

Facility DEC ID: 3551800342

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

Permit Administrator: REBECCA S CRIST
21 S PUTT CORNERS RD
NEW PALTZ, NY 12561

Authorized Signature: _____ Date: ___ / ___ / ___

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Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

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DEC GENERAL CONDITIONS
****** General Provisions ******
GENERAL CONDITIONS - Apply to ALL Authorized Permits.

Condition 1: Facility Inspection by the Department

Applicable State Requirement: ECL 19-0305

Item 1.1:

The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

Item 1.2:

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

Item 1.3:

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

Condition 2: Relationship of this Permit to Other Department Orders and Determinations

Applicable State Requirement: ECL 3-0301 (2) (m)

Item 2.1:

Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

Condition 3: Applications for permit renewals, modifications and transfers

Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:

The permittee must submit a separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item 3.2:

The permittee must submit a renewal application at least 180 days before the expiration of permits for Title V and State Facility Permits.

Item 3.3

Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

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Condition 4: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:

The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

- a) materially false or inaccurate statements in the permit application or supporting papers;
- b) failure by the permittee to comply with any terms or conditions of the permit;
- c) exceeding the scope of the project as described in the permit application;
- d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

****** Facility Level ******

Condition 5: Submission of application for permit modification or renewal -REGION 3
HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:
NYSDEC Regional Permit Administrator
Region 3 Headquarters
Division of Environmental Permits
21 South Putt Corners Road
New Paltz, NY 12561-1696
(845) 256-3054

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Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: WESTCHESTER COUNTY
148 MARTINE AVE
WHITE PLAINS, NY 10601-4704

Facility: YONKERS JOINT WATER RESOURCE RECOVERY FACILITY
1 FERNBROOK ST|Ludlow Dock South
Yonkers, NY 10705

Authorized Activity By Standard Industrial Classification Code:
4952 - SEWERAGE SYSTEMS

Permit Effective Date:

Permit Expiration Date:

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EU=2-ENGIN,EP=00033

- 35 25 6 NYCRR 201-5.3 (c): Compliance Demonstration

NOTE: * preceding the condition number indicates capping.

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FEDERALLY ENFORCEABLE CONDITIONS

DRAFT

**** 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,

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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 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

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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.

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)

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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: Maintenance of Equipment
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 200.7

Item 1.1:

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 2: Facility Permissible Emissions
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2.1:

The sum of emissions from the emission units specified in this permit shall not equal or exceed the following

Potential To Emit (PTE) rate for each regulated contaminant:

| | |
|--------------------------|-----------------------------|
| CAS No: 0NY210-00-0 | PTE: 49,900 pounds per year |
| Name: OXIDES OF NITROGEN | |

Condition 3: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 3.1:

Under the authority of 6 NYCRR Part 201-7, this condition contains an emission cap for the purpose of limiting emissions from the facility, emission unit or process to avoid being subject to the following applicable requirement(s) that the facility, emission unit or process would

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otherwise be subject to:

6 NYCRR Subpart 201-6

Item 3.2:

Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 3.3:

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.

Item 3.4:

On an annual basis, unless otherwise specified below, beginning one year after the granting of an emissions cap, the responsible official shall provide a certification to the Department that the facility has operated all emission units within the limits imposed by the emission cap. This certification shall include a brief summary of the emissions subject to the cap for that time period and a comparison to the threshold levels that would require compliance with an applicable requirement.

Item 3.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement, for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 3.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 3.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

Nitrogen Oxide emissions (NOx) from the facility shall not exceed 24.9 tons in any consecutive 12-month period. Emissions shall be calculated based on fuel consumption in each emission unit/source. Each source shall be equipped with fuel meters which will record the natural gas, digester gas and No. 2 oil (diesel) consumption, monthly. The quantity of fuel (in cubic feet or gallons, as appropriate) consumed annually (on a 12-month rolling basis) will be calculated each month, and it will be plugged into the formula below to derive the total NOx emissions generated at the facility. The emission factors

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used as indicated below are based on EPA published emissions data, or stack testing, or manufacturers' recommendations.

Total NOx emissions shall not exceed the limit stated below.

For the calculation the following emission units are to be considered:

1. Industrial boilers consist of:

- Emission Unit: 1-SDBLR; two (2) boilers - 16.7mmBTU/hr, Burns Digester Gas or Natural gas
- Emission Unit: 2-SDBLR; two (2) boilers - 8.4mmBTU/hr, Burns Digester Gas only
- Emission Unit: 1-CSOBL; two (2) boilers - 3.4mmBTU/hr, Burns Natural Gas only.

2. Generators consist of:

- Emission Unit: 2-ENGIN; One (1) spark-ignited, 4-cycle 1600kW rated engine, Burns Digester Gas or natural gas only
- Emission Unit: 2-ENGIN Two identical (2) - 1200kW rated engines, Burns Digester Gas or Natural Gas
- Emission Unit: 3-ENGIN; One (1) - 2500kW Cummins Emergency Generator, Burns No.2 Diesel

3. 1-Flare: three flares burning the excess digester gas.

