

Facility DEC ID: 2620200007

PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
 Permit ID: 2-6202-00007/00015
 Effective Date: 12/23/2019 Expiration Date: 12/22/2024

Permit Issued To: NYC DEPT OF ENVIRONMENTAL PROTECTION
 96-05 HORACE HARDING EXPY FL 5
 CORONA, NY 11368

Contact: NYC DEPT OF ENVIRONMENTAL PROTECTION
 96-05 HORACE HARDING EXPY FL 5
 CORONA, NY 11368
 (718) 595-5050

Facility: NORTH RIVER WASTEWATER TREATMENT PLANT
 725 W 135TH ST
 NEW YORK, NY 10031

Contact: NYC-DEP NORTH RIVER WPCP
 725 W 135TH ST
 NEW YORK, NY 10031
 (718) 595-5050

Description:

- Five (5) new 3.37 megawatt (MW) spark ignition reciprocating internal combustion engine generators are being installed that will be interconnected with the Con Edison electrical supply (Emission Sources COGN1, COGN2, COGN3, COGN4 and COGN5). Up to four of the five cogeneration engines will operate at any one time (13.5 MW maximum) with the fifth as a standby unit. The new cogeneration engines will operate on both anaerobic digester gas and natural gas and will be equipped with oxidation catalyst for carbon monoxide (CO), volatile organic compound (VOC), and non-criteria pollutant emissions control. The new cogeneration engines will be housed in the existing engine room and will exhaust through the existing pump engine stacks, with physical stack parameters such as location, height, and diameter remaining unchanged.

. one additional waste digester gas burner to be installed (Emission Source WGBR2) for emergency flaring of excessive sludge digester gas (minor mod 3)

. Four (4) 2 MW interim diesel emergency generators (emission sources IGEN1, IGEN2, IGEN3, IGEN4) may be installed during the construction period to provide back up power to the WTP during emergencies and will exhaust through the existing turbine generator stacks (CGTG1, CGTG2). Once the cogen engines are in operation, these 4 generators will be removed, if installed.

The WWTP has the following wastewater treatment processes and their associated equipment. Emissions from these processes depend on the concentrations of pollutants of concern in the WWTP's influent of which the plant has limited control. The emissions from these processes are

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remaining unchanged.

- Headworks
- Influent Channels
- Primary settling tanks
- Activated sludge aeration tanks
- Activated sludge aeration tanks effluent mixed liquor channels
- Final settling tanks
- Chlorination contact tanks
- Sludge thickeners
- Sludge digesters
- Sludge storage tank
- Wiggins sludge digester gas holder
- Mixed liquor channels

Improvements are being made to the equipment associated with the sludge thickeners, sludge digesters, and Wiggins sludge digester gas holder. All the processes are covered except a small portion of the final settling tanks, and the air from these processes is collected & vented to the WWTP's odor control systems prior to being exhausted to the atmosphere. The WWTP has three (3) 2-stage odor control systems by location, North, West and South, consisting of nineteen (19) wet chemical scrubbers, and fifty six (56) activated carbon absorbers. The wet scrubbers use chemicals to achieve design H₂S removal efficiency at high H₂S concentrations but could achieve adequate H₂S removal efficiency by using less or no chemicals at normal or low H₂S inlet concentration.

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:

STEPHEN A WATTS
47-40 21ST ST
LONG ISLAND CITY, NY 11101-5401

Authorized Signature: _____

Date: 12/23/2019

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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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- 4 2 Relationship of this Permit to Other Department Orders and Determinations
- 4 3 Applications for permit renewals, modifications and transfers
- 5 4 Permit modifications, suspensions or revocations by the Department

Facility Level

- 5 5 Submission of application for permit modification or renewal -
REGION 2 HEADQUARTERS

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DEC GENERAL CONDITIONS

****** General Provisions ******

For the purpose of your Title V permit, the following section contains state-only enforceable terms and conditions.

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 2 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 2 Headquarters
Division of Environmental Permits
1 Hunters Point Plaza, 4740 21st Street
Long Island City, NY 11101-5407
(718) 482-4997

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ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

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96-05 HORACE HARDING EXPY FL 5
CORONA, NY 11368

Facility: NORTH RIVER WASTEWATER TREATMENT PLANT
725 W 135TH ST
NEW YORK, NY 10031

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

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- 36 44 6 NYCRR 227.2 (b) (1): Compliance Certification
- 37 45 40CFR 60, NSPS Subpart IIII: Applicability
- 38 46 40CFR 60.4206, NSPS Subpart IIII: Duration of emission standards
for new stationary compression ignition IC engines
- 38 47 40CFR 60.4211(c), NSPS Subpart IIII: Compliance Certification
- 39 48 40CFR 60.4214(b), NSPS Subpart IIII: Compliance Certification
- Emission Unit Level**
- 40 49 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 43 50 6 NYCRR Subpart 201-6: Process Definition By Emission Unit
- 55 51 6 NYCRR Subpart 201-7: Emission Unit Permissible Emissions

EU=1-COGEN

- 55 52 6 NYCRR 201-6.1 (a): Compliance Certification
- 56 53 6 NYCRR 201-6.1 (a): Compliance Certification
- 57 *54 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 59 *55 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 61 *56 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 63 *57 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 66 *58 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 68 59 40CFR 60, NSPS Subpart JJJJ: Compliance Certification

EU=1-COGEN,Proc=COD

- 69 60 6 NYCRR Subpart 201-6: Compliance Certification
- 70 61 6 NYCRR Subpart 201-6: Compliance Certification
- 71 62 6 NYCRR Subpart 201-6: Compliance Certification
- 71 63 6 NYCRR Subpart 201-6: Compliance Certification
- 72 64 6 NYCRR Subpart 201-6: Compliance Certification
- 73 65 6 NYCRR Subpart 227-2: Compliance Certification
- 74 66 6 NYCRR Subpart 231-6: Compliance Certification
- 75 67 40CFR 60.4230(a)(4)(i), NSPS Subpart JJJJ: Applicability of
facilities subject to Subpart JJJJ

EU=1-COGEN,Proc=CON

- 75 68 6 NYCRR Subpart 201-6: Compliance Certification
- 76 69 6 NYCRR Subpart 201-6: Compliance Certification
- 77 70 6 NYCRR Subpart 201-6: Compliance Certification
- 78 71 6 NYCRR Subpart 201-6: Compliance Certification
- 79 72 6 NYCRR Subpart 227-2: Compliance Certification
- 80 73 6 NYCRR Subpart 231-6: Compliance Certification
- 80 74 40CFR 60.4230(a)(4)(i), NSPS Subpart JJJJ: Applicability of
facilities subject to Subpart JJJJ
- 81 75 6 NYCRR 227-1.3 (a): Compliance Certification

EU=1-COGEN,Proc=INT

- 82 76 40CFR 60.4205(b), NSPS Subpart IIII: Compliance Certification
- 83 77 40CFR 60.4205(b), NSPS Subpart IIII: Compliance Certification
- 84 78 40CFR 60.4207(b), NSPS Subpart IIII: Compliance Certification
- 85 79 40CFR 60.4207(b), NSPS Subpart IIII: Compliance Certification
- 86 80 40CFR 60.4211(a), NSPS Subpart IIII: Compliance Certification
- 87 81 40CFR 60.4211(f), NSPS Subpart IIII: Compliance Certification
- 88 82 40CFR 63.6590(c), Subpart ZZZZ: Stationary RICE subject to
regulations under 40 CFR Part 60

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88 83 40CFR 63.6645(f), Subpart ZZZZ: Compliance Certification

EU=1-COGEN,Proc=WGB

89 84 6 NYCRR Subpart 231-6: Compliance Certification

EU=1-COGEN,Proc=WGB,ES=WGBR2

90 85 6 NYCRR 200.7: Compliance Certification

EU=1--COMB

90 86 6 NYCRR 201-6.1 (a): Compliance Certification

91 87 6 NYCRR 227-2.3 (b): Compliance Certification

91 88 6 NYCRR 227-2.4 (c): Compliance Certification

92 89 6 NYCRR 227-2.5 (c): Compliance Certification

93 90 6 NYCRR 227-2.5 (c): Compliance Certification

93 91 6 NYCRR Subpart 231-10: Compliance Certification

EU=1--COMB,Proc=BLR

94 92 40CFR 60.4, NSPS Subpart A: EPA Region 2 address.

95 93 40CFR 60.48c(a), NSPS Subpart Dc: Compliance Certification

96 94 40CFR 60.48c(g), NSPS Subpart Dc: Compliance Certification

96 95 6 NYCRR 227-2.4 (c) (1) (ii): Compliance Certification

EU=1--COMB,Proc=BLR,ES=BLER2

97 96 6 NYCRR 227-2.4 (d): Compliance Certification

EU=1--COMB,Proc=FLA,ES=WGBR1

98 97 6 NYCRR 200.7: Compliance Certification

EU=1--COMB,Proc=GNR

99 98 6 NYCRR 227-2.4 (f): Compliance Certification

99 99 40CFR 60, NSPS Subpart GG: Compliance Certification

EU=1--COMB,Proc=PED

101 100 6 NYCRR 227-2.4 (f): Compliance Certification

EU=1--COMB,Proc=PEG

101 101 6 NYCRR 227-2.4 (f): Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

104 102 ECL 19-0301: Contaminant List

104 103 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities

105 104 6 NYCRR 211.1: Air pollution prohibited

NOTE: * preceding the condition number indicates capping.

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

The items listed below are not subject to the annual compliance certification requirements under Title V. Permittees may also have other obligations under regulations of general applicability.

- Item A: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10 (b)**
The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.
- Item B: Timely Application for the Renewal of Title V Permits - 6 NYCRR 201-6.2 (a) (4)**
Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.
- Item C: Certification by a Responsible Official - 6 NYCRR 201-6.2 (d) (12)**
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- Item D: Requirement to Comply With All Conditions - 6 NYCRR 201-6.4 (a) (2)**
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- Item E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR 201-6.4 (a) (3)**
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- Item F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR**

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201-6.4 (a) (5)

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

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

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

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

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

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

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

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

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

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

- i. When additional applicable requirements under the act become applicable to a title V facility with a remaining permit term of three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the department pursuant to the provisions of section 201- 6.6 of this Subpart.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

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

Item K: Permit Exclusion - ECL 19-0305

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

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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.

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS AT ALL TIMES**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements at all times.

- Condition 1: Acceptable Ambient Air Quality**
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 200.6

- Item 1.1:**
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: Fees**
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (7)

- Item 2.1:**
The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0303.

- Condition 3: Recordkeeping and Reporting of Compliance Monitoring**
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 201-6.4 (c)

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Item 3.1:

The following information must be included in any required compliance monitoring records and reports:

- (i) The date, place, and time of sampling or measurements;
- (ii) The date(s) analyses were performed;
- (iii) The company or entity that performed the analyses;
- (iv) The analytical techniques or methods used including quality assurance and quality control procedures if required;
- (v) The results of such analyses including quality assurance data where required; and
- (vi) The operating conditions as existing at the time of sampling or measurement.

Any deviation from permit requirements must be clearly identified in all records and reports. Reports must be certified by a responsible official, consistent with Section 201-6.2 of Part 201.

**Condition 4: Records of Monitoring, Sampling, and Measurement
Effective between the dates of 12/23/2019 and 12/22/2024**

Applicable Federal Requirement: 6 NYCRR 201-6.4 (c) (2)

Item 4.1:

Compliance monitoring and recordkeeping shall be conducted according to the terms and conditions contained in this permit and shall follow all quality assurance requirements found in applicable regulations. Records of all monitoring data and support information must be retained for a period of at least 5 years from the date of the monitoring, sampling, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

**Condition 5: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024**

Applicable Federal Requirement: 6 NYCRR 201-6.4 (c) (3) (ii)

Item 5.1:

The Compliance Certification activity will be performed for the Facility.

Item 5.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To meet the requirements of this facility permit with respect to reporting, the permittee must:

Submit reports of any required monitoring at a minimum frequency of

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every 6 months, based on a calendar year reporting schedule. These reports shall be submitted to the Department within 30 days after the end of a reporting period. All instances of deviations from permit requirements must be clearly identified in such reports. All required reports must be certified by the responsible official for this facility.

Notify the Department and report permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement fails to address the time frame for reporting deviations, reports of deviations shall be submitted to the permitting authority based on the following schedule:

- (1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
- (2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
- (3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring report required above.
- (4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.2(d)(12), must be submitted within 10 working days of an occurrence for deviations reported under (1) and (2). All deviations reported under paragraphs (1) and (2) of this section must also be identified in the 6 month monitoring report required above.

The provisions of 6 NYCRR 201-1.4 shall apply if the permittee seeks

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to have a violation excused unless otherwise limited by regulation. In order to have a violation of a federal regulation (such as a new source performance standard or national emissions standard for hazardous air pollutants) excused, the specific federal regulation must provide for an affirmative defense during start-up, shutdowns, malfunctions or upsets. Notwithstanding any recordkeeping and reporting requirements in 6 NYCRR 201-1.4, reports of any deviations shall not be on a less frequent basis than the reporting periods described in paragraphs (1) and (4) above.

In the case of any condition contained in this permit with a reporting requirement of "Upon request by regulatory agency" the permittee shall include in the semiannual report, a statement for each such condition that the monitoring or recordkeeping was performed as required or requested and a listing of all instances of deviations from these requirements.

In the case of any emission testing performed during the previous six month reporting period, either due to a request by the Department, EPA, or a regulatory requirement, the permittee shall include in the semiannual report a summary of the testing results and shall indicate whether or not the Department or EPA has approved the results.

All semiannual reports may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office) and one copy shall be sent to the Administrator (or his or her representative). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.4(e), contained elsewhere in this permit.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 6: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 201-6.4 (e)

Item 6.1:

The Compliance Certification activity will be performed for the Facility.

Item 6.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

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Monitoring Description:

Requirements for compliance certifications with terms and conditions contained in this facility permit include the following:

i. Compliance certifications shall contain:

- the identification of each term or condition of the permit that is the basis of the certification;
- the compliance status;
- whether compliance was continuous or intermittent;
- the method(s) used for determining the compliance status of the facility, currently and over the reporting period consistent with the monitoring and related record keeping and reporting requirements of this permit;
- such other facts as the Department may require to determine the compliance status of the facility as specified in any special permit terms or conditions; and
- such additional requirements as may be specified elsewhere in this permit related to compliance certification.

ii. The responsible official must include in the annual certification report all terms and conditions contained in this permit which are identified as being subject to certification, including emission limitations, standards, or work practices. That is, the provisions labeled herein as "Compliance Certification" are not the only provisions of this permit for which an annual certification is required.

iii. Compliance certifications shall be submitted annually.

Certification reports are due 30 days after the anniversary date of four consecutive calendar quarters. The first report is due 30 days after the calendar quarter that occurs just prior to the permit anniversary date, unless another quarter has been acceptable by the Department.

iv. All annual compliance certifications may be submitted electronically or physically. Electronic reports shall be submitted using the Department's Air Compliance and Emissions Electronic-Reporting system (ACE). If the facility owner or operator elects to send physical copies instead, two copies shall be sent to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Quality Assurance (BQA) in the DEC central office) and one copy shall be sent to the Administrator (or his or her representative). The mailing addresses for the above referenced persons are:

Chief – Air Compliance Branch
USEPA Region 2 DECA/ACB
290 Broadway, 21st Floor
New York, NY 10007

The address for the RAPCE is as follows:

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Regional Air Pollution Control Engineer
 Hunters Point Plaza
 47-40 21st Street
 Long Island City, NY 11101-5407

The address for the BQA is as follows:

NYSDEC
 Bureau of Quality Assurance
 625 Broadway
 Albany, NY 12233-3258

Monitoring Frequency: ANNUALLY
 Reporting Requirements: ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 7/30/2020.
 Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 202-2.1

Item 7.1:

The Compliance Certification activity will be performed for the Facility.

Item 7.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
 Monitoring Description:

Emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year. Statements are to be mailed to: New York State Department of Environmental Conservation, Division of Air Resources, Bureau of Air Quality Planning, 625 Broadway, Albany NY 12233-3251

Monitoring Frequency: ANNUALLY
 Reporting Requirements: ANNUALLY (CALENDAR)
 Reports due by April 15th for previous calendar year

Condition 8: Recordkeeping requirements
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 202-2.5

Item 8.1:

(a) The following records shall be maintained for at least five years:

- (1) a copy of each emission statement submitted to the department; and
- (2) records indicating how the information submitted in the emission

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statement was determined, including any calculations, data, measurements, and estimates used.

(b) These records shall be made available at the facility to the representatives of the department upon request during normal business hours.

Condition 9: Open Fires - Prohibitions
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 215.2

Item 9.1:

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 9.2

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 plant and insect species.

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

**MANDATORY FEDERALLY ENFORCEABLE PERMIT CONDITIONS
SUBJECT TO ANNUAL CERTIFICATIONS ONLY IF APPLICABLE**

The following federally enforceable permit conditions are mandatory for all Title V permits and are subject to annual compliance certification requirements only if effectuated during the reporting period.

[NOTE: The corresponding annual compliance certification for those conditions not effectuated during the reporting period shall be specified as "not applicable".]

Condition 10: Maintenance of Equipment
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 200.7

Item 10.1:

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 11: Recycling and Salvage
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 201-1.7

Item 11.1:

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 12: Prohibition of Reintroduction of Collected Contaminants to the air
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 201-1.8

Item 12.1:

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 13: Exempt Sources - Proof of Eligibility
Effective between the dates of 12/23/2019 and 12/22/2024

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

Item 13.1:

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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 14: Trivial Sources - Proof of Eligibility
Effective between the dates of 12/23/2019 and 12/22/2024

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

Item 14.1:

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 15: Requirement to Provide Information
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (4)

Item 15.1:

The owner and/or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the department copies of records required to be kept by the permit or, for information claimed to be confidential, the permittee may furnish such records directly to the administrator along with a claim of confidentiality, if the administrator initiated the request for information or otherwise has need of it.

