROGEN FLUORIDE
CAS No: 007446-09-5 SULFUR DIOXIDE

Item 17.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

The Hydrated Lime Scrubber shall be operated when the associated process equipment is operating. Scrubber water recirculation flow rate must be maintained at or above 500 gallons per minute, the recommended minimum rate according to the manufacturer's specifications.

The scrubber water recirculation flow rate shall be monitored and recorded on a continuous basis when the scrubbers are operating except during quality assurance and routine maintenance activities.

All equipment shall be installed and maintained in accordance with the manufacturer's instructions and specifications.

All operating, monitoring and maintenance records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

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Parameter Monitored: FLOW RATE
 Lower Permit Limit: 500 gallons per minute
 Monitoring Frequency: CONTINUOUS
 Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 18: Compliance Demonstration
 Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 212-1.7 (b)

Item 18.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS	
Process: CM1	Emission Source: SO2S1
Regulated Contaminant(s):	
CAS No: 007664-39-3	HYDROGEN FLUORIDE
CAS No: 007446-09-5	SULFUR DIOXIDE

Item 18.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
 PARAMETERS AS SURROGATE

Monitoring Description:

The Hydrated Lime Scrubber shall be operated when the associated process equipment is operating. Scrubber liquid pH must be maintained at or above 7, the minimum value according to manufacturer's specifications.

The scrubber liquid pH shall be monitored and recorded on a continuous basis when the scrubbers are operating except during quality assurance and routine maintenance activities.

All equipment shall be installed and maintained in accordance with the manufacturer's instructions and specifications.

All operating, monitoring and maintenance records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Parameter Monitored: ACIDITY/ALKALINITY
 Lower Permit Limit: 7 pH (STANDARD) units
 Monitoring Frequency: CONTINUOUS
 Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 19: Compliance Demonstration

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-1.7 (b)

Item 19.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: U-00SBS
Process: CM1

Emission Source: THOX1

Regulated Contaminant(s):
CAS No: 0NY998-00-0 VOC
CAS No: 000335-67-1 PERFLUOROOCCTANOIC ACID (PFOA)

Item 19.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE
PARAMETERS AS SURROGATE

Monitoring Description:

The thermal oxidizer shall be operated when the associated process equipment is operating. The reducing zone (first stage) must be maintained at a manufacturer's recommended minimum temperature of 2,300 degrees Fahrenheit with a residence time of 0.5 seconds to comply with 6 NYCRR Part 212-2.3(b).

The reducing zone temperature shall be monitored and recorded on a continuous basis when the thermal oxidizer is operating, except during quality assurance and routine maintenance activities. If the one hour average temperature falls below the specified limit in this condition, it shall be recorded and included in the facility's annual report.

All equipment shall be installed and maintained in accordance with the manufacturer's instructions and specifications.

All monitoring, operating, and maintenance records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Parameter Monitored: TEMPERATURE
Lower Permit Limit: 2300 degrees Fahrenheit
Monitoring Frequency: CONTINUOUS
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 20: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 212-2

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Item 20.1:

The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: U-00SBS

Emission Point: SBS01

Regulated Contaminant(s):

CAS No: 000064-19-7	ACETIC ACID
CAS No: 000074-89-5	METHYL AMINE
CAS No: 000075-04-7	ETHANAMINE
CAS No: 000075-50-3	METHANAMINE, N,N-DIMETHYL
CAS No: 000109-89-7	ETHANAMINE, N-ETHYL
CAS No: 000121-44-8	N,N-DIETHYL ETHANAMINE
CAS No: 000124-40-3	METHANAMINE, N-METHYL- C2H7N
CAS No: 000624-92-0	DIMETHYL DISULFIDE
CAS No: 000630-08-0	CARBON MONOXIDE
CAS No: 007647-01-0	HYDROGEN CHLORIDE
CAS No: 007783-06-4	HYDROGEN SULFIDE
CAS No: 000124-38-9	CARBON DIOXIDE