CALCULATING FORMULA:

$$\begin{aligned}
 & [1\text{-CSOBL(NG)*EF1}] + \\
 & [1\text{-SDBLR(DG)*EF2}] + \\
 & [1\text{-SDBLR(NG)*EF3}] + \\
 & [2\text{-SDBLR(DG)*EF4}] + \\
 & [2\text{-ENGIN (1600kW_DG) *EF5}] + \\
 & [2\text{-ENGIN (1600kW_NG) *EF6}] + \\
 & [2\text{-ENGIN (1200kW_DG) *EF7}] + \\
 & [2\text{-ENGIN (1200kW_NG) *EF8}] + \\
 & [3\text{-ENGIN (No.2) *EF9}] + \\
 & [1\text{-FLARE (DG) * EF10}] < 49,900 \text{ lbs/yr}
 \end{aligned}$$

Where:

12 month rolling fuel consumption as follows:

1. 1-CSOBL (NG) - natural gas in cubic feet burned by both boilers (3.4 mmBTU/hr, each)
2. 1-SDBLR (DG) –digester gas in cubic feet burned by both boilers (16.7 mmBTU/hr, each)

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- 3. 1-SDBLR (NG) - natural gas in cubic feet burned by both boilers (16.7 mmBTU/hr, each)
- 4. 2-SDBLR (DG) - digester gas in cubic feet burned by both boilers (8.4 mmBTU/hr, each)
- 5. 2- ENGIN (DG) -digester gas in cubic feet burned by the 1600KW engine w/o controls
- 6. 2-ENGIN (NG) - natural gas in cubic feet burned by the 1600KW engine w/o controls
- 7. 2-ENGIN (DG) - digester gas in cubic feet burned by both 1200KW engines w/controls
- 8. 2-ENGIN (NG) - natural gas in cubic feet burned by both 1200KW engines w/controls
- 9. 3-ENGIN (DSL) -diesel (No.2 oil) in gallons burned by the engine
- 10. 1-FLARE (DG) - digester gas in cubic feet burned by all flares.

Emission Factors (EF)x:

EF1 = 100 lb/10⁶scf, Ref: AP-42 Table 1.4-1 (boilers <100 mmBTU/hr, burning natural gas with uncontrolled emissions)

EF2 = 40 lb/10⁶scf, Ref: (EPA Chief Fire Date Base)

EF3 = 100 lb/10⁶scf AP-42 Table 1.4-1 (boilers <100 mmBTU/hr, burning natural gas with uncontrolled emissions)

EF4 = 40 lb/10⁶scf, Ref: (EPA Chief Fire Date Base)

EF5 = 2.99*10⁻⁴lbs/scf – derived (see notes below)

EF6 = 6.97*10⁻⁴lbs/scf – derived (see notes below)

EF7 = 3.16*10⁻⁴lbs/scf - derived (see notes below)

EF8 = 5.29*10⁻⁴lbs/scf - derived (see notes below)

EF9 = 0.573 lbs/gal – derived (see notes below)

EF10= 40 lb/10⁶scf, Ref: (EPA Chief Fire Date Base)

Notes:

Emission factor derivations:

EF5 = 2.99*10⁻⁴ lbs/scf (for digester gas)

Derived as follows: Emission factor resulting from the 2023 stack testing = 1.25*10⁻³ lbs/hp-hr

Digester gas heating value 610 BTU/scf – Published value

Conversion 1hp=2545 BTU/hr - Perry’s Chemical engineering Handbook (4th edition)

Then: ((1.25*10⁻³ lbs/hp-hr)/(2545 BTU/hr)) * (610 BTU/scf) = 2.99*10⁻⁴lbs/scf

EF6 = 6.97*10⁻⁴ lbs/scf (for natural gas)

Derived as follows: Emission factor resulting from the 2023 stack testing: 1.74*10⁻³ lbs/hp-hr

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Natural gas heating value 1020 BTU/scf – Published value
AP-42

Conversion 1hp=2545 BTU/hr - Perry’s Chemical
engineering Handbook (4th edition)

Then: $((1.74 \times 10^{-3} \text{ lbs/hp-hr}) / (2545 \text{ BTU/hr})) \times$
 $(1020 \text{ BTU/scf}) = 6.97 \times 10^{-4} \text{ lbs/scf}$

EF7 = $3.16 \times 10^{-4} \text{ lbs/scf}$ (for digester gas)

Derived as follows: Emission factor based on
manufacturer’s data: $1.32 \times 10^{-3} \text{ lbs/hp-hr}$

Digester gas heating value 610 BTU/scf – Published value

Conversion 1hp=2545 BTU/hr - Perry’s Chemical
engineering Handbook (4th edition)