Condition 16: Right to Inspect
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 201-6.4 (a) (8)

Item 16.1:

The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to:

(i) enter upon the permittee's premises where a facility subject to the permitting requirements of this Subpart is located or emissions-related activity is conducted, or where records must be kept under the conditions of the permit;

(ii) have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;

(iii) inspect at reasonable times any emission sources, equipment (including monitoring and air pollution control equipment), practices, and operations regulated or required under the permit;

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and

(iv) sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

Condition 17: Off Permit Changes**Effective between the dates of 12/23/2019 and 12/22/2024****Applicable Federal Requirement:6 NYCRR 201-6.4 (f) (6)****Item 17.1:**

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions. Such changes may be made without requiring a permit revision, if the changes are not modifications under any provision of title I of the act and the changes do not exceed the emissions allowable under the permit (whether expressed therein as a rate of emissions or in terms of total emissions) provided that the facility provides the administrator and the department with written notification as required below in advance of the proposed changes within a minimum of seven days. The facility owner or operator, and the department shall attach each such notice to their copy of the relevant permit.

(i) For each such change, the written notification required above shall include a brief description of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

(ii) The permit shield described in section 6 NYCRR 201-6.4 shall not apply to any change made pursuant to this paragraph.

Condition 18: Required Emissions Tests**Effective between the dates of 12/23/2019 and 12/22/2024****Applicable Federal Requirement:6 NYCRR 202-1.1****Item 18.1:**

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

Condition 19: Accidental release provisions.**Effective between the dates of 12/23/2019 and 12/22/2024****Applicable Federal Requirement:40 CFR Part 68****Item 19.1:**

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities

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greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

- a) The owner or operator shall comply with the provisions of 40 CFR Part 68 and;
- b) The owner or operator shall submit at the time of permit issuance (if not previously submitted) one of the following, if such quantities are present:
 - 1) A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR §68.10(a) or,
 - 2) A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan. Information should be submitted to:

Risk Management Plan Reporting Center
 C/O CSC
 8400 Corporate Dr
 Carrollton, Md. 20785

Condition 20: Recycling and Emissions Reduction
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:40CFR 82, Subpart F

Item 20.1:
 The permittee shall comply with all applicable provisions of 40 CFR Part 82.

The following conditions are subject to annual compliance certification requirements for Title V permits only.

Condition 21: Emission Unit Definition
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 21.1:
 The facility is authorized to perform regulated processes under this permit for:
 Emission Unit: 1-COGEN
 Emission Unit Description:
 This emission unit is comprised of five (5) new 3.03 megawatt (MW) spark ignition reciprocating internal combustion engine generators (Emission Sources COGN1,COGN2,COGN3,COGN4, and COGN5) that will be interconnected with the Con Edison electrical supply. Up to four of the five engines will operate at any one given time (12.12 MW maximum), with the fifth as a standby unit. The engines will operate on both digester gas and natural gas. The new cogeneration engines will be housed in the existing engine room and will exhaust through

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the existing pump engine stacks, with physical stack parameters such as location, height and diameter remaining unchanged.

In addition, this unit includes four (4) 2 MW interim diesel emergency generators (IGEN1, IGEN2, IGEN3, IGEN4) to be installed during the construction period to provide back up power to the plant during emergencies and will exhaust through the existing turbine generator stacks. Once the cogeneration plant is in operation, these four emergency generators will be removed.

This unit also includes a new completely enclosed waste digester gas burner (capacity of 1510 scfm) (Emission Source WGBR2) to flare the additional digester gas produced at the WTP in the extreme event that digester gas can not be used by the new cogen engines or boilers.

Existing emission points ENGP1, ENGP2, ENGP3, ENGP4, and ENGP5 are the existing pump engine stacks which will be used to exhaust the new cogeneration engines. A new emission point for the new waste gas burner (WGBR2) will be used for emergency flaring of excessive sludge digester gas. Existing emission points EMTG1 and EMTG2 are the existing emergency turbine generator stacks which will be used to exhaust the interim emergency generators during the construction period.

Building(s): MAIN
PARK

Item 21.2:

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

Emission Unit: 1--COMB

Emission Unit Description:

This Unit includes the following combustion sources and their associated equipment:

Five (5) Delaval Transamerican 1700 HP dual fuel internal combustion engines mechanically coupled to five sewage pumps which pump sewage to the plant. These engines fire primarily a mixture of digester gas and natural gas with #2 fuel oil pilot fuel in normal operation and exhaust to the atmosphere via individual stacks through the roof into the rooftop NYS Riverbank State Park.

Five (5) Mirrlees Blackstone 940 HP dual fuel internal combustion engines mechanically coupled to five blowers which feed air to the plant's aeration tanks. These engines fire primarily a mixture of digester gas and natural gas with #2 fuel oil pilot fuel in normal operation and exhaust to the atmosphere via individual stacks through the roof into the rooftop NYS Riverbank State Park. NYCDEP informed NYSDEC that all the 5 blower engines have been removed now.

The facility has recently installed (year 2011) a 2000HP electrical blower to the pool of blowers. This 2000HP electrical blower is powered by utility power and does not have any emission.

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Three (3) 31.4 mmBtu/hr and one (1) 8.4 mmBtu/hr York-Shipley boilers to provide heat and hot water to the facility. These boilers primarily fire natural gas or sludge digester gas in normal operation and exhaust to atmosphere via three (3) stacks through the roof into the rooftop NYS Riverbank State Park. Only during curtailment period and for exercise, these boilers may fire fuel oil.

One (1) waste sludge digester gas burner to flare excessive sludge digester gas.

Four (4) emergency generators: two (2) 2,800 KW emergency turbine generator, one (1) 2,000 KW trailer-mounted emergency engine generator, and one (1) 200 KW blackstart engine generator. These emergency generators, each to operate no more than 500 hrs., provide critical emergency power support to achieve the State Pollutant Discharge Elimination System (SPDES) permit required minimum wastewater treatment and disinfection in the event the plant loses utility power. The two turbine generators exhaust to the atmosphere via individual stacks through the roof. These two turbine generators will be removed upon operation of the new cogen engines. The trailer-mounted 2000 KW emergency engine generator is also located on the plant's east roadway and exhaust from this emergency engine generator is piped to the main building exterior 70 feet away. The 200 kw black start engine enerator has a six inch diameter exhaust pipe routed across service road A to the outside of the bldg. through the center of the open archway.

Building(s): MAIN
PARK
SLUDGE

Item 21.3:

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

Emission Unit: 2-WWTRE

Emission Unit Description:

This Unit includes the following wastewater treatment processes and their associated equipment. Emissions from these processes depend on the concentrations of pollutants of concern in the plant's influent of which the plant does not have complete control.

Headworks
Influent channels
Primary settling tanks
Activated sludge aeration tanks
Activated sludge aeration tanks effluent mixed liquor channels
Final settling tanks
Chlorination contact tanks with dechlorination
Sludge thickeners
Sludge mechanical centrifuge thickeners
Sludge digesters
Sludge storage tank

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Wiggins sludge digester gas holder

All the processes are covered except small portion of the final settling tank, and the air from these processes is collected & vented to the plant's odor control systems prior to being exhausted to atmosphere.

The plant has three (3) 2-stage odor control systems by location, North, West and South consisting of wet scrubbers and activated carbon adsorbers. For the North River WWTP odor control system, the chemicals used by the wet scrubbers are sodium hypochlorite and caustic, in order to achieve 90% removal of H₂S at the design's H₂S concentration specifications, as high as 10 ppm. Chemical consumption is controlled automatically by setting pH and ORP (Oxidation Reduction Potential). The manufacturer recommends maintaining the scrubbers' pH at approximately 10.5 and ORP at about +400 to +600 millivolts. For daily operation at the WWTP with H₂S levels normally at ppb not ppm, the actual operation differs from the manufacturer's recommendations by using less or no chemicals, in order to avoid chemical waste and excessive chemicals be released with the scrubbers' discharge water flow.

The North Odor Control System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers exhausting through two(2) identical large stacks. The West Odor Control System consists of four (4) wet scrubbers and twelve (12) activated carbon adsorbers and the treated air of this system is sent to the North Odor Control System plenum and exits through the North Odor Control System's two identical exhaust stacks. The South North Odor Control System consists of seven (7) wet scrubbers and eighteen (18) activated carbon adsorbers to exhaust through one(1) large stack.

Building(s): AERATION
CHLORCONT
MAIN
SLUDGE

Condition 22: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 22.1:

The Compliance Certification activity will be performed for the Facility.

Item 22.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility will install 5 new spark ignited reciprocating internal combustion engine generators which will be interconnected with Con Ed

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power supply. At any time, up to 4 cogeneration engines will operate, totalling 12.12 mw maximum, with fifth unit as a stand by unit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 23: Progress Reports Due Semiannually
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 201-6.4 (d) (4)

Item 23.1:

Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually, or at a more frequent period if specified in the applicable requirement or by the department. Such progress reports shall contain the following:

(i) dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

(ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

Condition 24: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 202-1

Item 24.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 TOTAL HAP

Item 24.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Annual HAPs emissions from wastewater treatment processes will be estimated using the TOXCHEM+ model. The HAPs will be sampled at the influent at a minimum of once per year.

Reference Test Method: EPA 600 series

Monitoring Frequency: ANNUALLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

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Condition 25: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 202-1

Item 25.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):
 CAS No: 0NY998-00-0 VOC

Item 25.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Annual VOCs emissions from wastewater treatment processes will be estimated using the TOXCHEM+ model. The VOCs will be sampled at the influent at a minimum of once per year.

Reference Test Method: EPA 600 series

Monitoring Frequency: ANNUALLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 26: Visible Emissions Limited
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 26.1:

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 27: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 27.1:

The Compliance Certification activity will be performed for the Facility.

Item 27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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The facility must maintain records of inspections performed, samples collected and analyzed, maintenance activities performed for the H2S AQMN system components, and report it to the Department.

Monitoring Frequency: DAILY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 28: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 28.1:
The Compliance Certification activity will be performed for the Facility.

Item 28.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Emission Unit 1-Comb, Emission Sources Pump Engines, Process:L PED,
PEG

The facility must maintain records of inspections performed, samples collected and analyzed, maintenance activities performed for the Continuous Opacity Monitor (COM) system components, and report it to the Department.

Monitoring Frequency: DAILY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 29: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 29.1:
The Compliance Certification activity will be performed for the Facility.

Item 29.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Emission Unit 1-Comb, Emission Sources Pump Engines, Process:L PED,
PEG

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

The permittee shall provide DEC access to continuous real time opacity data from the blower and pump engines' Continuous Opacity Monitors, at all the times.

NYCDEP informed NYSDEC (6/2018) that all 5 blower engines have been removed.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 30: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 30.1:

The Compliance Certification activity will be performed for the Facility.

Item 30.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The permittee shall provide NYSDEC access to continuous real time H2S data from the four Air Quality Monitoring Stations (AQMS) in the WWTP, at all the times.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 31: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 31.1:

The Compliance Certification activity will be performed for the Facility.

Item 31.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission Unit 1-Comb, Emission Sources Pump Engines, Process:L PED, PEG

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

NYCDEP shall install and operate Continuous Opacity Monitors (COMs) at 5 pump engine stacks and 5 blower engine stacks to monitor opacity, in accordance with the plan approved by the Department, unless it is already operating under an approved plan.

NYCDEP informed NYSDEC (6/2018) that all 5 blower engines have been removed.

The maintenance and QA/QC of the COMs shall be done in accordance with the approved plan.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 32: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 32.1:

The Compliance Certification activity will be performed for the Facility.

Item 32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

NYCDEP is required to submit a quarterly AQMN report, including but not limited to, callibration, QA/QC, H2S readings, exceedances, possible causes, corrective actions taken) . The quarterly report shall be submitted no later than 30 days after each quarter.

NYCDEP is required to report any exceedances, violations, odor complaints, within two business days to the NYSDEC Region 2 office. A full written report of any such incident should be submitted to RAPCE with the Quarterly Report.

Copies of all reports shall be sent to RAPCE, NYSDEC Region 2 office, 47-40 21 Street, Long Island City, NY 11101.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 3 calendar month(s).

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Condition 33: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 33.1:

The Compliance Certification activity will be performed for the Facility.

Item 33.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

NYCDEP shall continue operating the H2S AQMN system at the four AQMS within the WWTP, in accordance with the H2S AQMN Standard Operating Procedures, approved by the Department on 6/23/14.

The maintenance and QA/QC of the AQMN shall be done in accordance with the approved SOPs.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 34: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 34.1:

The Compliance Certification activity will be performed for the Facility.

Item 34.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission Unit 1-Comb, Emission Sources Pump Engines, Process:L PED, PEG

NYCDEP is required to submit a quarterly COMs report (calibration, QA/QC, readings, exceedances, possible cause, corrective actions taken) . The quarterly report shall be submitted no later than 30 days after each quarter.

NYCDEP is required to report any exceedances, violations, complaints, within two business days to the NYSDEC Region 2 office. A full written report of any such incident should be submitted to the NYSDEC Region 2 office in Quarterly Reports.

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Copies of all reports shall be sent to RAPCE, NYSDEC Region 2 office,
47-40 21 Street, Long Island City, NY 11101.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 3 calendar month(s).

Condition 35: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 211.2

Item 35.1:

The Compliance Certification activity will be performed for the Facility.

Item 35.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

NYCDEP shall continue monitoring of hydrogen sulfide in the four
in-plant monitoring stations.

New York City DEP shall monitor H₂S levels in each plenum (one from each of the three odor control systems - north, south, northwest), at least twice daily using a Jerome meter. These H₂S readings are to remain less than 50 ppb at all times. In the event the H₂S levels are above 50 ppb in any plenum, NYCDEP shall investigate the source of the higher readings and take appropriate corrective actions. If the source of the problem is a carbon vessel with less than 95% H₂S capture capacity, DEP shall have the carbon replenished no later than 15 days after such reading is observed. Permittee shall record the date and time of such observations and date and time carbon replaced. An explanatory report shall be included, with the Quarterly Report, of any occasion of H₂S reading above 50 ppb

This Jerome meter shall be maintained and calibrated per manufacturer's recommendations. The Jerome meter shall have an accuracy of +/- 3 ppb. The maintenance and calibration data, as well as the H₂S measurement data, shall be reported to the Department on a quarterly (calendar) basis.

The Permittee will submit quarterly (calendar) report to the Department with in 30 days of the end of the applicable quarter.

Reference Test Method: EPA 600

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 36: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Item 36.1:

The Compliance Certification activity will be performed for the Facility.

Item 36.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The Permittee shall follow best engineering procedures and take precautions to minimize odors. These shall include, but not limited to, keeping the doors, windows, and gates of buildings/structures that are sources of odors/ odor pathways, closed except when absolutely necessary for plant operation/maintenance.

The Permittee shall ensure that all off-gases from odor producing processes (eg. aeration tanks, settling tanks, digesters etc) are conducted to appropriate control equipment and the off gas transport system does not have any leakages. Head spaces of odorous processes shall be ventilated at rates which follow good engineering practice. All outdoor containers with products must be covered at all times and no odors are allowed to escape from the containers.

The WWTP will evaluate the operation and maintenance of odor control systems and keep the systems in compliance. The plant will maintain a daily log on site to record the presence of odors and corrective actions taken, and report those to the Department semi annually.

The plant will evaluate the operations and maintenance of odor control systems and make necessary adjustments in the systems, to keep the system in compliance with the Part 257-10 ambient air quality standard for H₂S of 10 ppb.

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 37: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 211.2

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Item 37.1:

The Compliance Certification activity will be performed for the Facility.

Item 37.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must maintain records of inspections performed, samples collected and analyzed, maintenance activities performed for the odor control system components, and report it to the Department.

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 38: Compliance Certification

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 211.2

Item 38.1:

The Compliance Certification activity will be performed for the Facility.

Item 38.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility shall establish a complaint response procedure to manage complaints received at this facility. The procedures shall be designed to ensure that complaints are adequately received and documented, and received timely response. The facility shall, at a minimum, include the following in the procedures:

1. Establish a complaint phone line that is available during the time is operating (24 hours a day, 7 days a week).
2. Follow DEP's odor complaints response procedures, commence investigation survey of the plant and take prompt action if situation causing the complaint is found.
3. Fully document the complaint, results of investigation and any corrective actions taken. Also, preventive action, if any, should also be considered to prevent the incident to happen again in future.
4. Upon completion of complaint investigations, inform the complainant with the result of investigations.
5. Report odor complaints to the Department on quarterly basis.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 39: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 212-1.5 (e) (2)

Item 39.1:

The Compliance Certification activity will be performed for the Facility.

Item 39.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This condition applies to processes BLR, FLA, GNR, PED, PEG of emission unit 1-COMB and COD, CON, INT, WGD of emission unit 1-COGN. The facility is required to satisfy 6 NYCRR 212 requirements for its process emission sources that may be subject to NESHAP by doing the following:

Within sixty days of completion of the stack test based on the approved protocol, NYCDEP shall submit a Stack Test Report to the NYSDEC Region 2 office.

A Toxic Impact Assessment (TIA) shall be done for emissions of High Toxicity Air Contaminants (HTACs) found in 6 NYCRR 212-2.2 and criteria pollutants within 60 days after submission of Stack Test Report.

A Stack test and a TIA analysis are required once during the term of permit.

Monitoring Frequency: Once every five years
 Reporting Requirements: ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 7/30/2020.
 Subsequent reports are due every 12 calendar month(s).

Condition 40: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

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

Item 40.1:

The Compliance Certification activity will be performed for the Facility.

Item 40.2:

Compliance Certification shall include the following monitoring:

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

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

Monitoring Description:

All of the NY City's service contracts require supplier to provide fuel oils that meet the low sulfur content requirement of 0.0015% by weight for the distillate fuel oils. Monitoring will be done randomly citywide at suppliers terminals by the NY City Department of Citywide Administrative Services (DCAS). Monitoring results are kept at DCAS and available for DEC upon request.

Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 0.0015 percent by weight

Reference Test Method: ASTM D4951

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE
MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 41: Compliance Certification

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 227-1.3 (a)

Item 41.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 41.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission Unit: 1-Comb, Emission Sources: Pump Engines 1 to 5,
Process: PED, PEG

NYCDEP shall maintain records of all measurements, calibrations, and maintenance of COMs in a permanent form and/or record/log book, and shall be made available for inspection for a period of 5 years following the date of such measurement.

Facility utilizing COMs is also required to file excess emission report with the following information:

- 1) Magnitude, date and time of each exceedance;

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- 2) For each period of excess emissions, steps to identify the cause of problem and corrective actions taken to solve the problem, and steps taken to prevent the problem happening in future;
- 3) Date, time and duration for each period of COMs down time, and corrective action for each period;
- 4) Total time the COMs is required to record data during the reporting period;
- 5) Total number of exceedances and the duration of exceedances expressed as a percentage of total time in which the COMs are required to record data; and
- 6) such other requirements as the Department may deem necessary in order to enforce Article 19 of the ECL

Permittee will submit quarterly report to the Department.

Reference Test Method: DEC/EPA Approved
 Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Reporting Requirements: QUARTERLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 3 calendar month(s).

Condition 42: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 227-2.4 (f)

Item 42.1:
 The Compliance Certification activity will be performed for the Facility.

Item 42.2:
 Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
 Monitoring Description:
 DEP is currently installing five (5) new 3.03 megawatt (MW) spark ignition reciprocating internal combustion engine generators (Emission Sources COGN1, COGN2, COGN3, COGN4 and COGN5) and these engines will be interconnected with the Con Edison utility power supply. Up to four of the five cogeneration engines may be operated at any one time (12.12 MW maximum) with the fifth as a standby unit. The new cogeneration engines will operate on both anaerobic digester gas and natural gas. The cogeneration engines will also be equipped with oxidation catalyst for carbon monoxide (CO), volatile organic compound (VOC), and non-criteria pollutant emissions control. The new cogeneration engines will be housed in the existing engine room and will exhaust through the existing pump engine stacks (renamed as

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Facility DEC ID: 2620200007

CGNP1, CGNP2, CGNP3, CGNP4 and CGNP5), with physical stack parameters such as location, height, and diameter remaining unchanged.

Once the new cogeneration engines are available for operation, the existing blower engines, pump engines, and emergency turbine generators will cease operation and be removed from the WWTP. NYCDEP informed NYSDEC (06/2018) that all 5 blower engines have been removed.

Installation of the new cogen engines should be done by August 2021.

Monitoring Frequency: ANNUALLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 43: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 227-2.4 (f)

Item 43.1:

The Compliance Certification activity will be performed for the Facility.

Item 43.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

To ensure that all the combustions units run at optimum conditions and stays in compliance with the NO_x RACT emission limit, periodic maintenance will be performed in accordance with manufacturer's specifications and in accordance with best professional judgement.

PM program should include, but not limited to, daily visual observation of operating engines, maintain logs of daily readings of engines' combustion temperature, fluid pressures, and periodically lubrication (oil and filter changes), testing of engine safety devices and all other as mentioned in the O and M manual and in accordance with good engineering practices. Corrective measures, if necessary, should be taken as needed as soon as practicable.

Other components of the periodic maintenance program for the unit include those actions necessitated by the results of monitoring the following data: diagnostic data obtained after a set number of operating hours, engine oil analysis, and fuel consumption versus power output of the unit.

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Facility DEC ID: 2620200007

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 44: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 227.2 (b) (1)

Item 44.1:

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

Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN1
Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN2
Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN3
Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN4
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER1
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER2
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER3
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER4
Emission Unit: 1--COMB Process: GNR	Emission Source: BGEN1
Emission Unit: 1--COMB Process: GNR	Emission Source: EGEN1
Emission Unit: 1--COMB Process: PED	Emission Source: PENG1
Emission Unit: 1--COMB Process: PED	Emission Source: PENG2
Emission Unit: 1--COMB	

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Facility DEC ID: 2620200007

Process: PED Emission Source: PENG3

Emission Unit: 1--COMB
Process: PED Emission Source: PENG4

Emission Unit: 1--COMB
Process: PED Emission Source: PENG5

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

Item 44.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The two hour average emission of particulates from this stationary combustion installation shall not exceed 0.10 pounds per million Btu of heat input.

At the monitoring frequency stated below the facility shall perform the following:

- 1) Submit to the Department an acceptable protocol for the testing of particulate emissions in a manner that will determine compliance with the limit cited in this condition.
- 2) Perform a stack test, based upon the approved test protocol, to determine compliance with the particulate emission limit cited in this condition.
- 3) Submit an acceptable stack test report that outlines the results obtained from the testing done to meet the requirement of #2 above.
- 4) Facility shall keep records of all testing done at this stationary combustion installation for a period of 5 years.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 45: Applicability

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:40CFR 60, NSPS Subpart IIII

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Item 45.1:

This Condition applies to:

Emission Unit: 1COGEN
 Process: INT Emission Source: IGEN1

Emission Unit: 1COGEN
 Process: INT Emission Source: IGEN2

Emission Unit: 1COGEN
 Process: INT Emission Source: IGEN3

Emission Unit: 1COGEN
 Process: INT Emission Source: IGEN4

Item 45.2:

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

Condition 46: Duration of emission standards for new stationary compression ignition IC engines
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:40CFR 60.4206, NSPS Subpart IIII

Item 46.1:

This Condition applies to:

Emission Unit: 1COGEN
 Process: INT Emission Source: IGEN1

Emission Unit: 1COGEN
 Process: INT Emission Source: IGEN2

Emission Unit: 1COGEN
 Process: INT Emission Source: IGEN3

Emission Unit: 1COGEN
 Process: INT Emission Source: IGEN4

Item 46.2:

Owners and operators of stationary combustion ignition internal combustion engine (CI ICE) must operate and maintain the stationary CI ICE that achieve the emission standards as required in §§60.4204 and 60.4205 over the entire life of the engine.

Condition 47: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:40CFR 60.4211(c), NSPS Subpart IIII

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Item 47.1:

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

Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN1
Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN2
Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN3
Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN4

Item 47.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Owners or operators of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power.

The engine must be installed and configured according to the manufacturer's specifications.

The manufacturer's certification of compliance with the emission standards specified in 40 CFR 60 Subpart IIII for major pollutants will be sent to the Department prior to commencement of operation of the engines.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 48: Compliance Certification

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:40CFR 60.4214(b), NSPS Subpart IIII

Item 48.1:

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

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

Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN1
Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN2
Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN3
Emission Unit: 1-COGEN Process: INT	Emission Source: IGEN4

Item 48.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

For stationary CI internal combustion engines that are emergency stationary internal combustion engines, the owner or operator is not required to submit an initial notification.

Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter.

The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

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

Condition 49: Emission Point Definition By Emission Unit
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 49.1:

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

Emission Unit: 1-COGEN

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Emission Point: CGNP1	Height (ft.): 161	Diameter (in.): 23	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: CGNP2	Height (ft.): 161	Diameter (in.): 23	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: CGNP3	Height (ft.): 11	Diameter (in.): 23	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: CGNP4	Height (ft.): 161	Diameter (in.): 23	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: CGNP5	Height (ft.): 161	Diameter (in.): 23	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: CGTG1	Height (ft.): 161	Diameter (in.): 48	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: CGTG2	Height (ft.): 161	Diameter (in.): 48	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: FLARB	Height (ft.): 57	Diameter (in.): 120	
	NYTMN (km.): 4519.611	NYTME (km.): 587.872	Building: PARK

Item 49.2:

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

Emission Unit: 1--COMB			
Emission Point: EMBG1	Height (ft.): 15	Diameter (in.): 6	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: MAIN
Emission Point: EMEG1	Height (ft.): 15	Diameter (in.): 16	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: MAIN
Emission Point: EMTG1	Height (ft.): 161	Diameter (in.): 48	
	NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: EMTG2	Height (ft.): 161	Diameter (in.): 48	

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NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGB1		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGB2		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGB3		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGB4		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGB5		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGP1		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGP2		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGP3		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGP4		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: ENGP5		
Height (ft.): 161	Diameter (in.): 23	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: FLARE		
Height (ft.): 87	Diameter (in.): 72	
NYTMN (km.): 4519.62	NYTME (km.): 587.853	Building: SLUDGE
Emission Point: MBLR1		
Height (ft.): 161	Diameter (in.): 48	
NYTMN (km.): 4520.023	NYTME (km.): 588.033	Building: PARK
Emission Point: MBLR2		
Height (ft.): 161	Diameter (in.): 48	

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NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: PARK

Emission Point: MBLR3
 Height (ft.): 161 Diameter (in.): 48
 NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: PARK

Item 49.3:

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

Emission Unit: 2-WWTRE

Emission Point: NRTH1
 Height (ft.): 154 Diameter (in.): 132
 NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: MAIN

Emission Point: NRTH2
 Height (ft.): 154 Diameter (in.): 132
 NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: MAIN

Emission Point: SUTH1
 Height (ft.): 169 Diameter (in.): 144
 NYTMN (km.): 4519.636 NYTME (km.): 587.906 Building: SLUDGE

Condition 50: Process Definition By Emission Unit
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 50.1:

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

Emission Unit: 1-COGEN
 Process: COD Source Classification Code: 2-03-007-02
 Process Description:
 cogen engines on either digester gas or blend of digester gas and
 natural gas.

Emission Source/Control: COGN1 - Combustion
 Design Capacity: 3.03 megawatt

Emission Source/Control: COGN2 - Combustion
 Design Capacity: 3.03 megawatt

Emission Source/Control: COGN3 - Combustion
 Design Capacity: 3.03 megawatt

Emission Source/Control: COGN4 - Combustion
 Design Capacity: 3.03 megawatt

Emission Source/Control: COGN5 - Combustion
 Design Capacity: 3.03 megawatt

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Item 50.2:

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

Emission Unit: 1-COGEN
 Process: CON Source Classification Code: 2-02-002-04
 Process Description: new cogen engines solely on natural gas.

Emission Source/Control: COGN1 - Combustion
 Design Capacity: 3.03 megawatt

Emission Source/Control: COGN2 - Combustion
 Design Capacity: 3.03 megawatt

Emission Source/Control: COGN3 - Combustion
 Design Capacity: 3.03 megawatt

Emission Source/Control: COGN4 - Combustion
 Design Capacity: 3.03 megawatt

Emission Source/Control: COGN5 - Combustion
 Design Capacity: 3.03 megawatt

Item 50.3:

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

Emission Unit: 1-COGEN
 Process: INT Source Classification Code: 2-04-004-02
 Process Description:
 this process includes operation of the four diesel interim emergency generators used during the construction period to provide back up power to the plant during power emergencies. the process will be removed once the cogeneration plant is in operation.

Emission Source/Control: IGEN1 - Combustion
 Design Capacity: 2,000 kilowatts

Emission Source/Control: IGEN2 - Combustion
 Design Capacity: 2,000 kilowatts

Emission Source/Control: IGEN3 - Combustion
 Design Capacity: 2,000 kilowatts

Emission Source/Control: IGEN4 - Combustion
 Design Capacity: 2,000 kilowatts

Item 50.4:

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

Emission Unit: 1-COGEN
 Process: WGB Source Classification Code: 5-03-007-89
 Process Description:
 This process includes operation of the new waste gas burner (WGBR2)

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to handle digester gas under emergency conditions when the cogeneration engines are not in operation. The operating temperature range for the most efficient flare operation is 1400 to 1800 degrees F. The flare temperature must be maintained within this temperature range.

The new flare will operate at the following design parameters:

- Design capacity: 1,510 SCFM
- Throughput quantity: 500,003 MMBTU/yr (based on 8760 hrs/yr)
- Heat input: 57.1 MMBTU/hr

* Throughput and heat input calculations are based on average gross heating value (HHV) of 690 MMBTU/cft. from 03/31/2015 North River WWTP digester gas analysis data and waste gas burner design capacity.

Emission Source/Control: WGBR2 - Process
Design Capacity: 1,510 cubic feet per minute (standard conditions)

Item 50.5:

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

Emission Unit: 1--COMB
Process: BLR Source Classification Code: 1-03-005-02
Process Description:

This process includes operation of the plant's three (3) York-Shipley boilers with input capacity of 31.4 mmBtu/hr and one (1) York-Shipley boiler with input capacity of 8.4 mmBtu/hr, all of them capable of firing natural gas, digester gas or #2 fuel oil. These boilers are to meet the plant's space heating and wastewater treatment's sludge heating demand.

Natural gas is the main fuel and oil is used only in emergency purpose. Per DEP's NOx RACT plan of December 2011, these boilers are limited to operate on natural or digester gas during normal operation. Number 2 fuel oil will only be used during emergency conditions when there is no gas is available or for intermittent maintenance testing.

The exhaust from the four (4) boilers is vented to atmosphere via three (3) stacks, MBLR1, MBLR2 and MBLR3, through the roof into the rooftop NYS Riverbank State Park. Restricted with three (3) stacks, so BLER2 and BLER3 share MBLR2, BLER1 and BLER4 have their own stacks, MBLR1 and MBLR3.

Emission Source/Control: BLER1 - Combustion
Design Capacity: 31.4 million Btu per hour

Emission Source/Control: BLER2 - Combustion
Design Capacity: 8.4 million Btu per hour

Emission Source/Control: BLER3 - Combustion

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Design Capacity: 31.4 million Btu per hour

 Emission Source/Control: BLER4 - Combustion
 Design Capacity: 31.4 million Btu per hour
Item 50.6:

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

Emission Unit: 1--COMB

Process: FLA

Source Classification Code: 5-01-007-89

Process Description:

This process includes operation of the waste gas burners in the Waste Gas Flare Tower. At times digester gas produced by the plant is more than the demand of the plant's combustion processes, particularly in the summer. The excess sludge digester gas will be flared at the waste gas burner.

The plant has one John Zink waste digester gas burners WGBR and has its own exhaust FLARE rated at 1160 scfm. The operating temperature range for the most efficient flare operation is 1400 to 1800 degrees F. The flare temperature must be maintained within this temperature range. The thruput quantity of 248,400 MMBTU/Yr heat input is based on 414.3 MMCF total digester gas produced for fiscal year 2005.

Emission Source/Control: WGBR1 - Combustion

Design Capacity: 1,160 cubic feet per minute

Item 50.7:

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

Emission Unit: 1--COMB

Process: GNR

Source Classification Code: 2-04-003-02

Process Description:

This process includes operation of the plant's emergency generator(s).

The plant's existing emergency turbine generator TURG1 and TURG2 are each rated 2800 KW and fires #2 fuel oil. These existing emergency generators are located in the Main Building (MAIN) and exhausts via their own stacks EMTG1 and EMTG2 through the roof into the rooftop NYS Riverbank State Park. These emergency turbine generators provide power in the event of a commercial power supply outage and will be operated less than 500 hrs per year, and will not participate in any load sharing program CDRP/PLM. Under severe circumstances, if operation of these units are necessary to avoid potential black outs which may threaten public safety and health, these units will be limited to operate at loads that are in compliance with 40 cfr 60, subpart GG limits. These emergency generators are being removed. This process will continue to operate until the cogen plant is fully operational. Once emergency generators are shut down and removed, this will be removed.

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To be exempt from compliance with the NOx emission standards at 40 CFR §60.6632(a), the facility must operate each of the two emergency turbines (identified as emission sources TURG 1 and TURG 2 of EU:1-COMB) according to the requirements in the definition of “emergency gas turbine” at 40 CFR § 60.331(e).

There is an additional 2000 KW trailer-mounted emergency engine generator for backup, in case the failure of the two (2) existing emergency turbine generators. The emergency engine generator is located at the corner of east roadway and service road B. The exhaust from this emergency engine generator would be piped to the main building exterior 70 feet away, below the level of the rooftop NYS Riverbank State Park.

There is a 200 KW black-start engine generator used to kick start the emergency turbine generators. The 200 kW black-start engine generator has a six (6) inch diameter exhaust pipe routed across service road A to the outside of the building through the center of the open archway.

This process will continue to operate until the cogen plant is fully operational. Once emergency generators are shut down and removed, they will no longer be part of this process.

Emission Source/Control: BGEN1 - Combustion
Design Capacity: 200 kilowatts

Emission Source/Control: EGEN1 - Combustion
Design Capacity: 2,000 kilowatts

Emission Source/Control: TURG1 - Combustion
Design Capacity: 2,800 kilowatts

Emission Source/Control: TURG2 - Combustion
Design Capacity: 2,800 kilowatts

Item 50.8:

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

Emission Unit: 1--COMB
Process: PED Source Classification Code: 2-02-004-01
Process Description:

This process includes operation of the five (5) pump engines in the Main Building (MAIN) on backup #2 fuel oil. These pump engines are directly connected to sewage pumps.

These five (5) Delaval Transamerican R-46 engines, PENG1 and PENG2 PENG3, PENG4 and PENG5 are each rated 1700 HP, exhaust through their own exhaust stacks ENGP1, ENGP2, ENGP3, ENGP4 and ENGP5, respectively.

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The plant is removing existing equipment and replacing with new equipment, with the construction sequence as follows: remove the first engine, electrify the pump, install the new engine generator and make operational. This sequence will continue til all the existing engines are removed. The replacement and resulting increase and decrease in emissions all occur within the 5 year contemporaneous period for compliance with NSR/PSD.

This process will continue to operate till the cogen plant is fully operational and pump engines are shut down and removed.