Item 20.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test for the contaminants listed in this condition to verify emission factor information and demonstrate compliance with the 6NYCRR Part 212 requirements. The facility must apply within 60 days of the department's approval of the test report for permit modification as necessary to ensure compliance with all the applicable air pollution control requirements.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Feedstocks and process operation during the testing shall represent the conditions that result in highest known concentrations of the target contaminants. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. The protocol should include specifics on the feedstocks and process operation to be used for obtaining the target contaminant

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concentrations. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

Monitoring Frequency: Once every five years

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 21: Compliance Demonstration
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR Subpart 212-2

Item 21.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: U-00SBS
Process: CM1

Emission Point: SBS01
Emission Source: THOX1

Regulated Contaminant(s):
CAS No: 000335-67-1 PERFLUOROOCANOIC ACID (PFOA)

Item 21.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test for PFAS and PFOA emissions to verify emission information, determine thermal oxidizer destruction efficiency, and demonstrate compliance with the 6NYCRR Part 212 requirements.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Materials processed during the testing shall represent the highest known concentration of the target contaminants in the biosolid and wood waste feedstock. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded. The thermal oxidizer's reducing zone, conditioning zone and oxidizing zone temperatures shall be continuously recorded throughout the performance test in accordance with this permit.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. Stack test report must be submitted to the Department within 60 days after

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the completion of the test. Additional testing may be required at the Department's discretion.

Upper Permit Limit: 0.001 pounds per hour
 Reference Test Method: EPA Test Method
 Monitoring Frequency: Once every five years
 Averaging Method: Arithmetic average of stack test runs
 Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 22: Compliance Demonstration
 Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR Subpart 212-2

Item 22.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS Emission Point: SBS01
 Regulated Contaminant(s):
 CAS No: 007439-97-6 MERCURY

Item 22.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test for mercury emissions to verify emission information and demonstrate compliance with the 6NYCRR Part 212 requirements.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Materials processed during the testing shall represent the highest known concentration of the target contaminants in the biosolid and wood waste feedstock. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

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Upper Permit Limit: 0.0057 pounds per hour
 Reference Test Method: EPA Test Method
 Monitoring Frequency: Once every five years
 Averaging Method: Arithmetic average of stack test runs
 Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 23: Compliance Demonstration
 Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR Subpart 212-2

Item 23.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS	Emission Point: SBS01
Process: CM1	Emission Source: THOX1

Regulated Contaminant(s):
 CAS No: 0NY210-00-0 OXIDES OF NITROGEN

Item 23.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test for oxides of nitrogen emissions to verify emission information and demonstrate compliance with the 6NYCRR Part 212 requirements.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Feedstocks and process operation during the testing shall represent the conditions that result in highest known concentrations of the target contaminants. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. The protocol should include specifics on the feedstocks and process operation to be used for obtaining the target contaminant concentrations. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

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Upper Permit Limit: 3.2 pounds per hour
 Reference Test Method: EPA Test Method
 Monitoring Frequency: Once every five years
 Averaging Method: Arithmetic average of stack test runs
 Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 24: Compliance Demonstration
 Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR Subpart 212-2

Item 24.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS
 Process: CM1 Emission Source: SO2S1

Regulated Contaminant(s):
 CAS No: 007664-39-3 HYDROGEN FLUORIDE

Item 24.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test for hydrogen fluoride emissions to verify emission information and demonstrate compliance with the 6NYCRR Part 212 requirements.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Feedstocks and process operation during the testing shall represent the conditions that result in highest known concentration of the target contaminants. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

Upper Permit Limit: 0.001 pounds per hour
 Reference Test Method: EPA Test Method

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Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 25: Compliance Demonstration
Effective for entire length of Permit****Applicable Federal Requirement: 6 NYCRR 212-2.3 (a)****Item 25.1:**

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: U-00SBS

Process: CM1

Emission Source: SO2S1

Regulated Contaminant(s):

CAS No: 007446-09-5

SULFUR DIOXIDE

Item 25.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The Hydrated Lime Scrubber must maintain a minimum sulfur dioxide removal efficiency of 95% in order to comply with 6NYCRR Part 212-2.3(a).

Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test to determine the sulfur dioxide removal efficiency for the Hydrated Lime Scrubber.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Feedstocks and process operation during the testing shall represent the conditions that result in highest known concentrations of the target contaminants. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded. The scrubber liquid flow rate and pH shall be continuously recorded throughout the performance test in accordance with this permit.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. The protocol should include specifics on the feedstocks and process operation to be used for obtaining the target contaminant

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concentrations. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

Lower Permit Limit: 95 percent
 Reference Test Method: EPA Test Method
 Monitoring Frequency: Once every five years
 Averaging Method: Arithmetic average of stack test runs
 Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 26: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212-2.3 (a)

Item 26.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS	
Process: CM1	Emission Source: CYCL1
Emission Unit: U-00SBS	
Process: CM1	Emission Source: VCYC1
Regulated Contaminant(s):	
CAS No: 0NY075-02-5	PM 2.5
CAS No: 0NY075-00-5	PM-10

Item 26.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility must maintain an overall 90% particulate removal efficiency for the Dry Cyclone and Venturi Cyclone to control particulates continuously in order to comply with 6NYCRR Part 212-2.3(a).

Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test to determine the process line's particulate removal efficiency for the combined Dry Cyclone and Venturi Cyclone equipment.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Feedstocks and process operation during the testing shall represent the conditions that result in highest known

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concentrations of the target contaminants. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded. The Dry Cyclone and Venturi Cyclone operating parameters shall be continuously recorded throughout the performance test.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. The protocol should include specifics on the feedstocks and process operation to be used for obtaining the target contaminant concentrations. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

Lower Permit Limit: 90 percent
 Reference Test Method: EPA Test Method
 Monitoring Frequency: Once every five years
 Averaging Method: Arithmetic average of stack test runs
 Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

**Condition 27: Compliance Demonstration
 Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 212-2.3 (b)

Item 27.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS
 Process: CM1 Emission Source: VCYC1

Regulated Contaminant(s):
 CAS No: 007439-92-1 LEAD
 CAS No: 007440-38-2 ARSENIC
 CAS No: 007440-43-9 CADMIUM

Item 27.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility must maintain a continuous 99% removal efficiency of Cadmium, Arsenic, and Lead in the Venturi Cyclone in order to comply with 6NYCRR Part 212-2.3(b).

Within 60 days after achieving the maximum production rate at which a

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process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test to determine the Cadmium, Arsenic and Lead removal efficiency for the Venturi Cyclone.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Materials processed during the testing shall represent the highest known concentration of the target contaminants in the biosolid and wood waste feedstock. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

Lower Permit Limit: 99 percent

Reference Test Method: EPA Test Method

Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 28: Compliance Demonstration
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR 212-2.3 (b)

Item 28.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: U-00SBS

Process: CM1

Emission Source: NH3S1

Regulated Contaminant(s):

CAS No: 007664-41-7 AMMONIA

Item 28.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility must maintain a continuous 95.5% removal efficiency of ammonia (NH₃) in the Ammonia Scrubber in order to comply with 6NYCRR Part 212-2.3(b).

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Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test to determine the ammonia destruction efficiency for the Ammonia Scrubber.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Feedstocks and process operation during the testing shall represent the conditions that result in highest known concentrations of the target contaminants. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded. The scrubber liquid flow rate and pH shall be continuously recorded throughout the performance test in accordance with this permit.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. The protocol should include specifics on the feedstocks and process operation to be used for obtaining the target contaminant concentrations. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

Lower Permit Limit: 95.5 percent
 Reference Test Method: EPA Test Method
 Monitoring Frequency: Once every five years
 Averaging Method: Arithmetic average of stack test runs
 Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 29: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212-2.3 (b)

Item 29.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS
 Process: CM1
 Emission Source: THOX1

Regulated Contaminant(s):
 CAS No: 0NY998-00-0 VOC
 CAS No: 000335-67-1 PERFLUOROCTANOIC ACID (PFOA)

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Item 29.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility must maintain a continuous 99.99% removal efficiency of VOC, PFAS, and PFOA in the thermal oxidizer in order to comply with 6NYCRR Part 212-2.3(b).

Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test to determine the VOC, PFAS, and PFOA removal efficiency for the thermal oxidizer.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Feedstocks and process operation during the testing shall represent the conditions that result in highest known concentrations of the target contaminants. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded. The thermal oxidizer's reducing zone, conditioning zone, and oxidizing zone temperatures shall be continuously recorded throughout the performance test in accordance with this permit.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. The protocol should include specifics on the feedstocks and process operation to be used for obtaining the target contaminant concentrations. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

Lower Permit Limit: 99.99 percent

Reference Test Method: EPA Test Method

Monitoring Frequency: Once every five years

Averaging Method: Arithmetic average of stack test runs

Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

**Condition 30: Compliance Demonstration
Effective for entire length of Permit****Applicable Federal Requirement: 6 NYCRR 212-2.3 (b)****Item 30.1:**

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

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Emission Unit: U-00SBS

Process: CM1

Emission Source: THOX1

Regulated Contaminant(s):

CAS No: 000091-20-3

NAPHTHALENE

Item 30.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The facility must maintain a continuous 99.5% removal efficiency of naphthalene in the thermal oxidizer in order to comply with 6NYCRR Part 212-2.3(b). Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test to determine the naphthalene removal efficiency for the thermal oxidizer.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Feedstocks and process operation during the testing shall represent the conditions that result in highest known concentrations of the target contaminants. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded. The thermal oxidizer's reducing zone, conditioning zone, and oxidizing zone temperatures shall be continuously recorded throughout the performance test in accordance with this permit.

Emission testing, sampling and analytical determinations shall be conducted in accordance with test methods acceptable to the Department. The facility must submit a stack test protocol to the Department for approval at least 60 days prior to the test. The protocol should include specifics on the feedstocks and process operation to be used for obtaining the target contaminant concentrations. Stack test report must be submitted to the Department within 60 days after the completion of the test. Additional testing may be required at the Department's discretion.

Within 60 days after achieving the maximum production rate at which a process line shall be operated, but not later than 180 days after the process line start up, the facility must conduct a performance test to determine the naphthalene removal efficiency for the thermal oxidizer.

The performance test shall be conducted while operating the process line at maximum throughput rate of 10 wet tons per hour of received biosolid and 1.5 tons per hour of wood waste, and under normal process control conditions. Materials processed during the testing shall represent the highest known concentration of the target contaminants

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in the biosolid and wood waste feedstock. During the performance test, process and control operating parameters, type of biosolid and wood waste received, biosolid and wood waste throughput, moisture content, feedstock analytical data, and other pertinent information shall be recorded. The thermal oxidizer's reducing zone, conditioning zone, and oxidizing zone temperatures shall be continuously recorded throughout the performance test in accordance with this permit.

Lower Permit Limit: 99.5 percent
 Reference Test Method: EPA Test Method
 Monitoring Frequency: Once every five years
 Averaging Method: Arithmetic average of stack test runs
 Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 31: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 212-2.4 (b)

Item 31.1:

The Compliance Demonstration activity will be performed for the facility:
 The Compliance Demonstration applies to:

Emission Unit: U-00SBS Emission Point: SBS01

Regulated Contaminant(s):
 CAS No: 0NY075-00-0 PARTICULATES

Item 31.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Emissions from any process emission source for which an application was received by the Department after July 1, 1973 are restricted as follows: No facility owner or operator shall cause or allow emissions that exceed 0.050 grains per cubic foot of exhaust gas, expressed at standard conditions on a dry basis. Testing must be performed within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 180 days after the facility startup. Additional testing may be required at the Department's discretion.