Then: $((1.32 \times 10^{-3} \text{ lbs/hp-hr}) / (2545 \text{ BTU/hr})) \times (610$
 $\text{ BTU/scf}) = 3.16 \times 10^{-4} \text{ lbs/scf}$

EF8 = $5.29 \times 10^{-4} \text{ lbs/scf}$ (for natural gas)

Derived as follows: Emission factor based on
manufacturer’s data: $1.32 \times 10^{-3} \text{ lbs/hp-hr}$

Natural gas heating value 1020 BTU/scf – Published value
AP-42

Conversion 1hp=2545 BTU/hr - Perry’s Chemical
engineering Handbook (4th edition)

Then: $((1.32 \times 10^{-3} \text{ lbs/hp-hr}) / (2545 \text{ BTU/hr})) \times (1020$
 $\text{ BTU/scf}) = 5.29 \times 10^{-4} \text{ lbs/scf}$

EF9 = 0.573lbs/gal (for diesel or No. 2 oil)

Derived as follows: Emission factor based on
manufacturer’s data: $10.56 \times 10^{-3} \text{ lbs/hp-hr}$ (or 4.8
gr/hp-hr)

Engine burning diesel heating value 138,000 BTU/gallon –
Published value AP-42

Conversion 1hp=2545 BTU/hr - Perry’s Chemical
engineering Handbook (4th edition)

Then: $((10.56 \times 10^{-3} \text{ lbs/hp-hr}) / (2545 \text{ BTU/hr})) \times (138,000$
 $\text{ BTU/gal}) = 0.573 \text{ lbs/gal}$

All emission factors must be re-assessed and amended if
proved different from factor’s derived based on future
stack testing.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 49900 pounds per year

Monitoring Frequency: MONTHLY

Averaging Method: 12-MONTH TOTAL, ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 4: Notification
Effective for entire length of Permit

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Applicable Federal Requirement:6 NYCRR 202-1.2**Item 4.1:**

A person who is required by the Department to submit a stack test report shall notify the Department, in writing, not less than 30 days prior to the test, of the time and date of the test. Such notification shall also include the acceptable procedures to be used to stack test including sampling and analytical procedures. Such person shall allow a representative of the Department free access to observe stack testing being conducted by such person.

**Condition 5: Acceptable procedures
Effective for entire length of Permit****Applicable Federal Requirement:6 NYCRR 202-1.3 (a)****Item 5.1:**

Emission testing, sampling and analytical determinations to ascertain compliance with this Subchapter shall be conducted in accordance with test methods acceptable to the Department. The Reference Methods contained in 40 CFR Part 51, Appendix M; 40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; and 40 CFR Part 63, Appendix A (see Table 1, section 200.9 of this Title) and all future technical revisions, additions or corrections made thereto shall be considered as acceptable test methods for those sources and contaminants for which they are expressly applicable, except where the Department has issued a specific method to be used instead of a Reference Method contained in these Federal regulations or where the Department determines that one or more alternate methods are also acceptable. The person who owns or operates an air contamination source shall submit the emission test report in triplicate to the Department within 60 days after the completion of tests. In the event such source owner/operator can demonstrate to the Department such time is not sufficient, the source owner/operator may submit a request in writing and be granted an extension. Where an opacity emission standard is applicable to the source tested, the emission test report shall include the opacity observation.

**Condition 6: Visible Emissions Limited
Effective for entire length of Permit****Applicable Federal Requirement:6 NYCRR 211.2****Item 6.1:**

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 7: Maintain all process emission sources, including the
associated air pollution control and monitoring equipment
Effective for entire length of Permit****Applicable Federal Requirement:6 NYCRR 212-1.5 (g)****Item 7.1:**

At all times, the facility owner or operator must operate and maintain all process emission

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sources, including the associated air pollution control and monitoring equipment, in a manner consistent with safety, good air pollution control practices, good engineering practices and manufacturers’ recommendations for minimizing emissions.

**Condition 8: Compliance Demonstration
Effective for entire length of Permit**

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

Item 8.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 8.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility owner or operator shall conduct a visible emissions observation of all emission points and emission sources specified by this condition once per day while the process is in operation.

- 1) Observe the stack for each emission source which is operating, once per day for visible emissions. This observation(s) must be conducted during daylight hours, but not during periods of adverse weather conditions (fog, rain, or snow).
- 2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:
 - date and time of observation
 - observer's name
 - identity of the emission point
 - weather conditions
 - was a plume observed

Inclement weather conditions shall be recorded for those days when observations are prohibited. This logbook must be retained at the facility for five (5) years after the date of the last entry.

- 3) If the operator observes any visible emissions (other than steam - see below) for two consecutive days, either a Method 9 or Method 22 analysis (based upon the source emitting the visible emissions) of the affected emission point(s) or emission source(s) must be conducted within two (2) business days of such occurrence. The results of either the Method 9 or Method 22 analysis must be recorded in the logbook. The operator must contact the Regional

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Air Pollution Control Engineer within one (1) business day of performing either the Method 9 or Method 22 analysis if the opacity standard has been contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance.