Emission Source/Control: PENG1 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG2 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG3 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG4 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG5 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Item 50.9:

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

Emission Unit: 1--COMB

Process: PEG

Source Classification Code: 2-02-004-02

Process Description:

This process includes operation of the five (5) pump engines in the Main Building (MAIN) on primarily gaseous fuel (sludge digester gas or natural gas, or blend) with #2 fuel oil pilot. These pump engines are directly connected to sewage pumps.

These five (5) Delaval Transamerican R-46 engines, PENG1 and PENG2 PENG3, PENG4 and PENG5 are each rated 1700 HP, exhaust through their own exhaust stacks ENGP1, ENGP2, ENGP3, ENGP4 and ENGP5, respectively.

The plant is removing existing equipment and replacing with new equipment , with the construction sequence as follows: remove the first engine, electrify the pump, install the new engine generator and make operational. This sequence will continue til all the existing engines are removed. The replacement and resulting increase and decrease in emissions all occur within the 5 year contemporaneous period for compliance with NSR/PSD.

This process will continue to operate till the cogen plant is fully operational and pump engines are shut down and removed.

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Emission Source/Control: PENG1 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG2 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG3 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG4 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG5 - Combustion
Design Capacity: 1,700 horsepower (mechanical)

Item 50.10:

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

Emission Unit: 2-WWTRE

Process: ART

Source Classification Code: 5-01-007-31

Process Description:

This process is the plant activated sludge aeration (ART) consisting of five (5) aeration tanks (AERTK) (330'X74.6'X29.2') and the waste sludge wet well. In this process, the effluent from the primary settling treatment section is mixed with activated sludge solids and air. These aeration tanks provide the detention time required for the activated sludge to absorb the organic matter in the wastewater. Compressed air is discharged through the tanks to provide mixing and an aerobic environment. After a set mixing period, the mixture flows to the final settling tanks, where the solids are flocculated, settled and collected. Emissions from this process are controlled by the North Odor Control (NTHOC) System consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The NTHOC System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers, that will discharge to a common plenum that conveys the treated air to two (2) large exhaust stacks (NRTH1 and NRTH2). The maximum exhaust flow rates from NRTH1 and NRTH2 are 222,000 acfm (per stack).

The total thruput is based on the design average dry weather flow of 170 MGD.

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

Emission Source/Control: AERTK - Process
Design Capacity: 170,000,000 gallons per day

Item 50.11:

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

Emission Unit: 2-WWTRE

Process: CCT

Source Classification Code: 5-01-007-60

Process Description:

This process is the plant chlorine contact tanks (CCT) disinfection process consisting of four (4) chlorination tanks CHLTK (639'X28.5'X8') and required disinfection of the plant effluent. This process also includes de-chlorination using sodium bisulfite, with four (4) new 6,000 gallon bulk storage tanks and two (2) new 2,000 gallon day tanks for sodium bisulfite. Off gas from each storage tank will go through a carbon drum before conveyed to the plant's South Odor Control System. Off gas from each day tank will go through a carbon drum before conveyed to the plant's North Odor Control System.

The wastewater from the final settling tanks flows to the chlorine contact tanks where sodium hypochlorite is added into the wastewater to destroy and kill the harmful disease-causing organisms and thereby to protect the receiving waters. Emissions from this process are controlled by the South Odor Control (STHOC) System which consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The STHOC System consist of seven (7) wet scrubbers and eighteen (18) carbon adsorbers that will discharge to one (1) large exhaust stack (SUTH1).

The total thruput is based on the design average dry weather flow of 170 MGD.

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

Emission Source/Control: CHLTK - Process
Design Capacity: 340,000,000 gallons per day

Item 50.12:

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

Emission Unit: 2-WWTRE

Process: FST

Source Classification Code: 5-01-007-40

Process Description:

This process is the plant final settling tanks (FST) consisting of sixteen (16) final settling tanks (FINTK) (4 Bays, 250'X74'X10.9') and the two (2) mixed liquor channels which feed the final settling tanks. The purpose of this final settling process is two fold: settle out microorganisms and activated sludge solid waste generated during the aeration process to produce a clarified effluent, and to collect the settled activated sludge for conveyance back to the aeration tanks. The two mixed liquor channels are covered and the air is vented to the

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North Odor Control System (NTHOC).

Emissions from this process are controlled by the South Odor Control (STHOC) System, consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The STHOC System consist of seven (7) wet scrubbers and eighteen (18) carbon adsorbers that will discharge to one (1) large exhaust stack (SUTH1).

The total thruput is based on the design average dry weather flow of 170 MGD.

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

Emission Source/Control: FINTK - Process
 Design Capacity: 255,000,000 gallons per day

Item 50.13:

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

Emission Unit: 2-WWTRE

Process: GHT

Source Classification Code: 5-01-007-99

Process Description:

The process consists of the plant's sludge digester gas storage process (GHT). Digester gas produced in the digester tanks will be stored in the 135,000 ft³ Wiggins Gas Holder (WGHTK) for later use at combustion units. Fugitive emissions from this tank are controlled by the South Odor Control (STHOC) System which consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The STHOC System consist of seven (7) wet scrubbers and eighteen (18) carbon adsorbers that will discharge to one (1) large exhaust stack (SUTH1)."

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

Emission Source/Control: WGHTK - Process
 Design Capacity: 135,000 cubic feet

Item 50.14:

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

Emission Unit: 2-WWTRE

Process: MXL

Source Classification Code: 5-01-007-99

Process Description:

The process consists of the plant's mixed liquor channel process (MXL). Odors identified emitting from the mixed liquor channels are

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primarily caused by the aeration of the channels used to keep the mixed liquor in suspension. Emission from this process is controlled by the South Odor Control System (STHOC).

The total thruput is based on the design average dry weather flow of 170 MGD.

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

Emission Source/Control: DIGTK - Process
Design Capacity: 1,600,000 cubic feet

Item 50.15:

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

Emission Unit: 2-WWTRE
Process: PHW Source Classification Code: 5-01-007-07
Process Description:

This process is the plant's headworks (PHW) including the plant's six (6) influent bar screens and influent channels in the plant's Main Building (MAIN). The bar screens consist of upright bars spaced one to three inches apart. The primary purpose of the bar screening is to remove large pieces of trash (rags, sticks, newspapers, cans, etc.) for the protection of the main sewage pumps and other equipment. Emissions from this process are controlled by the North Odor Control (NTHOC) System which consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The North Odor Control System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers, that will discharge to a common plenum that conveys the treated air to two (2) large exhaust stacks (NRTH1 and NRTH2). The maximum exhaust flow rates from NRTH1 and NRTH2 are 222,000 acfm (per stack).

The total thruput is based on the design average dry weather flow of 170 MGD.

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

Emission Source/Control: SCREN - Process
Design Capacity: 170,000,000 gallons per day

Emission Source/Control: WEWEL - Process

Item 50.16:

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

Emission Unit: 2-WWTRE
Process: PST Source Classification Code: 5-01-007-20

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Facility DEC ID: 2620200007

Process Description:

This process is the plant primary settling tanks (PST) consisting of eight (8) primary settling tanks PRITK (6 Bays, 187.5'X85.8'X11.5').

Primary settling is a process in which the solid particles carried in raw sewage are removed by gravity under quiescent conditions in the primary settling tanks. In addition, the primary settling tanks are used to separate and remove floating materials and scum. Solids and grit collected in the tanks are removed as a thin sludge by continuous pumping. Each primary settling tank is equipped with sludge collectors, dipping weirs, scum removal equipment, inlet sluice gate overflow weirs. The PTS process is covered and the emissions are controlled by the West Odor Control (WSTOC) 2-stage odor control system consists of four (4) wet scrubbers and twelve (12) activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration.

The treated air of this system is sent to the NTHOC exhaust plenum to two (2) large exhaust stacks (NRTHI and NRTH2).

The total thruput is based on the design average dry weather flow of 170 MGD.

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

Emission Source/Control: PRITK - Process
 Design Capacity: 170,000,000 gallons per day

Item 50.17:

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

Emission Unit: 2-WWTRE

Process: SDA

Source Classification Code: 5-01-007-71

Process Description:

This process is the plant's Sludge Anaerobic Digester (SAD) process including eight (8) sludge digestion tanks (DIGTK) each is 200,000 ft³.

After sludge gravity thickening, for making it safer for the environment, the sludge is placed in oxygen-free tanks called digesters. Digesters are heated to at least 95 deg F for between 15 - 20 days stimulating the growth of anaerobic bacteria which consume organic material in the sludge. In the digesters, sludge is converted into water, carbon dioxide and methane gas. The methane gas is often used as an energy source to operate boilers or engines. Fugitive emissions from the digester relief valve are controlled by the South Odor Control (STHOC) System which currently consists of seven (7) wet scrubbers and eighteen (18) activated carbon adsorbers to exhaust

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through one (1) large exhaust stack SUTH1.

The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration.

The digested sludge is pumped from these digestion tanks to the dewatering building.

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

Emission Source/Control: DIGTK - Process
 Design Capacity: 1,600,000 cubic feet

Item 50.18:

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

Emission Unit: 2-WWTRE

Process: SST

Source Classification Code: 5-01-007-81

Process Description:

This process is the plant's Sludge Storage Tanks (SST) process including one (1) 120,000 ft³ sludge storage tank (SSTK) and the return sludge overflow boxes & wells. Emissions from this process are controlled by the South Odor Control (STHOC) System consists of seven (7) scrubbers and eighteen (18) activated carbon adsorbers.

The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration.

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

Emission Source/Control: SSTK1 - Process
 Design Capacity: 522,000 cubic feet

Item 50.19:

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

Emission Unit: 2-WWTRE

Process: STG

Source Classification Code: 5-01-007-71

Process Description:

This process is the plant's Sludge Gravity Thickening (SGT) process including ten (10) 40,000 cu. ft sludge gravity thickener tanks SGTTK. The primary and final settling tank's sludge (approximately 99% water) is concentrated in these gravity thickening tanks. The water is sent back to the head of the plant or aeration tanks for additional treatment. Emissions from this process are controlled by the South Odor Control (STHOC) System consists of seven (7) scrubbers and eighteen (18) activated carbon adsorbers.

The wet scrubbers will use chemical to achieve design H₂S removal

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efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration.

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

Emission Source/Control: SGTTK - Process
Design Capacity: 400,000 cubic feet

Condition 51: Emission Unit Permissible Emissions
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 51.1:

The sum of emissions from all regulated processes specified in this permit for the emission unit cited

shall not exceed the following Potential to Emit (PTE) rates for each regulated contaminant:

Emission Unit: 1-COGEN

CAS No: 000630-08-0
Name: CARBON MONOXIDE
PTE(s): 196,400 pounds per year

CAS No: 0NY075-00-5
Name: PM-10
PTE(s): 26,800 pounds per year

CAS No: 0NY075-02-5
Name: PM 2.5
PTE(s): 16,800 pounds per year

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN
PTE(s): 265,360 pounds per year

CAS No: 0NY998-00-0
Name: VOC
PTE(s): 49,000 pounds per year

Condition 52: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 201-6.1 (a)

Item 52.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

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Item 52.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This condition applies to emission unit 1-COGEN (5 Cogen Engines):

A continuous parameter monitoring system (CPMS) will be installed to continuously monitor catalyst inlet and outlet temperatures, and differential pressures. Records will be kept at the facility and available upon request.” The engines and their catalyst systems would be operated and maintained according to manufacturer’s instructions for optimum performance within applicable design ranges.

NYCDEP is required to maintain all of their equipment and maintain manufacturer’ specified operating parameters within the specified ranges.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 53: Compliance Certification

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 201-6.1 (a)

Item 53.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Item 53.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This condition applies to emission unit 1-COGEN (5 cogen engines).

The efficiency factor is limited to a minimum of 8,066 Btu/kW and will be verified at the time of the stack testing on these engines.

Monitoring Frequency: Once every five years

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

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Condition 54: Capping Monitoring Condition
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 54.1:

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 otherwise be subject to:

6 NYCRR Subpart 231-6

Item 54.2:

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

Item 54.3:

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 54.4:

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 54.5:

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 54.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

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

Item 54.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

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The facility is proposing an annual NO_x emissions cap of 132.68 tons per year from Emission Unit 1-COGEN. The following formula will be used to calculate monthly NO_x emissions and to demonstrate compliance with this cap on a rolling 12-month basis:

$$[(A \times B) + (C \times D) + (E \times F) + (G \times H)] / 2000 < 132.68$$

tons/year

Where:

A = NO_x emission factor from the cogeneration engines firing digester gas in lbs/mmcf based on the most recent stack test. An emission factor of 253.63 lbs/mmcf is certified by the manufacturer in the interim based on the treated digester gas higher heating value (HHV) of 750 mmBtu/mmcf and an engine efficiency factor of 8607 Btu/kw-hr;

B = 12-month rolling total digester gas consumed in the cogeneration engines in mmcf/yr;

C = NO_x emission factor from the cogeneration engines firing natural gas in lbs/mmcf based on the most recent stack test. An emission factor of 362.11 lbs/mmcf is certified by the manufacturer in the interim based on a natural gas higher heating value (HHV) of 1050 mmBtu/mmcf and an engine efficiency factor of 8440 Btu/kw-hr;

D= 12-month rolling total natural gas consumed in the cogeneration engines in mmcf/yr;

E= NO_x emission factor from the waste gas burner firing digester gas, as certified by the manufacturer of 45.0 lbs/mmcf, based on a digester gas HHV of 750 mmBtu/mmcf;

F= 12-month rolling total digester gas sent to the waste gas burner in mmcf/yr;

G= NO_x emission factor from the interim emergency engines, as certified by the engine manufacturer for compliance with New Source Performance Standards (NSPS) for 2011 model year and later stationary compression ignition engines less than 2,237 KW with a displacement of less than 10 liters per cylinder . This emission factor is 179.41 lbs/1000 gallon;

H= 12-month rolling total fuel oil consumed in the interim emergency engines in 1000 gallons/yr.

Facility will conduct performance test within 180 days of commencement of operation utilizing fuel used, to verify that emissions factors and HHV are not being exceeded.

During the stack test, Siloxane level and H₂S level in digester gas should also be verified that they are at the manufacturer specified

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level (400 ppm and 900 ppb, respectively).

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: FUEL

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 132.68 tons per year

Reference Test Method: EPA

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 55: Capping Monitoring Condition
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 55.1:

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 otherwise be subject to:

6 NYCRR Subpart 231-6

Item 55.2:

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

Item 55.3:

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 55.4:

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

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applicable requirement.

Item 55.5:

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 55.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

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

Item 55.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The facility is proposing an annual PM10 emissions cap of 13.4 tons per year from Emission Unit 1-COGEN. The following formula will be used to calculate monthly PM10 emissions and to demonstrate compliance with this cap on a rolling 12-month basis:

$$[(A \times B) + (C \times D) + (E \times F) + (G \times H)] / 2000 < 13.40$$

tons/year

Where:

A = PM10 emission factor from the cogeneration engines firing digester gas in lbs/mmcf based on the most recent stack test. An emission factor of 30.96lbs/mmcf is certified by the manufacturer in the interim based on the treated digester gas higher heating value (HHV) of 850 mmBtu/mmcf and an engine efficiency factor of 8066 Btu/kw-hr;

B = 12-month rolling total digester gas consumed in the cogeneration engines in mmcf/yr;

C = PM10 emission factor from the cogeneration engines firing natural gas in lbs/mmcf based on the most recent stack test. An emission factor of 38.24 lbs/mmcf is certified by the manufacturer in the interim based on a natural gas higher heating value (HHV) of 1050 mmBtu/mmcf and an engine efficiency factor of 8066 Btu/kw-hr;

D= 12-month rolling total natural gas consumed in the cogeneration engines in mmcf/yr;

E= USEPA FIRE 9/7/2016 published PM10 emission factor from the digester gas burner of 17.11 lbs/mmcf;

F= 12-month rolling total digester gas sent to the waste gas burner in mmcf/yr;

G= PM10 emission factor from the interim emergency engines, as certified by the engine manufacturer for compliance with New Source Performance Standards (NSPS) for 2011 model year and later stationary

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compression ignition engines less than 2,237 KW with a displacement of less than 10 liters per cylinder . This emission factor is 5.61 lbs/1000 gallon;
H= 12-month rolling total fuel oil consumed in the interim emergency engines in 1000 gallons/yr.

Facility will conduct performance test within 180 days of commencement of operation utilizing fuel used, to verify that emissions factors and HHV are not being exceeded.
During the stack test, Siloxane level and H₂S level in digester gas should also be verified that they are at the manufacturer specified level (400 ppm and 900 ppb, respectively).

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: FUEL

Parameter Monitored: PM-10

Upper Permit Limit: 13.40 tons per year

Reference Test Method: EPA

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 56: Capping Monitoring Condition
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 56.1:

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 otherwise be subject to:

6 NYCRR Subpart 231-6

Item 56.2:

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

Item 56.3:

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,

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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 56.4:

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 56.5:

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 56.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):
 CAS No: 0NY998-00-0 VOC

Item 56.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The facility is proposing an annual VOC emissions cap of 24.50 tons per year from Emission Unit 1-COGEN. The following formula will be used to calculate monthly VOC emissions and to demonstrate compliance with this cap on a rolling 12-month basis:

$$[(A \times B) + (C \times D) + (E \times F) + (G \times H)] / 2000 < 24.50$$

tons/year

Where:

A = VOC emission factor from the cogeneration engines firing digester gas in lbs/mmcf based on the most recent stack test. An emission factor of 46.75 lbs/mmcf is certified by the manufacturer in the interim based on the treated digester gas higher heating value (HHV) of 750 mmBtu/mmcf and an engine efficiency factor of 8607 Btu/kw-hr;

B = 12-month rolling total digester gas consumed in the cogeneration engines in mmcf/yr;

C = VOC emission factor from the cogeneration engines firing natural gas in lbs/mmcf based on the most recent stack test. An emission factor of 66.74 lbs/mmcf is certified by the manufacturer in the

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interim based on a natural gas higher heating value (HHV) of 1050 mmBtu/mmcf and an engine efficiency factor of 8440 Btu/kw-hr;

D= 12-month rolling total natural gas consumed in the cogeneration engines in mmcf/yr;

E= VOC emission factor from the waste gas burner firing digester gas, as certified by the manufacturer of 60.0 lbs/mmcf, based on a digester gas HHV of 750 mmBtu/mmcf;

F= 12-month rolling total digester gas sent to the waste gas burner in mmcf/yr;

G= AP-42 VOC emission factor from the interim emergency engines of 10.94 lbs/1000 gallon;

H= 12-month rolling total fuel oil consumed in the interim emergency engines in 1000 gallons/yr.