Upper Permit Limit: 0.050 grains per dscf
 Reference Test Method: Method 5
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Averaging Method: Arithmetic average of stack test runs
 Reporting Requirements: ONCE / BATCH OR MONITORING OCCURRENCE

Condition 32: Compliance Demonstration
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 225-1.2 (d)

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Item 32.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 32.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Owners or operators of emission sources that fire distillate oil are limited to a 0.0015 percent sulfur content by weight of the fuel. Compliance with the sulfur-in-fuel limitation is based on fuel vendor receipts. All fuel vendor receipts must be maintained on site or at a Department approved alternative location for a minimum of five years.

Note - Process sources and incinerators must comply with the above requirements on or after July 1, 2023.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: DIESEL OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 0.0015 percent by weight

Monitoring Frequency: PER DELIVERY

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME
(INSTANTANEOUS/DISCRETE OR GRAB)

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Subsequent reports are due every 12 calendar month(s).

Condition 33: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60, NSPS Subpart IIII

Item 33.1:

Facilities that have stationary compression ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart IIII.

Condition 34: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60, NSPS Subpart JJJJ

Item 34.1:

Facilities that have stationary spark ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart JJJJ.

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined in 6 NYCRR 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 demonstrate, 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 facility was being properly operated and maintained;
- (3) during the period of the emergency the facility owner or operator took all reasonable steps to minimize the 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 any 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 malfunction provision contained in any applicable requirement.

Item B: Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)

Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

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

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

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

STATE ONLY APPLICABLE REQUIREMENTS**The following conditions are state only enforceable.****Condition 35: Contaminant List**
Effective for entire length of Permit**Applicable State Requirement: ECL 19-0301****Item 35.1:**

Emissions of the following contaminants are subject to contaminant specific requirements in this permit (emission limits, control requirements or compliance monitoring conditions).

CAS No: 000064-19-7

Name: ACETIC ACID

CAS No: 000074-89-5

Name: METHYL AMINE

CAS No: 000075-04-7

Name: ETHANAMINE

CAS No: 000075-50-3

Name: METHANAMINE, N,N-DIMETHYL

CAS No: 000091-20-3

Name: NAPHTHALENE

CAS No: 000109-89-7

Name: ETHANAMINE, N-ETHYL

CAS No: 000121-44-8

Name: N,N-DIETHYL ETHANAMINE

Permit ID: 5-4144-00187/00002

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CAS No: 000124-38-9
Name: CARBON DIOXIDE

CAS No: 000124-40-3
Name: METHANAMINE,N-METHYL- C₂H₇N

CAS No: 000335-67-1
Name: PERFLUOROOCTANOIC ACID (PFOA)

CAS No: 000624-92-0
Name: DIMETHYL DISULFIDE

CAS No: 000630-08-0
Name: CARBON MONOXIDE

CAS No: 007439-92-1
Name: LEAD

CAS No: 007439-97-6
Name: MERCURY

CAS No: 007440-38-2
Name: ARSENIC

CAS No: 007440-43-9
Name: CADMIUM

CAS No: 007446-09-5
Name: SULFUR DIOXIDE

CAS No: 007647-01-0
Name: HYDROGEN CHLORIDE

CAS No: 007664-39-3
Name: HYDROGEN FLUORIDE

CAS No: 007664-41-7
Name: AMMONIA

CAS No: 007783-06-4
Name: HYDROGEN SULFIDE

CAS No: 068188-85-2
Name: FLUORIDES

CAS No: 0NY075-00-0
Name: PARTICULATES

CAS No: 0NY075-00-5
Name: PM-10

CAS No: 0NY075-02-5
Name: PM 2.5

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0
Name: VOC

**Condition 36: Malfunctions and Start-up/Shutdown Activities
Effective for entire length of Permit**

Applicable State Requirement: 6 NYCRR 201-1.4

Item 36.1:

(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment maintenance and start-up/shutdown activities when they are expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when required by a permit condition or upon request by the department. Such reports shall state whether an exceedance occurred and if it was unavoidable, include the time, frequency and duration of the exceedance, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous monitoring and quarterly reporting requirements need not submit additional reports of exceedances to the department.