**** NOTE **** Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is (normally) a distinctive distance between the plume and stack. Steam plumes are white in color and have a billowy consistency. Steam plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail downwind of the stack.

The facility owner or operator shall make any necessary corrections and verify that the excess visible emissions problem has been corrected.

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

Reference Test Method: See Monitoring Description
 Monitoring Frequency: DAILY
 Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**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.

Item 9.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

No facility owner or operator shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water.

Parameter Monitored: OPACITY
 Upper Permit Limit: 20 percent
 Reference Test Method: EPA RM 9

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Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

**Condition 10: Emission Testing Using Approved Procedures
Effective for entire length of Permit**

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

Item 10.1:

a) Facility owners and/or operators of a process emission source required by the department to demonstrate compliance with this Part may be required to conduct capture efficiency and/or stack emissions testing using acceptable and approved procedures pursuant to Part 202 of this Title.

**Condition 11: Compliance Demonstration
Effective for entire length of Permit**

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

Item 11.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 11.2:

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: NUMBER 2 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).

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Condition 12: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60, NSPS Subpart IIII

Item 12.1:

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

Condition 13: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 60, NSPS Subpart JJJJ

Item 13.1:

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

Condition 14: Engines at Area sources of HAP
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 14.1:

Internal combustion engines, constructed or re-constructed on or after June 12, 2006, that meet the requirements of 40 CFR 60 Subpart IIII or Subpart JJJJ meet the requirements of 40 CFR 63 Subpart ZZZZ.

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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

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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**

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 15: Contaminant List
Effective for entire length of Permit

Applicable State Requirement:ECL 19-0301

Item 15.1:

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

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

Condition 16: Malfunctions and Start-up/Shutdown Activities
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 201-1.4

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Item 16.1:

(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.

Condition 17: Emission Unit Definition
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 17.1:

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

Emission Unit: 1-CSOBL

Emission Unit Description:

Two exempt combined sewer overflow (CSO) boilers each rated at 3.4 mmbtu/hr.

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Building(s): CSO

Item 17.2:

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

Emission Unit: 1-FLARE

Emission Unit Description:

This unit comprises three (3) the primary and six (6) secondary digesters, which generate digester gas used for fueling the plant's engines and boilers. Excess digester gas is burned at three flares, which serve as emission controls for the digesters. Two of the Flares (EP 41 & 42), serving three primary digesters, installed under this ASF permit, are equipped with digester gas burners rated at about 42,000 CF per hour, each. These replace three older flares, with burners rated at about 24,000 CF per hour, each.

The third flare (EP 32), installed in 2006 (under renewal 1, modification 1) is equipped with a gas burner rated at 88,150 CF per hour, and primarily serves the six secondary digesters.

Building(s): PLANT

Item 17.3:

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

Emission Unit: 1-SDBLR

Emission Unit Description:

Two boilers each rated at 16.7 mmbtu/hr which combust digester gas and No. 2 fuel oil and natural gas. Boilers are used to provide process steam and plant heating.

Note: The two 23 mmBTU/hr (each), boilers that served this unit prior to Hurricane Sandy were damaged and were replaced by the smaller (16.7 mmbtu/hr) boilers.

Building(s): BLOWER

Item 17.4:

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

Emission Unit: 1-YJWTP

Emission Unit Description:

Various sources including the odor control systems from the plant. This Emission Unit consists of air contamination sources resulting from the handling and treatment of municipal wastewater and sewage sludge at the Yonkers Joint Water Resource Recovery Facility (YJWRRF). Major wastewater processes include mechanical bar screening, aerated grit removal, primary settling tanks, aeration basins, secondary settling tanks and

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chlorination. Treated wastewater effluent is discharged to the Hudson River. Sludge is collected from the primary and secondary settling tanks and is thickened to increase the solids content. Thickened sludge is anaerobically digested and then pumped to two sludge storage tanks for storage prior to Dewatering and off-site disposal. The facility is permitted to process a maximum of 120 million gallons per day on a 12 month rolling average.

Building(s): CHLCT
CSO
DEWATERING
FLOTATION
FST
PLANT
SCRENGRIT
SECDG

Item 17.5:

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

Emission Unit: 2-ENGIN

Emission Unit Description:

This emission unit comprises three engines. 1. One spark-ignited (MWM TCG 2020 V16m, ~ 2100 BHP, 4-cycle. 1600 KW) engine, that runs on digester gas and natural gas.

2. Two identical (MWM MWM TCG 2020-V12) cogeneration engines, each rated at 1600 HP (1200 KW), running on digester gas mainly and on natural gas if needed. The engines are equipped with emission controls. It is anticipated that the engines will burn 10 % natural gas and 90% digester gas.