Facility will conduct performance test within 180 days of commencement of operation utilizing fuel used, to verify that emissions factors and HHV are not being exceeded.

During the stack test, Siloxane level and H₂S level in digester gas should also be verified that they are at the manufacturer specified level (400 ppm and 900 ppb, respectively).

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: FUEL

Parameter Monitored: VOC

Upper Permit Limit: 24.5 tons per year

Reference Test Method: EPA

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 57: Capping Monitoring Condition
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 57.1:

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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 otherwise be subject to:

6 NYCRR Subpart 231-8

Item 57.2:

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

Item 57.3:

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 57.4:

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 57.5:

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 57.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

CAS No: 0NY075-02-5 PM 2.5

Item 57.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The facility is proposing an annual PM2.5 emissions cap of 8.4 tons per year from Emission Unit 1-COGEN. The following formula will be used to calculate monthly PM2.5 emissions and to demonstrate compliance with this cap on a rolling 12-month basis:

$$[(A \times B) + (C \times D) + (E \times F) + (G \times H)] / 2000 < 8.40$$

tons/year

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Where:

A = PM_{2.5} emission factor from the cogeneration engines firing digester gas in lbs/mmcf based on the most recent stack test. An emission factor of 16.04 lbs/mmcf is certified by the manufacturer in the interim based on the treated digester gas higher heating value (HHV) of 750 mmBtu/mmcf and an engine efficiency factor of 8607 Btu/kw-hr;

B = 12-month rolling total digester gas consumed in the cogeneration engines in mmcf/yr;

C = PM_{2.5} emission factor from the cogeneration engines firing natural gas in lbs/mmcf based on the most recent stack test. An emission factor of 22.9 lbs/mmcf is certified by the manufacturer in the interim based on a natural gas higher heating value (HHV) of 1050 mmBtu/mmcf and an engine efficiency factor of 8440 Btu/kw-hr;

D= 12-month rolling total natural gas consumed in the cogeneration engines in mmcf/yr;

E= USEPA FIRE 9/7/2016 published PM₁₀ emission factor from the digester gas burner of 17.11 lbs/mmcf;

F= 12-month rolling total digester gas sent to the waste gas burner in mmcf/yr;

G= PM_{2.5} emission factor from the interim emergency engines, as certified by the engine manufacturer for compliance with New Source Performance Standards (NSPS) for 2011 model year and later stationary compression ignition engines less than 2,237 KW with a displacement of less than 10 liters per cylinder . This emission factor is 5.61 lbs/1000 gallon;

H= 12-month rolling total fuel oil consumed in the interim emergency engines in 1000 gallons/yr.

Facility will conduct performance test within 180 days of commencement of operation utilizing fuel used, to verify that emissions factors and HHV are not being exceeded.

During the stack test, Siloxane level and H₂S level in digester gas should also be verified that they are at the manufacturer specified level (400 ppm and 900 ppb, respectively).

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

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Process Material: FUEL
Parameter Monitored: PM 2.5
Upper Permit Limit: 8.4 tons per year
Reference Test Method: EPA
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 58: Capping Monitoring Condition
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 58.1:

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 otherwise be subject to:

6 NYCRR Subpart 231-8

Item 58.2:

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

Item 58.3:

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 58.4:

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 58.5:

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 58.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Permit ID: 2-6202-00007/00015

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Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 58.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The facility is proposing an annual CO emissions cap of 98.2 tons per year from Emission Unit 1-COGEN. The following formula will be used to calculate monthly CO emissions and to demonstrate compliance with this cap on a rolling 12-month basis:

$$[(A \times B) + (C \times D) + (E \times F) + (G \times H)] / 2000 < 98.20$$

tons/year

Where:

A = CO emission factor from the cogeneration engines firing digester gas in lbs/mmcf based on the most recent stack test. An emission factor of 183.50 lbs/mmcf is certified by the manufacturer in the interim based on the treated digester gas higher heating value (HHV) of 750 mmBtu/mmcf and an engine efficiency factor of 8607 Btu/kw-hr;

B = 12-month rolling total digester gas consumed in the cogeneration engines in mmcf/yr;

C = CO emission factor from the cogeneration engines firing natural gas in lbs/mmcf based on the most recent stack test. An emission factor of 261.99 lbs/mmcf is certified by the manufacturer in the interim based on a natural gas higher heating value (HHV) of 1050 mmBtu/mmcf and an engine efficiency factor of 8440 Btu/kw-hr;

D = 12-month rolling total natural gas consumed in the cogeneration engines in mmcf/yr;

E = CO emission factor from the waste gas burner firing digester gas, as certified by the manufacturer of 225 lbs/mmcf, based on a digester gas HHV of 750 mmBtu/mmcf;

F = 12-month rolling total digester gas sent to the waste gas burner in mmcf/yr;

G = CO emission factor from the interim emergency engines, as certified by the engine manufacturer for compliance with New Source Performance Standards (NSPS) for 2011 model year and later stationary compression ignition engines less than 2,237 KW with a displacement of less than 10 liters per cylinder. This emission factor is 98.12 lbs/1000 gallon;

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H= 12-month rolling total fuel oil consumed in the interim emergency engines in 1000 gallons/yr.

Facility will conduct performance test within 180 days of commencement of operation utilizing fuel used, to verify that emissions factors and HHV are not being exceeded.

During the stack test, Siloxane level and H₂S level in digester gas should also be verified that they are at the manufacturer specified level (400 ppm and 900 ppb, respectively).

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: FUEL

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 98.2 tons per year

Reference Test Method: EPA

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 59: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 40CFR 60, NSPS Subpart JJJJ

Item 59.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Item 59.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This condition is for Emission Unit 1-COGEN, emission sources COGN1, COGN2, COGN3, COGN4, COGN5.

Stationary spark ignition internal combustion engines must comply with applicable portions of 40 CFR 60 subpart JJJJ.

The following regulations are applicable to the emission source Cogen.

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- 40 CFR 60.4230 (a)(4)(i)
- 40 CFR 60.4233 (e)
- 40 CFR 60.4234
- 40 CFR 60.4235
- 40 CFR 60.4243 (a)(1)
- 40 CFR 60.4243 (b)(1)
- 40 CFR 60.4245

All stationary spark ignition internal combustion engines must comply with all the applicable requirements for emission standards, operational requirements, monitoring and record keeping requirements of the NSPS 40 cfr 60 subpart JJJJ.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 60: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 60.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
 Process: COD

Regulated Contaminant(s):
 CAS No: 000050-00-0 FORMALDEHYDE

Item 60.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial emission test for the cogeneration engines while utilizing either solely digester gas or a blend of digester gas and natural gas to determine the emission factor, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

The emission stack tests will be performed once during the term of the Title V permit.

Reference Test Method: epa approved
Monitoring Frequency: Once every five years
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 61: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 61.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: COD

Regulated Contaminant(s):
CAS No: 0NY075-02-5 PM 2.5

Item 61.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial PM_{2.5} emission test for the cogeneration engines while utilizing either solely digester gas or a blend of digester gas and natural gas to determine the PM_{2.5} emission factor for compliance with 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

PM_{2.5} emission stack tests will be performed once during the term of the Title V permit.

Reference Test Method: 40 cfr 60 appendix a
Monitoring Frequency: Once every five years
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Subsequent reports are due every 6 calendar month(s).

Condition 62: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 62.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: COD

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 62.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial PM10 emission test for the cogeneration engines while utilizing either solely digester gas or a blend of digester gas and natural gas to determine the PM10 emission factor for compliance with 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

PM10 emission stack tests will be performed once during the term of the Title V permit.

Reference Test Method: 40 cfr 60 appendix a

Monitoring Frequency: Once every five years

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 63: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 63.1:

The Compliance Certification activity will be performed for:

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Emission Unit: 1-COGEN
 Process: COD

Regulated Contaminant(s):
 CAS No: 0NY998-00-0 VOC

Item 63.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial VOC emission test for the cogeneration engines while utilizing either solely digester gas or a blend of digester gas and natural gas to determine the VOC emission factor for compliance with 40 CFR 60 Subpart JJJJ, NSPS and 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

VOC emission stack tests will be performed once during the term of the Title V permit.

Facility should comply with the NSPS 40 CFR 60 Subpart JJJJ requirements for (1) the initial and subsequent compliance testing, (2) performance testing procedures, and (3) performance test methods.

Upper Permit Limit: 1.0 grams per brake horsepower-hour

Reference Test Method: 40 cfr 60 appendix a

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 64: Compliance Certification

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 64.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
 Process: COD

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 64.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial CO emission test for the cogeneration engines while utilizing either solely digester gas or a blend of digester gas and natural gas to determine the CO emission factor for compliance with 40 CFR 60 Subpart JJJJ, NSPS and 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

CO emission stack tests will be performed once during the term of the Title V permit.

Facility should comply with the NSPS 40 CFR 60 Subpart JJJJ requirements for (1) the initial and subsequent compliance testing, (2) performance testing procedures, and (3) performance test methods.

Upper Permit Limit: 5.0 grams per brake horsepower-hour

Reference Test Method: 40 cfr 60 appendix a

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 65: Compliance Certification

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 227-2

Item 65.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: COD

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Regulated Contaminant(s):

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

Item 65.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial NOx emission test for the cogeneration engines while utilizing either solely digester gas or a blend of digester gas and natural gas to determine the NOx emission factor for compliance with 6 NYCRR Part 227-2, NOx RACT, 40 CFR 60 Subpart JJJJ, NSPS, and 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

Facility will conduct performance test within 180 days of commencement of operation utilizing fuel used, to verify that emissions factors and HHV are not being exceeded.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

NOx emission stack tests will be performed once during the term of the Title V permit.

Facility should comply with the NSPS 40 CFR 60 Subpart JJJJ requirements for (1) the initial and subsequent compliance testing, (2) performance testing procedures, and (3) performance test methods.

Upper Permit Limit: 2.0 grams per brake horsepower-hour

Reference Test Method: 40 cfr 60 appendix a

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 66: Compliance Certification

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 231-6

Item 66.1:

The Compliance Certification activity will be performed for:

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Emission Unit: 1-COGEN
Process: COD

Item 66.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The firing of digester gas in the five new cogenerations engines would be a maximum of 1,065,767,499 cubic feet per year or less, calculated on a rolling 12-month basis

Monitoring Frequency: SEMI-ANNUALLY

Averaging Method: 12 MONTH AVERAGE - ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

**Condition 67: Applicability of facilities subject to Subpart JJJJ
Effective between the dates of 12/23/2019 and 12/22/2024**

Applicable Federal Requirement:40CFR 60.4230(a)(4)(i), NSPS Subpart JJJJ

Item 67.1:

This Condition applies to Emission Unit: 1-COGEN
Process: COD

Item 67.2: The provisions of 40 CFR 60 Subpart JJJJ are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) that commence construction after June 12, 2006, and where the stationary SI ICE are manufactured on or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP). For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

**Condition 68: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 68.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: CON

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Regulated Contaminant(s):
CAS No: 0NY075-02-5 PM 2.5

Item 68.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial PM2.5 emission test for the cogeneration engines while utilizing solely natural gas to determine the PM2.5 emission factor for compliance with 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

PM2.5 emission stack tests will be performed once during the term of the Title V permit.

Reference Test Method: 40 cfr 60 appendix a
Monitoring Frequency: Once every five years
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 69: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 69.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: CON

Regulated Contaminant(s):
CAS No: 0NY075-00-5 PM-10

Item 69.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within 180 days after the commencement of operation of the

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Facility DEC ID: 2620200007

cogeneration plant, the facility shall conduct the initial PM10 emission test for the cogeneration engines while utilizing solely natural gas to determine the PM10 emission factor for compliance with 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

PM10 emission stack tests will be performed once during the term of the Title V permit.

Reference Test Method: 40 cfr 60 appendix a
 Monitoring Frequency: Once every five years
 Averaging Method: 1-HOUR AVERAGE
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 70: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 70.1:
 The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
 Process: CON

Regulated Contaminant(s):
 CAS No: 0NY998-00-0 VOC

Item 70.2:
 Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial VOC emission test for the cogeneration engines while utilizing solely natural gas to determine the VOC emission factor for compliance with 40 CFR 60 Subpart JJJJ, NSPS and 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

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Facility DEC ID: 2620200007

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

VOC emission stack tests will be performed once during the term of the Title V permit.

Facility should comply with the NSPS 40 CFR 60 Subpart JJJJ requirements for (1) the initial and subsequent compliance testing, (2) performance testing procedures, and (3) performance test methods.

Upper Permit Limit: 0.7 grams per brake horsepower-hour
 Reference Test Method: 40 cfr 60 appendix a
 Monitoring Frequency: Once every five years
 Averaging Method: 1-HOUR AVERAGE
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 71: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 71.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
 Process: CON

Regulated Contaminant(s):
 CAS No: 000630-08-0 CARBON MONOXIDE

Item 71.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial CO emission test for the cogeneration engines while utilizing solely natural gas to determine the CO emission factor for compliance with 40 CFR 60 Subpart JJJJ, NSPS and 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

CO emission stack tests will be performed once during the term of the Title V permit.

Facility should comply with the NSPS 40 CFR 60 Subpart JJJJ requirements for (1) the initial and subsequent compliance testing, (2) performance testing procedures, and (3) performance test methods.

Upper Permit Limit: 2.0 grams per brake horsepower-hour
 Reference Test Method: 40 cfr 60 appendix a
 Monitoring Frequency: Once every five years
 Averaging Method: 1-HOUR AVERAGE
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 72: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR Subpart 227-2

Item 72.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
 Process: CON

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

Item 72.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

Within 180 days after the commencement of operation of the cogeneration plant, the facility shall conduct the initial NOx emission test for the cogeneration engines while utilizing either solely natural gas to determine the NOx emission factor for compliance with 6 NYCRR Part 227-2, NOx RACT, 40 CFR 60 Subpart JJJJ, NSPS, and 6 NYCRR Part 231, New Source Review, as per EPA stack testing method.

A stack test protocol shall be submitted to the Department for approval at least 30 days prior to the test.

A report demonstrating compliance shall be submitted to the Department within 60 days of the test.

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

NOx emission stack tests will be performed once during the term of the Title V permit.

Facility should comply with the NSPS 40 CFR 60 Subpart JJJJ requirements for (1) the initial and subsequent compliance testing, (2) performance testing procedures, and (3) performance test methods.

Upper Permit Limit: 1.0 grams per brake horsepower-hour
 Reference Test Method: 40 cfr 60 Appendix A
 Monitoring Frequency: Once every five years
 Averaging Method: 1-HOUR AVERAGE
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 73: Compliance Certification
 Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 231-6

Item 73.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
 Process: CON

Item 73.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The firing of natural gas in the five new cogenerations engines would be a maximum of 700,361,499 cubic feet per year or less, calculated on a rolling 12-month basis.

Monitoring Frequency: SEMI-ANNUALLY
 Averaging Method: 12 MONTH AVERAGE - ROLLED MONTHLY
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 74: Applicability of facilities subject to Subpart JJJJ
 Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:40CFR 60.4230(a)(4)(i), NSPS Subpart JJJJ

Item 74.1:

This Condition applies to Emission Unit: 1-COGEN

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Process: CON

Item 74.2: The provisions of 40 CFR 60 Subpart JJJJ are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) that commence construction after June 12, 2006, and where the stationary SI ICE are manufactured on or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP). For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

Condition 75: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 227-1.3 (a)

Item 75.1:

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

Emission Unit: 1-COGEN
 Process: COD

Emission Unit: 1-COGEN
 Process: CON

Emission Unit: 1-COGEN
 Process: INT

Emission Unit: 1--COMB
 Process: BLR

Emission Unit: 1--COMB
 Process: GNR

Emission Unit: 1--COMB
 Process: PED

Emission Unit: 1--COMB
 Process: PEG

Item 75.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

No person shall operate a stationary combustion installation which

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Facility DEC ID: 2620200007

exhibits greater than 20 percent opacity (six minute average), except for one-six-minute period per hour of not more than 27 percent opacity.

In addition, the Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The permittee will conduct observations of visible emissions from the emission unit, process, etc. to which this condition applies at the monitoring frequency stated below while the process is in operation. The permittee 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.

The permittee shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continue, the permittee will conduct a Method 9 assessment within the next operating day of the sources associated with the potential noncompliance to determine the degree of opacity and will notify the NYSDEC if the method 9 test indicates that the opacity standard is not met.