(c) In the event that air contaminant emissions exceed any applicable emission standard due to a malfunction, the facility owner or operator shall notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. In addition, the facility owner or operator shall compile and maintain a record of all malfunctions. Such records shall be maintained at the facility for a period of at least five years and must be made available to the department upon request. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, the air contaminants emitted, and the resulting emission rates and/or opacity.

(d) The department may also require the facility owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Condition 37: Emission Unit Definition
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 37.1:

The facility is authorized to perform regulated processes under this permit for:

Emission Unit: U-00SBS

Emission Unit Description:

Carbon manufacturing facility with an annual throughput up to 78,400 wet tons of received biosolids and up to 11,760 tons of wood waste for each process line. The facility is designed to be constructed in three phases with each phase consisting of a process line capable of processing up to 10 tons per hour of biosolids and up to 1.5 tons per hour of wood waste. This initial permit is for only one process line. The facility is maintained under negative pressure to mitigate fugitive odor emissions. All exhaust air is treated through engineered air pollution control devices.

Building(s): 1

Condition 38: Renewal deadlines for state facility permits
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-5.2 (c)

Item 38.1:

The owner or operator of a facility having an issued state facility 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.

Condition 39: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-5.3 (c)

Item 39.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 39.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility shall keep monthly natural gas and diesel fuel usage records and submit an annual fuel usage report.

Records and supporting information shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Monitoring Frequency: MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 40: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-5.3 (c)

Item 40.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 40.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This facility is designed to be constructed in three phases with each phase consisting of a process line capable of processing up to 10 tons per hour of biosolids and up to 1.5 tons per hour of wood waste. After the startup of the first phase process line (Process CM1), the facility must conduct performance tests as required in this permit to verify the emission information provided in the application, demonstrate compliance with permit limits, and apply within 60 days of the department's approval of the test report for permit modification as necessary to ensure compliance with all the applicable air pollution control requirements. Authorization of the additional phases of process lines (Process CM2 and Process CM3) will require modification of this permit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 41: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-5.3 (c)

Item 41.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 41.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Region 5
232 Golf Course Rd.
Warrensburg, NY 12885

Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 42: Air pollution prohibited
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.1

Item 42.1:

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. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.

Condition 43: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 212-2.1

Item 43.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 43.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The wood waste throughput for the process line at this facility shall be limited to no more than 11,760 tons during any consecutive 12-month period, rolled monthly. The facility must monitor the throughput from the process line and maintain the monthly and 12-month rolling throughput records. Each 12-month wood waste throughput total for the process line must be below the permitted limit of 11,760 tons.

The facility must submit an annual report of monthly and 12-month rolling throughput to document compliance with the permitted limit of 11,760 tons per year of wood waste.

Records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Work Practice Type: PROCESS MATERIAL THRUPUT
Process Material: WOODWASTE

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Upper Permit Limit: 11,760 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 44: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 212-2.1

Item 44.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 44.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The biosolids throughput for the process line at this facility shall be limited to no more than 78,400 wet tons during any consecutive 12-month period, rolled monthly. The facility must monitor the throughput from the process line and maintain the monthly and 12-month rolling throughput records. Each 12-month biosolids throughput total for the process line must be below the permitted limit of 78,400 tons.

The facility must submit an annual report of monthly and 12-month rolling throughput to document compliance with the permitted limit of 78,400 wet tons per year of biosolids.

Records shall be kept at the facility for a minimum of five (5) years and must be available to the Department upon request.