Building(s): BLOWER

Item 17.6:

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

Emission Unit: 2-SDBLR

Emission Unit Description:

Two boilers each rated at 8.4 mmBTU/hr, capable of burning number 2 oil or digester gas. The boilers serve the primary building and the sludge heat exchangers.

Building(s): DEWATERING

Item 17.7:

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

Emission Unit: 3-ENGIN

Emission Unit Description:

One 2500 KW diesel generator (Cummins - 2500DQLE, Compression Ignition- Internal Combustion Engine). This is

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an emergency generator.

Building(s): SCRENGRIT

**Condition 18: Renewal deadlines for state facility permits
Effective for entire length of Permit**

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

Item 18.1:

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 19: Compliance Demonstration
Effective for entire length of Permit**

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

Item 19.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 19.2:

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
Region 3
21 South Putt Corners Rd.
New Paltz, NY 12561

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

**Condition 20: Air pollution prohibited
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR 211.1

Item 20.1:

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

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

Applicable State Requirement:6 NYCRR 211.1

Item 21.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 21.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility owner or operator shall establish a complaint response plan to manage complaints related to air emissions from the facility. At a minimum, the plan shall include procedures to ensure that:

1. A complaint phone line is available 24 hours a day, 7 days a week.
2. Facility staff promptly investigate the possible causes of the complaint and promptly take action to abate any circumstances found to be the cause of the complaint.
3. The complaint, the results of investigation, and any corrective actions taken are recorded. Such records shall include the date, time, and staff person responsible.
4. Records are reported at a regular frequency acceptable to the Department.
5. Records are reported in a format acceptable to the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

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

Applicable State Requirement:6 NYCRR 212-2.1

Item 22.1:

The Compliance Demonstration activity will be performed for the facility:

The Compliance Demonstration applies to:

Emission Unit: 1-FLARE

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Emission Unit: 1-YJWTP

Item 22.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:

Preliminary air modeling analysis indicated that emissions of certain High Toxicity Air Contaminants (HTACs) exceed the applicable Mass Emission Limits (MELs). The modeling analysis was carried out with the aid of the AERSCREEN model. The next step is to carry out a more detailed analysis using the AERMOD model and at the same time perform ambient air sampling in the field to confirm the AERMOD results.

No later than 30 days after the issuance of this permit, the facility owner or operator shall submit a modeling protocol to the Department for review and approval. Such protocol shall follow the procedures outlined in the Department's DAR-10 guidance document. At a minimum, the protocol shall discuss modeling emissions of all HTACs that exceed the applicable MELs using AERMOD. These emissions include, but are not limited to, trichloroethene, vinyl chloride, benzene, and formaldehyde from outdoor wastewater treatment operation areas of Emission Units 1-YJWTP and 1-FLARE.

No later than 60 days after the issuance of this permit, the facility owner or operator shall submit an ambient air sampling protocol to the Department for review and approval. Such protocol shall describe the methods and procedures that will be used to conduct the sampling required by this condition. The purpose of sampling will be to establish emissions factors.

If the detailed air modeling analysis or sampling results demonstrate that the values HTACs exceed the applicable annual guideline concentration (AGC) or short-term guideline concentration (SGC) offsite, the facility owner or operator shall submit a T-BACT analysis indicating implementation of controls within 60 days of such result. Controls identified as T-BACT shall be installed to capture the contaminants at efficiencies stipulated by pertinent regulations pursuant to a schedule identified in an application for a significant permit modification.

The facility shall carry out the above in accordance with

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a plan and time schedule approved by the department.

Manufacturer Name/Model Number: N/A
 Parameter Monitored: FORMALDEHYDE
 Upper Permit Limit: 100 pounds per year
 Reference Test Method: Air Modeling Analysis AERMOD or equivalent
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
 Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

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

**Condition 23: Emission Point Definition By Emission Unit
 Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 23.1:

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

Emission Unit: 1-CSOBL

Emission Point: 00004
 Height (ft.): 30 Diameter (in.): 24
 NYTMN (km.): 4529.943 NYTME (km.): 591.819 Building: CSO

Item 23.2:

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

Emission Unit: 1-FLARE

Emission Point: 00032
 Height (ft.): 36 Diameter (in.): 8
 NYTMN (km.): 4530.06 NYTME (km.): 591.75 Building: PLANT

Emission Point: 00041
 Height (ft.): 31 Diameter (in.): 86
 NYTMN (km.): 4530.724 NYTME (km.): 591.932 Building: PLANT

Emission Point: 00042
 Height (ft.): 31 Diameter (in.): 86
 NYTMN (km.): 4530.724 NYTME (km.): 591.932 Building: PLANT

Item 23.3:

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

Emission Unit: 1-SDBLR

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Emission Point: 00012
 Height (ft.): 30 Diameter (in.): 24
 NYTMN (km.): 4530.436 NYTME (km.): 591.812 Building: BLOWER

Emission Point: 00013
 Height (ft.): 30 Diameter (in.): 24
 NYTMN (km.): 4530.436 NYTME (km.): 591.812 Building: BLOWER