Records of visible emissions observations (or any follow-up method 9 tests), investigations and corrective actions will be kept on-site. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: DAILY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 76: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 40CFR 60.4205(b), NSPS Subpart III

Item 76.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: INT

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Item 76.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of a 2011 model year or later emergency stationary compression ignition (CI) internal combustion engine with a maximum engine power greater than 2,237 kW (3,000 HP) that is not a fire pump engine and a displacement of less than 10 liters/cylinder will require certification to the emission standards for new nonroad CI engines in 40 CFR 89.112 and 40 CFR 89.113, as applicable, for all pollutants, for the same model year and maximum engine power. Compliance with this requirement will be established by purchasing an engine certified to the emission standard referenced above and having it installed and configured according to the manufacturer's specifications. Records documenting these actions must be kept on-site.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 77: Compliance Certification

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 40CFR 60.4205(b), NSPS Subpart IIII

Item 77.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 77.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission from 4 interim emergency diesel engine generators

Number of Engines: 4

Capacity (KW, each): 2000 Horsepower
2682.044

Heat Input (mmBtu/hr/engine): 22.02 assuming 11010 Btu/kw-hr

Oil HHV: 140 mmBtu/1000 gal

Annual Operation (hours/yr): 26 PTE (0.5 hrs per

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week, 52 weeks per year)

Unit/Source	CAS #	Contaminant	Emission Factor	Totalemission	Emiss Stand
			(lb/1000 gal)		
			(TPY)		from
	10102-44-0	NOx	6.40		g/kw-hr, NSPS, assumes < 10
	L/cylinder	179.410			
			1.47		
	00630-08-0	CO	3.50		g/kw-hr, NSPS, assumes < 10
	L/cylinder	98.115			
			0.80		
	NY075-00-5	PM10	0.20		g/kw-hr, NSPS, assumes < 10
	L/cylinder	5.607			
			0.05		
	NY075-02-5	PM2.5	0.20		g/kw-hr, NSPS, assumes < 10
	L/cylinder	5.607		0.05	

Reference Test Method: EPA approved
 Monitoring Frequency: CONTINUOUS
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 78: Compliance Certification
 Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 40CFR 60.4207(b), NSPS Subpart III

Item 78.1:
 The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
 Process: INT

Item 78.2:
 Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Monitoring Description:

The owner or operator of a stationary compression ignition internal combustion engine displacing less than 30 liters per cylinder and which is subject to the requirements of subpart IIII of 40 CFR Part 60 may not fire diesel fuel below a minimum cetane index of 40 as referenced in 40 CFR Part 80.510(b) except that any diesel fuel purchased or otherwise obtained prior to October 1, 2010 may be used until depleted. Compliance shall be demonstrated by either sampling each delivery and conducting an appropriate analysis or by obtaining a certificate of analysis showing the cetane index for each shipment of diesel fuel provided by the fuel supplier. In either case, the owner or operator must verify that any required fuel analysis has been conducted using methodology acceptable to the Department. Records of all certificates of analysis provided by the fuel supplier and on-site fuel sampling results must be maintained on site for a minimum of five years.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: DIESEL OIL

Parameter Monitored: CETANE INDEX

Lower Permit Limit: 40 ratio

Monitoring Frequency: PER DELIVERY

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 79: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 40CFR 60.4207(b), NSPS Subpart IIII

Item 79.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 79.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The owner or operator of a stationary compression ignition internal combustion engine displacing less than 30 liters per cylinder and which is subject to the requirements of subpart IIII of 40 CFR Part 60 may not fire any diesel fuel which exceeds a sulfur content of 15 ppm as per the non-road diesel fuel sulfur content standard set forth in 40 CFR Part 80.510(b) except that any diesel fuel purchased or otherwise obtained prior to October 1, 2010 may be used until

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depleted. Compliance shall be demonstrated by either sampling each delivery and conducting an appropriate analysis or by obtaining a certificate of analysis showing the sulfur content or range of sulfur content for each shipment of non-road diesel fuel provided by the fuel supplier. In either case, the owner or operator must verify that any required fuel analysis has been conducted using methodology acceptable to the Department. Records of all certificates of analysis provided by the fuel supplier and on-site fuel sampling results must be maintained on site for a minimum of five years.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: DIESEL OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15 parts per million by weight

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 80: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 40CFR 60.4211(a), NSPS Subpart III

Item 80.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 80.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of a stationary CI internal combustion engine must comply with the emission standards specified in 40 CFR 60 Subpart III and must do all of the following:

- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to the facility

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Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 81: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 40CFR 60.4211(f), NSPS Subpart IIII

Item 81.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 81.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 60.4211(f)(2). Except as provided in paragraph (i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. There is no time limit on the use of emergency stationary ICE in emergency situations.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

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(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

Parameter Monitored: HOURS OF OPERATION
 Upper Permit Limit: 50 hours per year
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 82: Stationary RICE subject to regulations under 40 CFR Part 60 Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:40CFR 63.6590(c), Subpart ZZZZ

Item 82.1:

This Condition applies to Emission Unit: 1-COGEN
 Process: INT

Item 82.2:

An affected source that meets any of the criteria listed below must meet the requirements of this part by meeting the requirements of 40 CFR part 60 subpart IIII, for compression ignition engines or 40 CFR part 60 subpart JJJJ, for spark ignition engines. No further requirements apply for such engines under this part.

- new or reconstructed stationary RICE located at an area source,
- new or reconstructed 2SLB stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions,
- new or reconstructed 4SLB stationary RICE with a site rating of less than 250 brake horsepower located at a major source of HAP emissions,
- new or reconstructed spark ignition 4 stroke rich burn (4SRB) stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions,
- new or reconstructed stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions which combusts landfill or digester gas equivalent to 10 percent or more of the gross heat input on an annual basis,
- new or reconstructed emergency or limited use stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions,
- new or reconstructed compression ignition (CI) stationary RICE with a site rating of less than or equal to 500 brake horsepower located at a major source of HAP emissions.

Condition 83: Compliance Certification Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:40CFR 63.6645(f), Subpart ZZZZ

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Item 83.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: INT

Item 83.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This applies to 4 new interim emergency generators in emission unit COGEN, Process: INT

If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

Monitoring Frequency: SEMI-ANNUALLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 84: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 231-6

Item 84.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: WGB

Item 84.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The flaring of digester gas in the new waste gas burner would be a maximum of 793,656,000 cubic feet per year or less, calculated on a rolling 12-month basis.

Monitoring Frequency: SEMI-ANNUALLY

Permit ID: 2-6202-00007/00015

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Averaging Method: 12 MONTH AVERAGE - ROLLED MONTHLY
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 85: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 200.7

Item 85.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: WGB

Emission Source: WGBR2

Item 85.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This condition is for the operation of the new flare (Process WGBR) in emission unit 1-Cogen.

- Flare should be operated within the operating temperature range recommended by the manufacturer as a permit limit;
- Facility should measure, on a continuous basis, the waste gas burner operating temperature;
- Flare should be operated with a flame present (pilot light) at all times when digester gas is vented through it, and that the presence of a flare pilot flame be monitored using a thermocouple or other equivalent device to detect the presence of a flame.

NYCDEP is required to maintain all of their equipment and maintain manufacturer' specified operating parameters within the specified ranges.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
 Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
 Reports due 30 days after the reporting period.
 The initial report is due 1/30/2020.
 Subsequent reports are due every 6 calendar month(s).

Condition 86: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 201-6.1 (a)

Item 86.1:

The Compliance Certification activity will be performed for:

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Facility DEC ID: 2620200007

Emission Unit: 1--COMB

Item 86.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The two combustion turbines (TURG1, TURG2) of the facility shall not operate more than 500 hrs in any year.

Facility must maintain a log of operating hrs for each combustion turbine and submit that along with the annual report.

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2020.

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

Condition 87: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 227-2.3 (b)

Item 87.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Regulated Contaminant(s):

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

Item 87.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility submitted the NOx compliance plan on December 2011, indicating how the facility intends to comply with the NOx RACT.

Facility should comply with the December 2011 Nox RACT plan.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 88: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Applicable Federal Requirement:6 NYCRR 227-2.4 (c)

Item 88.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Regulated Contaminant(s):

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

Item 88.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

DEP has proposed an enforceable fuel limitation condition to limit these boilers to primarily fire natural gas or anaerobic digester gas during normal operation. Per DEPs NOx RACT compliance plan (12/30/2011), these boilers are limited to fire natural gas or digester gas during normal operation. ULSD fuel oil will only be used during emergency conditions when there is no digester gas or natural gas available or for intermittent testing. Therefore, NOx RACT limit for fuel oil is not applicable.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 89: Compliance Certification

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 227-2.5 (c)

Item 89.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Item 89.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This condition is for Emission unit 1-COMB. and for mid size boilers.

Within sixty days of permit issuance, NYCDEP shall provide a case by case RACT analysis for NOx limit for mid size boilers when:

(1) when diesel fuel is combusted and (2) natural gas fuel is

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combusted.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2020.

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

Condition 90: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 227-2.5 (c)

Item 90.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Regulated Contaminant(s):

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

Item 90.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

As per the compliance plan dated June 29, 2004, NYCDEP must continue to investigate NOx control technologies. NYCDEP must provide the Department reports on the progress of the investigations and may conduct pilot testing only with Department's approval.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 91: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR Subpart 231-10

Item 91.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Regulated Contaminant(s):

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

Item 91.2:

Compliance Certification shall include the following monitoring:

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Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

pump engines operations from all 5 pump engines (PENG1, PENG2, PENG3, PENG4, PENG5) and blower engine operations from all 5 blower engines (BENG1, BENG2, BENG3, BENG4, BENG5) under emission unit 1--COMB are permanently being shut down, and are being replaced by new spark ignited internal combustion reciprocating engine generators. NYCDEP informed NYSDEC (6/2018) that all 5 blower engines have been removed.

Total NOx emissions from shutdown of these 10 sources will create 134.9 tpy of NOx emission reduction.

The new proposed cogen plant (1-COGEN) will create Project emission potential (PEP) of 144.17 tpy of NOx.

Nox emission reductions from permanent shutdown is 134.90 tpy. Of these, 119.67 tpy of NOx ERC is being used to internally offset the NOx emissions from the proposed cogen (144.17 tpy) plant in the netting analysis as per 231-6.2 and 231-8.2. Net emission increase of the proposed project in the modification is 24.5 tpy, is below the significant net emission increase threshold of 25 tpy.

This modification will not result in New Source Review major modification and is in compliance with non attainment NSR and PSD NSR regulations.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

**Condition 92: EPA Region 2 address.
Effective between the dates of 12/23/2019 and 12/22/2024**

Applicable Federal Requirement: 40CFR 60.4, NSPS Subpart A

Item 92.1:

This Condition applies to Emission Unit: 1--COMB
Process: BLR

Item 92.2:

All requests, reports, applications, submittals, and other communications to the Administrator pursuant to this part shall be submitted in duplicate to the following address:

Director, Division of Enforcement and Compliance Assistance
USEPA Region 2

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290 Broadway, 21st Floor
New York, NY 10007-1886

Copies of all correspondence to the administrator pursuant to this part shall also be submitted to the NYSDEC Regional Office issuing this permit (see address at the beginning of this permit) and to the following address:

NYSDEC
Bureau of Quality Assurance
625 Broadway
Albany, NY 12233-3258

Condition 93: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 40CFR 60.48c(a), NSPS Subpart Dc

Item 93.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB
Process: BLR

Item 93.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner and operator of each affected facility shall submit notification of the date of construction or reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7 of this part. This notification shall include:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c., or 40 CFR 60.43c.
- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

Monitoring Frequency: SINGLE OCCURRENCE

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

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Condition 94: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:40CFR 60.48c(g), NSPS Subpart Dc

Item 94.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB
Process: BLR

Item 94.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day.

Monitoring Frequency: DAILY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 6 calendar month(s).

Condition 95: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement:6 NYCRR 227-2.4 (c) (1) (ii)

Item 95.1:

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

Emission Unit: 1--COMB
Process: BLR
Emission Source: BLER1

Emission Unit: 1--COMB
Process: BLR
Emission Source: BLER3

Emission Unit: 1--COMB
Process: BLR
Emission Source: BLER4

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

Item 95.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

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Monitoring Description:

This condition applies to distillate oil/gas fired mid-size boilers. The owner or operator shall submit a testing protocol to the Department for approval a minimum of 30 days prior to any stack testing.

The owner or operator will maintain records on-site for a minimum of five years.

The compliance deadline, with the emission limitation listed in this condition, is July, 1 2014. Compliance with the monitoring, record keeping, or reporting requirements listed in this condition begins on July, 1 2014.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 0.08 pounds per million Btus

Reference Test Method: 40 CFR 60 Appendix A - Method 7, 7E, or 19

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 96: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 227-2.4 (d)

Item 96.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: BLR

Emission Source: BLER2

Regulated Contaminant(s):

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

Item 96.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of a small boiler, small combustion turbine, or small internal combustion engine must perform an annual tune-up of their equipment. This tune-up should be performed in accordance with the requirements of the DAR-5 guidance document. Records of each tune-up must be kept on-site for a minimum of five years.

Reference Test Method: EPA approvable

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

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Facility DEC ID: 2620200007

Reports due 30 days after the reporting period.
 The initial report is due 7/30/2020.
 Subsequent reports are due every 12 calendar month(s).

Condition 97: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 200.7

Item 97.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: FLA

Emission Source: WGBR1

Item 97.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

This condition is for the operation of the existing flare (Emission Source: WGBR1, Process:FLA) in emission unit 1-COMB.

- Flare should be operated within the operating temperature range recommended by the manufacturer as a permit limit;
- Facility should measure, on a continuous basis, the waste gas burner operating temperature;
- Flare should be operated with a flame present (pilot light) at all times when digester gas is vented through it, and that the presence of a flare pilot flame be monitored using a thermocouple or other equivalent device to detect the presence of a flame.

The plant has one John Zink waste digester gas burners WGBR and has its own exhaust FLARE rated at 1160 scfm. The operating temperature range for the most efficient flare operation is 1400 to 1800 degrees F. The flare temperature must be maintained within this temperature range.

Parameter Monitored: TEMPERATURE

Lower Permit Limit: 1400 degrees Fahrenheit

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: MINIMUM - NOT TO FALL BELOW STATED VALUE AT ANY TIME

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

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Condition 98: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 227-2.4 (f)

Item 98.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB
 Process: GNR

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

Item 98.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The two emergency turbine generators will be removed after all the cogen engines are installed. Until these emergency turbine generators are removed, the NOx emissions verified during the most recent stack test shall be set forth as the alternative emission permit limit for each engine.

Alternative emission limit for the 2 turbine generators when burning diesel oil must not be greater than 179 ppmv dry @ 15% O2 @ ISO standard.

Stack testing once during the permit term is required to demonstrate compliance with the permit limit until the turbine generators are removed. Stack test protocol must be sent to Department for approval prior to testing.

To be exempt from compliance with the NOx emission standards at 40 CFR §60.6632(a), the facility must operate each of the two emergency turbines (identified as emission sources TURG 1 and TURG 2 of EU:1-COMB) according to the requirements in the definition of “emergency gas turbine” at 40 CFR § 60.331(e).

Upper Permit Limit: 179 parts per million by volume (dry, corrected to 15% O2)

Reference Test Method: epa approved

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 99: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

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Facility DEC ID: 2620200007

Applicable Federal Requirement:40CFR 60, NSPS Subpart GG**Item 99.1:**

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: GNR

Item 99.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This condition applies to emission sources TURG 1 and TURG 2 (2 existing turbine generators).

DEP conducted NO_x and SO_x stack emissions tests on the two emergency turbine generators on 1/18-19/2007, following procedures in a USEPA approved protocol and subsequent instructions. These stack tests determined NO_x and SO_x emissions at each turbine generator's maximum achievable load and three partial loads. A study report was submitted to the USEPA on 2/20/2007. Results of the tests indicated all tests demonstrated compliance with the 40 CFR 60 Subpart GG NO_x and SO_x limits (except the maximum achievable load of the turbine generator #1 exceeded the NO_x limit). Because these two turbine generators are to be used for emergency power and are operated less than 500 hours per year, these turbine generators are considered emergency turbine generators and are therefore exempt from the 40 CFR 60 Subpart GG requirements. These emergency turbine generators will not participate in any load shedding program. Under certain severe circumstances, if operation of these turbine generators are necessary to avoid potential blackouts, which may threaten public safety, these turbine generators will only be limited to operate at loads that are in compliance with 40 CFR 60 Subpart GG limits.

DEP is currently installing five (5) new 3.03 megawatt (MW) spark ignition reciprocating internal combustion engine generators (Emission Sources COGN1, COGN2, COGN3, COGN4 and COGN5) and these engines will

be interconnected with the Con Edison utility power supply. Up to four of the five cogeneration engines may be operated at any one time (12.12 MW maximum) with the fifth as a standby unit. The new cogeneration engines will operate on both anaerobic digester gas and natural gas. The cogeneration engines will be equipped with oxidation catalyst for carbon monoxide (CO), volatile organic compound (VOC), and non-criteria pollutant emissions control. The new cogeneration engines will be housed in the existing engine room and will exhaust through the existing pump engine stacks (renamed as CGNP1, CGNP2, CGNP3, CGNP4 and CGNP5), with physical stack parameters such as location, height, and diameter remaining unchanged.

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Once the new cogeneration engines are available for operation, the existing emergency turbine generators will cease operation and be removed from the WWTP.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 100: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Applicable Federal Requirement: 6 NYCRR 227-2.4 (f)

Item 100.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: PED

Regulated Contaminant(s):

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

Item 100.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The five pump engines are being removed with this permit modification. Until these engines are removed, the NO_x emissions verified during the most recent stack test shall be set forth as the alternative emission permit limit for each engine.

Alternative emission limit for the 5 pump engines, when burning 100% diesel must not be greater than 8.26 grams/bhp-hr.

Stack testing once during the permit term is required to demonstrate compliance with the permit limit until the engines are removed. Stack test protocol must be sent to Department for approval prior to testing.

Upper Permit Limit: 8.26 grams per brake horsepower-hour

Reference Test Method: epa approved

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Condition 101: Compliance Certification
Effective between the dates of 12/23/2019 and 12/22/2024

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

Applicable Federal Requirement: 6 NYCRR 227-2.4 (f)

Item 101.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: PEG

Regulated Contaminant(s):

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

Item 101.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The five pump engines are being removed with this permit modification. Until these engines are removed, the NO_x emissions verified during the most recent stack test shall be set forth as the alternative emission permit limit for each engine.

Alternative emission limit for the 5 pump engines, when burning dual fuel (Digester Gas and/or natural gas and/or Diesel Oil), must not be greater than 7.65 grams/bhp-hr.