Work Practice Type: PROCESS MATERIAL THRUPTUT
Process Material: BIOSOLIDS
Upper Permit Limit: 78,400 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 45: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 212-2.1

Item 45.1:

The Compliance Demonstration activity will be performed for the Facility.

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Item 45.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility owner or operator shall not allow emissions of an air contaminant to violate the requirements specified in Subdivision 212-2.3(a) Table-3 - Degree of Air Cleaning Required for Criteria Air Contaminants and Subdivision 212-2.3(b) Table 4 – Degree of Air Cleaning Required for Non-Criteria Air Contaminants for the environmental rating assigned to the contaminant by the department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 46: Compliance Demonstration
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR Subpart 257-4

Item 46.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 068188-85-2 FLUORIDES

Item 46.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility owner or operator shall not allow emissions of gaseous fluorides to violate the ambient air quality standard specified below:

Gaseous fluorides in air (parts per million parts of air) as F—all levels. (25 degrees Centigrade, 760 min. Hg.)

- (1) 12 hour averages to be less than 4.5 ppb (3.7 µg/m³)
- (2) 24 hour averages to be less than 3.5 ppb (2.85 µg/m³)
- (3) 1 week averages to be less than 2.0 ppb (1.65 µg/m³)
- (4) 1 month averages to be less than 1.0 ppb (0.8 µg/m³)

As per 6 NYCRR 257-4.3, gaseous fluorides in air will be collected and analyzed by methods acceptable to the commissioner.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**Condition 47: Compliance Demonstration
Effective for entire length of Permit**

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Applicable State Requirement:6 NYCRR Subpart 257-5

Item 47.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 007783-06-4 HYDROGEN SULFIDE

Item 47.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility owner or operator shall not allow emissions of hydrogen sulfide to violate the ambient air quality standard specified below:

Applicable in all levels. In any one-hour period, the average concentration of hydrogen sulfide shall not exceed 0.010 ppm (14 µg/m3).

As per 6 NYCRR 257-5.4(b), all measurements are corrected to a reference temperature of 25 degrees Centigrade and to a reference pressure of 760 millimeters of mercury.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

****** Emission Unit Level ******

**Condition 48: Emission Point Definition By Emission Unit
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 48.1:

The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: U-00SBS

Emission Point: SBS01

Height (ft.): 115

Diameter (in.): 33

NYTMN (km.): 4793.191 NYTME (km.): 613.155 Building: 1

**Condition 49: Process Definition By Emission Unit
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR Subpart 201-5

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187

Item 49.1:

This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: U-00SBS

Process: CM1

Source Classification Code: 3-01-045-01

Process Description:

Carbon manufacturing facility with an annual throughput up to 78,400 wet tons of received biosolids and up to 11,760 tons of wood waste for each process line. The facility is designed to be constructed in three phases with each phase consisting of a process line capable of processing up to 10 tons per hour of biosolids and up to 1.5 tons per hour of wood waste. This process is the first phase.

The facility is maintained under negative pressure to mitigate fugitive odor emissions. All exhaust air is treated through engineered air pollution control devices.

Emission Source/Control: BIOS1 - Control
Control Type: BIOLOGICAL OXIDATION

Emission Source/Control: CYCL1 - Control
Control Type: SINGLE CYCLONE

Emission Source/Control: NH3S1 - Control
Control Type: WET SCRUBBER

Emission Source/Control: SO2S1 - Control
Control Type: WET SCRUBBER

Emission Source/Control: THOX1 - Control
Control Type: THERMAL OXIDATION

Emission Source/Control: VCYC1 - Control
Control Type: VENTURI CYCLONE

Emission Source/Control: CONV1 - Process
Design Capacity: 240 tons per day

Emission Source/Control: DRY01 - Process
Design Capacity: 32,409 cubic feet per minute

Permit ID: 5-4144-00187/00002

Facility DEC ID: 5414400187