Item 23.4:

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

Emission Unit: 1-YJWTP

Emission Point: 00001
 Height (ft.): 33 Diameter (in.): 53
 NYTMN (km.): 4530.34 NYTME (km.): 591.843 Building: PLANT

Emission Point: 00002
 Height (ft.): 19 Diameter (in.): 24
 NYTMN (km.): 4530.338 NYTME (km.): 591.843 Building: PLANT

Emission Point: 00003
 Height (ft.): 33 Diameter (in.): 54
 NYTMN (km.): 4530.066 NYTME (km.): 591.736 Building: PLANT

Emission Point: 00006
 Height (ft.): 33 Diameter (in.): 53
 NYTMN (km.): 4530.34 NYTME (km.): 591.84 Building: SECDG

Emission Point: 00007
 Height (ft.): 33 Diameter (in.): 54
 NYTMN (km.): 4530.338 NYTME (km.): 591.843 Building: PLANT

Emission Point: 00035
 Height (ft.): 55 Diameter (in.): 36
 NYTMN (km.): 4530.369 NYTME (km.): 591.842 Building: PLANT

Item 23.5:

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

Emission Unit: 2-ENGIN

Emission Point: 00033
 Height (ft.): 37 Diameter (in.): 20
 NYTMN (km.): 4530.436 NYTME (km.): 591.812 Building: BLOWER

Emission Point: 00039
 Height (ft.): 37 Diameter (in.): 20
 NYTMN (km.): 4530.436 NYTME (km.): 591.812 Building: BLOWER

Emission Point: 00040

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Height (ft.): 37 Diameter (in.): 20
 NYTMN (km.): 4530.436 NYTME (km.): 591.812 Building: BLOWER

Item 23.6:

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

Emission Unit: 2-SDBLR

Emission Point: 00005

Height (ft.): 38 Diameter (in.): 24
 NYTMN (km.): 4530.116 NYTME (km.): 591.74 Building:

DEWATERING

Item 23.7:

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

Emission Unit: 3-ENGIN

Emission Point: 00034

Height (ft.): 35 Diameter (in.): 18
 NYTMN (km.): 4530.152 NYTME (km.): 591.748 Building: SCRENGRIT

**Condition 24: Process Definition By Emission Unit
 Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 24.1:

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

Emission Unit: 1-CSOBL

Process: NAG Source Classification Code: 1-02-006-03

Process Description:

3.4 mmbtu/hr exempt boiler fueled with natural gas.

Emission Source/Control: CSOB1 - Combustion

Design Capacity: 3.4 million Btu per hour

Emission Source/Control: CSOB2 - Combustion

Design Capacity: 3.4 million Btu per hour

Item 24.2:

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

Emission Unit: 1-FLARE

Process: FLR Source Classification Code: 5-01-004-10

Process Description:

This process pertains to excess digester gas generated by the primary and secondary digesters. This gas is burned by the waste burners at the Flares at emission points 41, 42, and 32.

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Emission Source/Control: FLR04 - Control
Control Type: FLARING

Emission Source/Control: FLR05 - Control
Control Type: FLARING

Emission Source/Control: FLR06 - Control
Control Type: FLARING

Emission Source/Control: DIGP1 - Process
Design Capacity: 119,350 cubic feet

Emission Source/Control: DIGP2 - Process
Design Capacity: 119,300 cubic feet

Emission Source/Control: DIGP3 - Process
Design Capacity: 76,350 cubic feet

Emission Source/Control: DIGS1 - Process
Design Capacity: 96,000 cubic feet

Emission Source/Control: DIGS2 - Process
Design Capacity: 96,000 cubic feet

Emission Source/Control: DIGS3 - Process
Design Capacity: 96,000 cubic feet

Emission Source/Control: DIGS4 - Process
Design Capacity: 96,000 cubic feet

Emission Source/Control: DIGS5 - Process
Design Capacity: 96,000 cubic feet

Emission Source/Control: DIGS6 - Process
Design Capacity: 96,000 cubic feet

Item 24.3:

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

Emission Unit: 1-SDBLR
Process: BNG Source Classification Code: 1-03-006-02
Process Description: Combustion of Natural Gas in two boilers.

Emission Source/Control: SBR1A - Combustion
Design Capacity: 16.7 million Btu per hour

Emission Source/Control: SBR2A - Combustion
Design Capacity: 16.7 million Btu per hour

Item 24.4:

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

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Emission Unit: 1-SDBLR
 Process: DIG Source Classification Code: 1-03-007-01
 Process Description: Combustion of Digester Gas in two Boilers.

Emission Source/Control: SBR1A - Combustion
 Design Capacity: 16.7 million Btu per hour

Emission Source/Control: SBR2A - Combustion
 Design Capacity: 16.7 million Btu per hour

Item 24.5:

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

Emission Unit: 1-SDBLR
 Process: OIL Source Classification Code: 1-02-005-02
 Process Description:

This process involves the burning of Ultra Low Sulfur Diesel by the secondary treatment boilers. each one of these boilers are rated at 16.5 mmBTU/hr.