Stack testing once during the permit term is required to demonstrate compliance with the permit limit until the engines are removed. Stack test protocol must be sent to Department for approval prior to testing.

Upper Permit Limit: 7.65 grams per brake horsepower-hour

Reference Test Method: epa approved

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2020.

Subsequent reports are due every 6 calendar month(s).

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

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

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;

(2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;

(3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

(4) The facility owner or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

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

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

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Facility DEC ID: 2620200007

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 applicable requirements and are not subject to compliance certification requirements unless otherwise noted or required under 6 NYCRR Part 201.

Condition 102: Contaminant List

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable State Requirement:ECL 19-0301

Item 102.1:

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

CAS No: 000050-00-0
Name: FORMALDEHYDE

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

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

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

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

CAS No: 0NY100-00-0
Name: TOTAL HAP

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

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

Condition 103: Malfunctions and start-up/shutdown activities

Effective between the dates of 12/23/2019 and 12/22/2024

Applicable State Requirement:6 NYCRR 201-1.4

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Facility DEC ID: 2620200007

Item 103.1:

- (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 malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, 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 stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.
- (c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and 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. 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, identification of air contaminants, and an estimate of the emission rates.
- (d) The department may also require the 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 104: Air pollution prohibited
Effective between the dates of 12/23/2019 and 12/22/2024**Applicable State Requirement: 6 NYCRR 211.1****Item 104.1:**

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.

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

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Facility DEC ID: 2620200007

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Permit ID: 2-6202-00007/00015

Renewal Number: 2

12/24/2019

Facility Identification Data

Name: NORTH RIVER WASTEWATER TREATMENT PLANT

Address: 725 W 135TH ST

NEW YORK, NY 10031

Owner/Firm

Name: NYC DEPT OF ENVIRONMENTAL PROTECTION

Address: 96-05 HORACE HARDING EXPY FL 5

CORONA, NY 11368, USA

Owner Classification: Municipal

Permit Contacts

Division of Environmental Permits:

Name: DENISE L GRATTAN

Address: 1 HUNTERS POINT PLAZA

47-40 21ST ST

LONG ISLAND CITY, NY 11101

Phone:7184824997

Division of Air Resources:

Name: PARESH SHAH

Address: NYSDEC - REGION 2

47-40 21ST ST

LONG ISLAND CITY, NY 11101

Air Permitting Contact:

Name: NYC-DEP NORTH RIVER WPCP

Address: 725 W 135TH ST

NEW YORK, NY 10031

Phone:7185955050

Permit Description

Introduction

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

Summary Description of Proposed Project

Please note the following in this renewal:

1. All fuel combusted blowers are removed from the facility and facility has electric blowers now.
2. Facility is removing all pump and blower engines and installation of new cogen engines are in process.

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This is being done as a part of the Nox RACT Plan mentioned in the permit.

3. Having satisfied the requirements of condition no. 55 of the Air Title V permit issued on October 17, 2014, the Department approved removal of the H2S monitoring network in the community.

4. In the emission formula, E is the emission factor (by EPA Fire, published 9/7/2016) for the digester gas burner 17.11 lb/mmCF, for PM 10 and PM 2.5.

Attainment Status

NORTH RIVER WASTEWATER TREATMENT PLANT is located in the town of MANHATTAN in the county of NEW YORK.

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

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter < 10µ in diameter (PM10)	MODERATE NON-ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	SEVERE NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

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

** NOx has a separate ambient air quality standard in addition to being an ozone precursor.

Facility Description:

The North River WWTP is a municipal wastewater treatment plant owned and operated by the New York City Department of Environmental Protection (DEP) and serves approximately 550,000 people on the west side of Manhattan. The WWTP is a secondary treatment plant with a design dry weather flow of 170 million gallons per day (MGD), and a peak wet weather flow of 340 MGD.

The WWTP has the following equipment and operations:

- Five (5) existing 1,700 bhp tri-fuel internal combustion engines (*Delaval Transamerican R-46 engines, installed in late 1980s, compression ignition engines*) mechanically coupled to five sewage pumps which pump sewage to the WWTP (Emission Sources PENG1, PENG2, PENG3, PENG4, PENG5). These engines are capable of firing digester gas and natural gas with #2 ultra-low sulfur distillate (ULSD) fuel oil pilot, or ULSD fuel oil alone. These engines are to be replaced with new cogeneration engines, currently under construction.
- Three (3) existing 940 bhp tri-fuel internal combustion engines mechanically coupled to five

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blowers which feed air to the WWTP's aeration tanks (Emission Sources BENG1, BENG2, BENG5). These engines are capable of firing digester gas and natural gas with ULSD fuel oil pilot, or ULSD fuel oil alone. These engines are to be replaced with new cogeneration engines, currently under construction. All blower engines removed as of Jan 2018.

- One (1) 2000 HP electrical blower. This 2000 HP electrical blower is powered by utility power and does not have any emissions.
- Three (3) 31.4 mmBtu/hr and one (1) 8.4 mmBtu/hr York-Shipley boilers (Emission Sources BLER1, BLER2, BLER3, BLER4) provide heat and hot water to the WWTP. These boilers are capable of firing digester gas, natural gas and ULSD fuel oil. However, per the DEP's NO_x RACT Compliance Plan (dated December 30, 2011), these boilers are limited to operation on natural gas or digester gas during normal operation. ULSD fuel oil will only be used during emergency conditions when there is no digester gas or natural gas available or for intermittent maintenance testing.
- one existing waste sludge digester gas burner (Emission Sources WGBR1) for emergency flaring of excessive sludge digester gas.
- Two (2) 2,800 KW emergency turbine generators (Emission Sources TURG1, TURG2), which are planned to cease operation and be removed from the WWTP once the cogeneration project is completed.
- Two (2) emergency engine generators; one (1) 2,000 KW trailer-mounted emergency engine generator (Emission Source EGEN1), and one (1) 200 KW Blackstart engine generator (Emission Source BENG1). These emergency generators provide emergency power to achieve the State Pollutant Discharge Elimination System (SPDES) permit required wastewater treatment and disinfection in the event the WWTP loses utility power.

Ongoing Upgrade:

- Five (5) new 3.37 megawatt (MW) spark ignition reciprocating internal combustion engine generators are being installed that will be interconnected with the Con Edison electrical supply (Emission Sources COGN1, COGN2, COGN3, COGN4 and COGN5). Up to four of the five cogeneration engines will operate at any one time (13.5 MW maximum) with the fifth as a standby unit. The new cogeneration engines will operate on both anaerobic digester gas and natural gas and will be equipped with oxidation catalyst for carbon monoxide (CO), volatile organic compound (VOC), and non-criteria pollutant emissions control. The new cogeneration engines will be housed in the existing engine room and will exhaust through the existing pump engine stacks, with physical stack parameters such as location, height, and diameter remaining unchanged.
- . one additional waste digester gas burner to be installed (Emission Source WGBR2) for emergency flaring of excessive sludge digester gas (minor mod 3)
- . Four (4) 2 MW interim diesel emergency generators (emission sources IGEN1, IGEN2, IGEN3, IGEN4) may be installed during the construction period to provide back up power to the WTP during emergencies and will exhaust through the existing turbine generator stacks (CGTG1, CGTG2). Once the cogen engines are in operation, these 4 generators will be removed, if installed.

The WWTP has the following wastewater treatment processes and their associated equipment. Emissions from these processes depend on the concentrations of pollutants of concern in the WWTP's influent of which the plant has limited control. The emissions from these processes are remaining unchanged.

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- Headworks
- Influent Channels
- Primary settling tanks
- Activated sludge aeration tanks
- Activated sludge aeration tanks effluent mixed liquor channels
- Final settling tanks
- Chlorination contact tanks
- Sludge thickeners
- Sludge digesters
- Sludge storage tank
- Wiggins sludge digester gas holder
- Mixed liquor channels

Improvements are being made to the equipment associated with the sludge thickeners, sludge digesters, and Wiggins sludge digester gas holder. All the processes are covered except a small portion of the final settling tanks, and the air from these processes is collected & vented to the WWTP's odor control systems prior to being exhausted to the atmosphere. The WWTP has three (3) 2-stage odor control systems by location, North, West and South, consisting of nineteen (19) wet chemical scrubbers, and fifty six (56) activated carbon absorbers. The wet scrubbers use chemicals to achieve design H₂S removal efficiency at high H₂S concentrations but could achieve adequate H₂S removal efficiency by using less or no chemicals at normal or low H₂S inlet concentration.

Permit Structure and Description of Operations

The Title V permit for NORTH RIVER WASTEWATER TREATMENT PLANT

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

- combustion - devices which burn fuel to generate heat, steam or power
- incinerator - devices which burn waste material for disposal
- control - emission control devices
- process - any device or contrivance which may emit air contaminants that is not included in the above categories.

NORTH RIVER WASTEWATER TREATMENT PLANT is defined by the following emission unit(s):

Emission unit 1-COMB - This Unit includes the following combustion sources and their associated equipment:

Five (5) Delaval Transamerican 1700 HP dual fuel internal combustion engines mechanically coupled to

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five sewage pumps which pump sewage to the plant. These engines fire primarily a mixture of digester gas and natural gas with #2 fuel oil pilot fuel in normal operation and exhaust to the atmosphere via individual stacks through the roof into the rooftop NYS Riverbank State Park.

Five (5) Mirrlees Blackstone 940 HP dual fuel internal combustion engines mechanically coupled to five blowers which feed air to the plant's aeration tanks. These engines fire primarily a mixture of digester gas and natural gas with #2 fuel oil pilot fuel in normal operation and exhaust to the atmosphere via individual stacks through the roof into the rooftop NYS Riverbank State Park. NYCDEP informed NYSDEC that all the 5 blower engines have been removed now.

The facility has recently installed (year 2011) a 2000HP electrical blower to the pool of blowers. This 2000HP electrical blower is powered by utility power and does not have any emission.

Three (3) 31.4 mmBtu/hr and one (1) 8.4 mmBtu/hr York-Shipley boilers to provide heat and hot water to the facility. These boilers primarily fire natural gas or sludge digester gas in normal operation and exhaust to atmosphere via three (3) stacks through the roof into the rooftop NYS Riverbank State Park. Only during curtailment period and for exercise, these boilers may fire fuel oil.

One (1) waste sludge digester gas burner to flare excessive sludge digester gas.

Four (4) emergency generators: two (2) 2,800 KW emergency turbine generator, one (1) 2,000 KW trailer-mounted emergency engine generator, and one (1) 200 KW blackstart engine generator. These emergency generators, each to operate no more than 500 hrs., provide critical emergency power support to achieve the State Pollutant Discharge Elimination System (SPDES) permit required minimum wastewater treatment and disinfection in the event the plant loses utility power. The two turbine generators exhaust to the atmosphere via individual stacks through the roof. These two turbine generators will be removed upon operation of the new cogen engines. The trailer-mounted 2000 KW emergency engine generator is also located on the plant's east roadway and exhaust from this emergency engine generator is piped to the main building exterior 70 feet away. The 200 kw black start engine generator has a six inch diameter exhaust pipe routed across service road A to the outside of the bldg. through the center of the open archway.

Emission unit 1-COMB is associated with the following emission points (EP):

EMBG1, EMEG1, EMTG1, EMTG2, ENGB1, ENGB2, ENGB3, ENGB4, ENGB5, ENGP1, ENGP2, ENGP3, ENGP4, ENGP5, FLARE, MBLR1, MBLR2, MBLR3

Process: BLR is located at Building MAIN - This process includes operation of the plant's three (3) York-Shipley boilers with input capacity of 31.4 mmBtu/hr and one (1) York-Shipley boiler with input capacity of 8.4 mmBtu/hr, all of them capable of firing natural gas, digester gas or #2 fuel oil. These boilers are to meet the plant's space heating and wastewater treatment's sludge heating demand.

Natural gas is the main fuel and oil is used only in emergency purpose. Per DEP's NOx RACT plan of December 2011, these boilers are limited to operate on natural or digester gas during normal operation. Number 2 fuel oil will only be used during emergency conditions when there is no gas is available or for intermittent maintenance testing.

The exhaust from the four (4) boilers is vented to atmosphere via three (3) stacks, MBLR1, MBLR2 and MBLR3, through the roof into the rooftop NYS Riverbank State Park. Restricted with three (3) stacks, so BLER2 and BLER3 share MBLR2, BLER1 and BLER4 have their own stacks, MBLR1 and MBLR3.

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Process: FLA is located at Building MAIN - This process includes operation of the waste gas burners in the Waste Gas Flare Tower. At times digester gas produced by the plant is more than the demand of the plant's combustion processes, particularly in the summer. The excess sludge digester gas will be flared at the waste gas burner.

The plant has one John Zink waste digester gas burners WGBR and has its own exhaust FLARE rated at 1160 scfm. The operating temperature range for the most efficient flare operation is 1400 to 1800 degrees F. The flare temperature must be maintained within this temperature range. The thruput quantity of 248,400 MMBTU/Yr heat input is based on 414.3 MMCF total digester gas produced for fiscal year 2005.

Process: GNR is located at Building MAIN - This process includes operation of the plant's emergency generator(s).

The plant's existing emergency turbine generator TURG1 and TURG2 are each rated 2800 KW and fires #2 fuel oil. These existing emergency generators are located in the Main Building (MAIN) and exhausts via their own stacks EMTG1 and EMTG2 through the roof into the rooftop NYS Riverbank State Park. These emergency turbine generators provide power in the event of a commercial power supply outage and will be operated less than 500 hrs per year, and will not participate in any load sharing program CDRP/PLM. Under severe circumstances, if operation of these units are necessary to avoid potential black outs which may threaten public safety and health, these units will be limited to operate at loads that are in compliance with 40 cfr 60, subpart GG limits. These emergency generators are being removed. This process will continue to operate until the cogen plant is fully operational. Once emergency generators are shut down and removed, this will be removed.

There is an additional 2000 KW trailer-mounted emergency engine generator for backup, in case the failure of the two (2) existing emergency turbine generators. The emergency engine generator is located at the corner of east roadway and service road B. The exhaust from this emergency engine generator would be piped to the main building exterior 70 feet away, below the level of the rooftop NYS Riverbank State Park.

There is a 200 KW black-start engine generator used to kick start the emergency turbine generators. The 200 kW black-start engine generator has a six (6) inch diameter exhaust pipe routed across service road A to the outside of the building through the center of the open archway.

This process will continue to operate until the cogen plant is fully operational. Once emergency generators are shut down and removed, they will no longer be part of this process.

Process: PED is located at Building MAIN - This process includes operation of the five (5) pump engines in the Main Building (MAIN) on backup #2 fuel oil. These pump engines are directly connected to sewage pumps.

These five (5) Delaval Transamerican R-46 engines, PENG1 and PENG2 PENG3, PENG4 and PENG5 are each rated 1700 HP, exhaust through their own exhaust stacks ENGP1, ENGP2, ENGP3, ENGP4 and ENGP5, respectively.

The plant is removing existing equipment and replacing with new equipment, with the construction sequence as follows: remove the first engine, electrify the pump, install the new engine generator and make operational. This sequence will continue til all the existing engines are removed. The replacement and resulting increase and decrease in emissions all occur within the 5 year contemporaneous period for compliance with NSR/PSD.

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This process will continue to operate till the cogen plant is fully operational and pump engines are shut down and removed.

Process: PEG is located at Building MAIN - This process includes operation of the five (5) pump engines in the Main Building (MAIN) on primarily gaseous fuel (sludge digester gas or natural gas, or blend) with #2 fuel oil pilot. These pump engines are directly connected to sewage pumps.

These five (5) Delaval Transamerican R-46 engines, PENG1 and PENG2 PENG3, PENG4 and PENG5 are each rated 1700 HP, exhaust through their own exhaust stacks ENGP1, ENGP2, ENGP3, ENGP4 and ENGP5, respectively.

The plant is removing existing equipment and replacing with new equipment , with the construction sequence as follows: remove the first engine, electrify the pump, install the new engine generator and make operational. This sequence will continue til all the existing engines are removed. The replacement and resulting increase and decrease in emissions all occur within the 5 year contemporaneous period for compliance with NSR/PSD.

This process will continue to operate till the cogen plant is fully operational and pump engines are shut down and removed.

Emission unit 1COGEN -

This emission unit is comprised of five (5) new 3.03 megawatt (MW) spark ignition reciprocating internal combustion engine generators (Emission Sources COGN1,COGN2,COGN3,COGN4, and COGN5) that will be interconnected with the Con Edison electrical supply. Up to four of the five engines will operate at any one given time (12.12 MW maximum), with the fifth as a standby unit. The engines will operate on both digester gas and natural gas. The new cogeneration engines will be housed in the existing engine room and will exhaust through the existing pump engine stacks, with physical stack parameters such as location, height and diameter remaining unchanged.

In addition, this unit includes four (4) 2 MW interim diesel emergency generators (IGEN1, IGEN2, IGEN3, IGEN4) to be installed during the construction period to provide back up power to the plant during emergencies and will exhaust through the existing turbine generator stacks. Once the cogeneration plant is in operation, these four emergency generators will be removed.

This unit also includes a new completely enclosed waste digester gas burner (capacity of 1510 scfm) (Emission Source WGBR2) to flare the additional digester gas produced at the WTP in the extreme event that digester gas can not be used by the new cogen engines or boilers.

Existing emission points ENGP1, ENGP2, ENGP3, ENGP4, and ENGP5 are the existing pump engine stacks which will be used to exhaust the new cogeneration engines. A new emission point for the new waste gas burner (WGBR2) will be used for emergency flaring of excessive sludge digester gas. Existing emission points EMTG1 and EMTG2 are the existing emergency turbine generator stacks which will be used to exhaust the interim emergency generators during the construction period.