Emission Source/Control: SBR1A - Combustion
 Design Capacity: 16.7 million Btu per hour

Emission Source/Control: SBR2A - Combustion
 Design Capacity: 16.7 million Btu per hour

Item 24.6:

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

Emission Unit: 1-YJWTP
 Process: AER Source Classification Code: 5-01-007-31
 Process Description:

This process, which is located outdoors, comprises the secondary treatment of wastewater in six (6) aeration basins, each consisting of four (4) passes. Process air is added to the aeration basins using fine bubble diffusers. Process air is obtained from the flotation thickener building, which houses thickeners used to increase the solids concentration of waste activated sludge.

Emission Source/Control: AERBS - Process
 Design Capacity: 120 million gallons per day

Emission Source/Control: AERIC - Process
 Design Capacity: 120 million gallons per day

Emission Source/Control: FLTHK - Process
 Design Capacity: 120 million gallons per day

Item 24.7:

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

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Emission Unit: 1-YJWTP

Process: AGC

Source Classification Code: 5-01-007-15

Process Description:

This process consists of the removal of Grit found in waste water when it passes through three aerated chambers.

The chambers are covered. The ventilation air is directed to a mist scrubber odor control system for control of hydrogen sulfide.

Emission Source/Control: AGCBS - Process

Item 24.8:

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

Emission Unit: 1-YJWTP

Process: BAR

Source Classification Code: 5-01-007-07

Process Description:

This process comprises the screening of waste water for removal of debris prior to wastewater treatment.

Wastewater is diverted into three influent channels. Each channel passes through a bar screen to remove rags and other debris. Air from the building is ventilated through a louvered exhaust.

Emission Source/Control: BAR01 - Control

Control Type: WET SCRUBBER

Emission Source/Control: BAR02 - Control

Control Type: WET SCRUBBER

Emission Source/Control: BAR03 - Control

Control Type: WET SCRUBBER

Emission Source/Control: SCREE - Process

Design Capacity: 120 million gallons per day

Item 24.9:

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

Emission Unit: 1-YJWTP

Process: CHL

Source Classification Code: 5-01-007-60

Process Description:

This process comprises the disinfection of the wastewater in the chlorine contact tanks. Wastewater is conveyed to the two (2) inside channels of the North Chlorine Contact Tanks. Sodium Hypochlorite solution is added through diffusers. Effluent is divided between the outside the North Chlorine Contact Tanks for additional chlorination. Effluent is being discharged to the Hudson River via two outfalls. This is an outdoors process.

Emission Source/Control: NTHCC - Process

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Facility DEC ID: 3551800342

Design Capacity: 120 million gallons per day

Emission Source/Control: STHCC - Process

Design Capacity: 120 million gallons per day

Item 24.10:

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

Emission Unit: 1-YJWTP

Process: CSO

Source Classification Code: 5-01-007-92

Process Description:

Process consists of wastewater handling and treatment activities in the South Yonkers Screen house. Wastewater from a 102" and 48" diameter sewer line is combined and conveyed to the South control structure. In the event of an overflow or emergency condition, wastewater can be diverted from the YJWWTP. Prior to discharge, diverted wastewater is directed through a mechanical bar screen to remove large solids, a swirl concentrator to remove floatables, and a chlorine contact for disinfection using sodium hypochlorite. Ventilation air from the building is directed to a mist scrubber system for control of hydrogen sulfide odor

Emission Source/Control: SCR4A - Control

Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: SCR4B - Control

Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: SYSHS - Process

Item 24.11:

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

Emission Unit: 1-YJWTP

Process: DW1

Source Classification Code: 5-01-007-92

Process Description:

Dewatering of municipal sewage sludge (truck loading area, centrate tank and sludge storage hoppers). Ventilation air from these areas is directed to a mist scrubber for control of odor-causing compounds. If the odor control system is not operational, ventilation air is directed to the Primary Thickener and Dewatering building odor control system (EP 00003).

Emission Source/Control: SCR3X - Control

Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: SCR3Y - Control

Control Type: CHEMICAL NEUTRALIZATION

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Emission Source/Control: DEWTR - Process
 Design Capacity: 120 million gallons per day

Item 24.12:

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

Emission Unit: 1-YJWTP
 Process: FST Source Classification Code: 5-01-007-40
 Process Description:
 Separation of waste activated sludge in nine (9) settling tanks. Wastewater enters the tanks from the fuel settling tanks influent channel. Process is located outdoors.

Emission Source/Control: FINST - Process
 Design Capacity: 120 million gallons per day

Emission Source/Control: FSTIC - Process
 Design Capacity: 120 million gallons per day

Item 24.13:

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

Emission Unit: 1-YJWTP
 Process: PST Source Classification Code: 5-01-007-20
 Process Description:
 Process consists of treatment of wastewater in four (4) emergency settling tanks for removal of suspended solids and associated BOD. Wastewater enters the primary tanks from the primary settling tanks influent channel. Effluent from the tanks passes over a weir and is discharged to the primary settling tanks effluent channel. Process is covered and the ventilation air is directed to a mist scrubber odor control system for control of hydrogen sulfide.

Emission Source/Control: SCR5A - Control
 Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: SCR5B - Control
 Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: SCR5C - Control
 Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: PSTEC - Process

Emission Source/Control: PSTIC - Process

Emission Source/Control: PSTKS - Process

Item 24.14:

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

Permit ID: 3-5518-00342/00038

Facility DEC ID: 3551800342

Emission Unit: 1-YJWTP

Process: PTH

Source Classification Code: 5-01-007-71

Process Description:

Sludge is thickened in three (3) primary thickening tanks to increase the sludge solids content. Thickened sludge is pumped to the primary digesters. Ventilation air from the building is directed to a mist scrubber odor control system for control of hydrogen sulfide. Under normal operation, two mist scrubbing units are used. When the dewatering facility odor control system is not operating (EP 00002), ventilation air from the dewatering building is combined with ventilation air from the primary thickener building and directed to the mist scrubbers.

Emission Source/Control: SCR3A - Control

Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: SCR3B - Control

Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: SCR3C - Control

Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: PMYTH - Process

Item 24.15:

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

Emission Unit: 1-YJWTP

Process: SSD

Source Classification Code: 5-01-007-81

Process Description: Secondary Sludge Digestion.

Emission Source/Control: CAU01 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CAU02 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CAU03 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CAU04 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CAU05 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CAU06 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CAU07 - Control

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Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CAU08 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CAU09 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: SSD01 - Process

Emission Source/Control: SSD02 - Process

Item 24.16:

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

Emission Unit: 1-YJWTP

Process: STK Source Classification Code: 5-01-007-99

Process Description:

Storage of Thickened Primary and Secondary Sludge in two (2) sludge storage tanks. The capacity of each tank is 60,170 cubic feet. Tanks are passively vented using a gooseneck vent located on top of each tank. The vented air is directed to the secondary scrubber.

Emission Source/Control: SCR3A - Control
Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: SCR3B - Control
Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: SCR3C - Control
Control Type: CHEMICAL NEUTRALIZATION

Emission Source/Control: DEWTR - Process
Design Capacity: 120 million gallons per day

Emission Source/Control: SLTK1 - Process
Design Capacity: 60,170 cubic feet

Emission Source/Control: SLTK2 - Process
Design Capacity: 60,170 cubic feet

Item 24.17:

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

Emission Unit: 2-ENGIN

Process: 2NG Source Classification Code: 2-02-002-02

Process Description:

Burning of natural gas by the new spark ignition lean burn engine.

Emission Source/Control: 2ENG2 - Combustion

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Facility DEC ID: 3551800342

Design Capacity: 1,200 kilowatts

Emission Source/Control: 2ENG3 - Combustion
Design Capacity: 1,200 kilowatts

Emission Source/Control: 2ENGI - Combustion
Design Capacity: 1,600 kilowatts

Emission Source/Control: 2CEN1 - Control
Control Type: CATALYTIC OXIDATION

Emission Source/Control: 2CEN2 - Control
Control Type: CATALYTIC OXIDATION

Emission Source/Control: 2CEN3 - Control
Control Type: CATALYTIC OXIDATION

Item 24.18:

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

Emission Unit: 2-ENGIN
Process: ADG Source Classification Code: 2-03-007-02
Process Description:
Burning of plant-produced digester gas by three spark
ignition lean burn engines.

Emission Source/Control: 2ENG2 - Combustion
Design Capacity: 1,200 kilowatts

Emission Source/Control: 2ENG3 - Combustion
Design Capacity: 1,200 kilowatts

Emission Source/Control: 2ENGI - Combustion
Design Capacity: 1,600 kilowatts

Emission Source/Control: 2CEN1 - Control
Control Type: CATALYTIC OXIDATION

Emission Source/Control: 2CEN2 - Control
Control Type: CATALYTIC OXIDATION

Emission Source/Control: 2CEN3 - Control
Control Type: CATALYTIC OXIDATION

Item 24.19:

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

Emission Unit: 2-SDBLR
Process: BL1 Source Classification Code: 1-03-005-03
Process Description:
Two boilers rated at 8.5 mmBtu/hr, each, operating on
distillate Oil.

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Facility DEC ID: 3551800342

requests for proposals, to procurement, to installation of the catalytic oxidizer.

Completion of this task shall be achieved not later than February 1, 2027. Shall the Facility, due to unforeseen circumstances, need more time to complete the task, an extension request along with justification has to be submitted and be approved by the Department 30 days prior to the Feb 1, 2027, deadline.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

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