Emission unit 1COGEN is associated with the following emission points (EP):

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CGNP1, CGNP2, CGNP3, CGNP4, CGNP5, CGTG1, CGTG2, FLARB

Process: COD is located at Building MAIN - cogen engines on either digester gas or blend of digester gas and natural gas.

Process: CON is located at Building MAIN - new cogen engines solely on natural gas.

Process: INT is located at Building MAIN - this process includes operation of the four diesel interim emergency generators used during the construction period to provide back up power to the plant during power emergencies. the process will be removed once the cogeneration plant is in operation.

Process: WGB This process includes operation of the new waste gas burner (WGBR2) to handle digester gas under emergency conditions when the cogeneration engines are not in operation. The operating temperature range for the most efficient flare operation is 1400 to 1800 degrees F. The flare temperature must be maintained within this temperature range.

The new flare will operate at the following design parameters:

- Design capacity: 1,510 SCFM
- Throughput quantity: 500,003 MMBTU/yr (based on 8760 hrs/yr)
- Heat input: 57.1 MMBTU/hr

* Throughput and heat input calculations are based on average gross heating value (HHV) of 630 MMBTU/cu. ft. from 03/31/2015 North River WWTP digester gas analysis data and waste gas burner design capacity.

Emission unit 2WWTRE - This Unit includes the following wastewater treatment processes and their associated equipment. Emissions from these processes depend on the concentrations of pollutants of concern in the plant's influent of which the plant does not have complete control.

Headworks

Influent channels

Primary settling tanks

Activated sludge aeration tanks

Activated sludge aeration tanks effluent mixed liquor channels

Final settling tanks

Chlorination contact tanks with dechlorination

Sludge thickeners

Sludge mechanical centrifuge thickeners

Sludge digesters

Sludge storage tank

Wiggins sludge digester gas holder

All the processes are covered except small portion of the final settling tank, and the air from these processes is collected & vented to the plant's odor control systems prior to being exhausted to atmosphere.

The plant has three (3) 2-stage odor control systems by location, North, West and South consisting of wet scrubbers and activated carbon adsorbers. For the North River WWTP odor control system, the chemicals used by the wet scrubbers are sodium hypochlorite and caustic, in order to achieve 90% removal of H₂S at the design's H₂S concentration specifications, as high as 10 ppm. Chemical consumption is controlled automatically by setting pH and ORP (Oxidation Reduction Potential). The manufacturer recommends maintaining the scrubbers' pH at approximately 10.5 and ORP at about +400 to +600 millivolts. For daily

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operation at the WWTP with H₂S levels normally at ppb not ppm, the actual operation differs from the manufacturer's recommendations by using less or no chemicals, in order to avoid chemical waste and excessive chemicals be released with the scrubbers' discharge water flow.

The North Odor Control System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers exhausting through two(2) identical large stacks. The West Odor Control System consists of four (4) wet scrubbers and twelve (12) activated carbon adsorbers and the treated air of this system is sent to the North Odor Control System plenum and exits through the North Odor Control System's two identical exhaust stacks. The South North Odor Control System consists of seven (7) wet scrubbers and eighteen (18) activated carbon adsorbers to exhaust through one(1) large stack.

Emission unit 2WWTRE is associated with the following emission points (EP):

NRTH1, NRTH2, SUTH1

Process: ART is located at Building AERATION - This process is the plant activated sludge aeration (ART) consisting of five (5) aeration tanks (AERTK) (330'X74.6'X29.2') and the waste sludge wet well. In this process, the effluent from the primary settling treatment section is mixed with activated sludge solids and air. These aeration tanks provide the detention time required for the activated sludge to absorb the organic matter in the wastewater. Compressed air is discharged through the tanks to provide mixing and an aerobic environment. After a set mixing period, the mixture flows to the final settling tanks, where the solids are flocculated, settled and collected. Emissions from this process are controlled by the North Odor Control (NTHOC) System consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The NTHOC System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers, that will discharge to a common plenum that conveys the treated air to two (2) large exhaust stacks (NRTH1 and NRTH2). The maximum exhaust flow rates from NRTH1 and NRTH2 are 222,000 acfm (per stack).

The total thrupt is based on the design average dry weather flow of 170 MGD.

Process: CCT This process is the plant chlorine contact tanks (CCT) disinfection process consisting of four (4) chlorination tanks CHLTK (639'X28.5'X8') and required disinfection of the plant effluent. This process also includes de-chlorination using sodium bisulfite, with four (4) new 6,000 gallon bulk storage tanks and two (2) new 2,000 gallon day tanks for sodium bisulfite. Off gas from each storage tank will go through a carbon drum before conveyed to the plant's South Odor Control System. Off gas from each day tank will go through a carbon drum before conveyed to the plant's North Odor Control System.

The wastewater from the final settling tanks flows to the chlorine contact tanks where sodium hypochlorite is added into the wastewater to destroy and kill the harmful disease-causing organisms and thereby to protect the receiving waters. Emissions from this process are controlled by the South Odor Control (STHOC) System which consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The STHOC System consist of seven (7) wet scrubbers and eighteen (18) carbon adsorbers that will discharge to one (1) large exhaust stack (SUTH1).

The total thrupt is based on the design average dry weather flow of 170 MGD.

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Process: FST is located at Building MAIN - This process is the plant final settling tanks (FST) consisting of sixteen (16) final settling tanks (FINTK) (4 Bays, 250'X74'X10.9') and the two (2) mixed liquor channels which feed the final settling tanks. The purpose of this final settling process is two fold: settle out microorganisms and activated sludge solid waste generated during the aeration process to produce a clarified effluent, and to collect the settled activated sludge for conveyance back to the aeration tanks. The two mixed liquor channels are covered and the air is vented to the North Odor Control System (NTHOC).

Emissions from this process are controlled by the South Odor Control (STHOC) System, consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The STHOC System consist of seven (7) wet scrubbers and eighteen (18) carbon adsorbers that will discharge to one (1) large exhaust stack (SUTH1).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: GHT The process consists of the plant's sludge digester gas storage process (GHT). Digester gas produced in the digester tanks will be stored in the 135,000 ft³ Wiggins Gas Holder (WGHTK) for later use at combustion units. Fugitive emissions from this tank are controlled by the South Odor Control (STHOC) System which consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The STHOC System consist of seven (7) wet scrubbers and eighteen (18) carbon adsorbers that will discharge to one (1) large exhaust stack (SUTH1)."

Process: MXL is located at Building MAIN - The process consists of the plant's mixed liquor channel process (MXL). Odors identified emitting from the mixed liquor channels are primarily caused by the aeration of the channels used to keep the mixed liquor in suspension. Emission from this process is controlled by the South Odor Control System (STHOC).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: PHW is located at Building MAIN - This process is the plant's headworks (PHW) including the plant's six (6) influent bar screens and influent channels in the plant's Main Building (MAIN). The bar screens consist of upright bars spaced one to three inches apart. The primary purpose of the bar screening is to remove large pieces of trash (rags, sticks, newspapers, cans, etc.) for the protection of the main sewage pumps and other equipment. Emissions from this process are controlled by the North Odor Control (NTHOC) System which consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration. The North Odor Control System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers, that will discharge to a common plenum that conveys the treated air to two (2) large exhaust stacks (NRTH1 and NRTH2). The maximum exhaust flow rates from NRTH1 and NRTH2 are 222,000 acfm (per stack).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: PST is located at Building MAIN - This process is the plant primary settling tanks (PST) consisting of eight (8) primary settling tanks PRITK (6 Bays, 187.5'X85.8'X11.5').

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Primary settling is a process in which the solid particles carried in raw sewage are removed by gravity under quiescent conditions in the primary settling tanks. In addition, the primary settling tanks are used to separate and remove floating materials and scum. Solids and grit collected in the tanks are removed as a thin sludge by continuous pumping. Each primary settling tank is equipped with sludge collectors, dipping weirs, scum removal equipment, inlet sluice gate overflow weirs. The PTS process is covered and the emissions are controlled by the West Odor Control (WSTOC) 2-stage odor control system consists of four (4) wet scrubbers and twelve(12) activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration.

The treated air of this system is sent to the NTHOC exhaust plenum to two (2) large exhaust stacks (NRTTH1 and NRTTH2).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: SDA is located at Building SLUDGE - This process is the plant's Sludge Anaerobic Digester (SAD) process including eight (8) sludge digestion tanks (DIGTK) each is 200,000 ft³.

After sludge gravity thickening, for making it safer for the environment, the sludge is placed in oxygen-free tanks called digesters. Digesters are heated to at least 95 deg F for between 15 - 20 days stimulating the growth of anaerobic bacteria which consume organic material in the sludge. In the digesters, sludge is converted into water, carbon dioxide and methane gas. The methane gas is often used as an energy source to operate boilers or engines. Fugitive emissions from the digester relief valve are controlled by the South Odor Control (STHOC) System which currently consists of seven (7) wet scrubbers and eighteen (18) activated carbon adsorbers to exhaust through one (1) large exhaust stack SUTH1.

The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration.

The digested sludge is pumped from these digestion tanks to the dewatering building.

Process: SST is located at Building SLUDGE - This process is the plant's Sludge Storage Tanks (SST) process including one (1) 120,000 ft³ sludge storage tank (SSTK) and the return sludge overflow boxes & wells. Emissions from this process are controlled by the South Odor Control (STHOC) System consists of seven (7) scrubbers and eighteen (18) activated carbon adsorbers.

The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet concentration.

Process: STG is located at Building SLUDGE - This process is the plant's Sludge Gravity Thickening (SGT) process including ten (10) 40,000 cu. ft sludge gravity thickener tanks SGTTK. The primary and final settling tank's sludge (approximately 99% water) is concentrated in these gravity thickening tanks. The water is sent back to the head of the plant or aeration tanks for additional treatment. Emissions from this process are controlled by the South Odor Control (STHOC) System consists of seven (7) scrubbers and eighteen (18) activated carbon adsorbers.

The wet scrubbers will use chemical to achieve design H₂S removal efficient at high H₂S concentration but could achieve adequate H₂S removal efficiency by using less or no chemical at normal low H₂S inlet

Title V/Major Source Status

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NORTH RIVER WASTEWATER TREATMENT PLANT is subject to Title V requirements. This determination is based on the following information:

Facility has potential to emit NO₂ of a major facility (TV category).

Facility is also major for HAP

Program Applicability

The following chart summarizes the applicability of NORTH RIVER WASTEWATER TREATMENT PLANT with regards to the principal air pollution regulatory programs:

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

NOTES:

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

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

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

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

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

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

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

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

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

Compliance Status

Facility is in compliance with all requirements.

SIC Codes

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

SIC Code

Description

4952

SEWERAGE SYSTEMS

SCC Codes

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

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SCC Code	Description
1-03-005-02	EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - DISTILLATE OIL 10-100MMBTU/HR **
2-02-002-04	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - NATURAL GAS Reciprocating: Cogeneration
2-02-004-01	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION LARGE BORE ENGINE Diesel
2-02-004-02	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION LARGE BORE ENGINE
2-03-007-02	Dual Fuel (Oil/Gas) INTERNAL COMBUSTION ENGINES - COMMERCIAL/INSTITUTIONAL COMMERCIAL/INSTITUTIONAL IC ENGINE - DIGESTER GAS
2-04-003-02	RECIPROCATING IC ENGINE: POTW DIGESTER GAS INTERNAL COMBUSTION ENGINES - ENGINE TESTING INTERNAL COMBUSTION ENGINE: ENGINE TESTING - TURBINE Diesel/Kerosene
2-04-004-02	INTERNAL COMBUSTION ENGINES - ENGINE TESTING INTERNAL COMBUSTION ENGINE: ENGINE TESTING - RECIPROCATING ENGINE Diesel/Kerosene
5-01-007-07	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: HEADWORKS SCREENING
5-01-007-20	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: PRIMARY SETTLING TANK
5-01-007-31	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: DIFFUSED AIR ACT SLUDGE
5-01-007-40	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: SECONDARY CLARIFIER
5-01-007-60	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: CHLORINE CONTACT TANK
5-01-007-71	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: GRAVITY SLUDGE THICKENER
5-01-007-81	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: ANAEROBIC DIGESTER
5-01-007-89	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE

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5-01-007-99	TREATMENT SLUDGE DIGESTER GAS FLARE SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT
5-03-007-89	OTHER NOT CLASSIFIED SOLID WASTE DISPOSAL - INDUSTRIAL SOLID WASTE DISPOSAL: INDUSTRIAL - LIQUID WASTE SLUDGE DIGESTER GAS FLARE

Facility Emissions Summary

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

Cas No.	Contaminant	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
000124-38-9	CARBON DIOXIDE	193517999			
0NY750-00-0	CARBON DIOXIDE EQUIVALENTS	258049641			
000630-08-0	CARBON MONOXIDE	278862			
000050-00-0	FORMALDEHYDE	5553			
000074-82-8	METHANE	7720			
010102-43-9	NITRIC OXIDE	2056			
0NY210-00-0	OXIDES OF NITROGEN	297577			
0NY075-00-0	PARTICULATES	35856			
0NY075-02-5	PM 2.5	25855			
0NY075-00-5	PM-10	35856			
007446-09-5	SULFUR DIOXIDE	24256			
0NY100-00-0	TOTAL HAP	31142			
0NY998-00-0	VOC	67140			

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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- Item A: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)**
The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.
- Item B: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(a)(4)**
Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.
- Item C: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)**
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- Item D: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)**
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- Item E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)**
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- Item F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)**
It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.
- Item G: Property Rights - 6 NYCRR 201-6.4(a)(6)**
This permit does not convey any property rights of any sort or any exclusive privilege.
- Item H: Severability - 6 NYCRR Part 201-6.4(a)(9)**
If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

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

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

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

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

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

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

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the permit for which cause to reopen exists.

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

Item K: Permit Exclusion - ECL 19-0305

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

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

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5

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

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
- (2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;
- (3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- (4) The facility owner or operator notified the Department

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within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement. item_02

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

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

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

Regulatory Analysis

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
FACILITY	ECL 19-0301	102	Powers and Duties of the Department with respect to air pollution control
1--COMB/--BLR	40CFR 60-A.4	92	General provisions - Address
1--COMB/--BLR	40CFR 60-Dc.48c(a)	93	Reporting and Recordkeeping Requirements.
1--COMB/--BLR	40CFR 60-Dc.48c(g)	94	Reporting and Recordkeeping Requirements.
1--COMB/--GNR	40CFR 60-GG	99	Stationary gas turbines over 10 million Btu per hour
FACILITY	40CFR 60-IIII	45	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
1-COGEN/--INT	40CFR 60-IIII.4205(b)	76, 77	Emission Standards - 2007 or later Emergency Non Fire



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FACILITY	40CFR 60-IIII.4206	46	Pump Stationary CI-IC Engines Displacing < 30 liters/cylinder
1-COGEN/-/INT	40CFR 60-IIII.4207(b)	78, 79	Stationary Compression Ignition IC Engines - Duration of Emission Standards
1-COGEN/-/INT	40CFR 60-IIII.4211(a)	80	Stationary Compression Ignition IC Engines - Fuel Requirements beginning October 1, 2010
FACILITY	40CFR 60-IIII.4211(c)	47	Stationary Compression Ignition Engines - Compliance Requirements
1-COGEN/-/INT	40CFR 60-IIII.4211(f)	81	Stationary Compression Ignition IC Engines - Emergency Engine Operation
FACILITY	40CFR 60-IIII.4214(b)	48	Notification, Recordkeeping Requirements - Emergency stationary CI-IC engines
1-COGEN	40CFR 60-JJJJ	59	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
1-COGEN/-/COD	40CFR 60-JJJJ.4230(a)(4)	67	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines - Applicability
1-COGEN/-/CON	40CFR 60-JJJJ.4230(a)(4)	74	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines - Applicability
1-COGEN/-/INT	40CFR 63-ZZZZ.6590(c)	82	Reciprocating Internal Combustion Engine (RICE) NESHAP - Stationary RICE subject to Regulations under 40 CFR Part 60
1-COGEN/-/INT	40CFR 63-ZZZZ.6645(f)	83	Reciprocating Internal Combustion Engine (RICE) NESHAP - Notification of complinace status
FACILITY	40CFR 68	19	Chemical accident prevention provisions
FACILITY	40CFR 82-F	20	Protection of Stratospheric Ozone -

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FACILITY	6NYCRR 200.6	1	recycling and emissions reduction
FACILITY	6NYCRR 200.7	10	Acceptable ambient air quality.
1-COGEN/-/WGB/WGBR2	6NYCRR 200.7	85	Maintenance of equipment.
1--COMB/-/FLA/WGBR1	6NYCRR 200.7	97	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	103	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	11	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	12	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2(a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	21, 22, 49, 50	Title V Permits and the Associated Permit Conditions
1-COGEN/-/COD	6NYCRR 201-6	60, 61, 62, 63, 64	Title V Permits and the Associated Permit Conditions
1-COGEN/-/CON	6NYCRR 201-6	68, 69, 70, 71	Title V Permits and the Associated Permit Conditions
1-COGEN	6NYCRR 201-6.1(a)	52, 53	Requirement for a Title V facility permit
1--COMB	6NYCRR 201-6.1(a)	86	Requirement for a Title V facility permit
FACILITY	6NYCRR 201-6.4(a)(4)	15	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	16	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4(c)(3)(ii)	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	23	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)(6)	17	Off Permit Changes
FACILITY	6NYCRR 201-7	51	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1	24, 25	Emission Testing, Sampling and

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FACILITY	6NYCRR 202-1.1	18	Analytical Determinations Required emissions tests.
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	104	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 212-1.5(e)(2)	39	Demonstrating compliance for Part 212 through the federal NESHAP program
FACILITY	6NYCRR 215.2	9	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2(h)	40	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 227.2(b)(1)	44	Particulate emissions.
FACILITY	6NYCRR 227-1.3(a)	41	Smoke Emission Limitations.
1-COGEN/-/INT	6NYCRR 227-1.3(a)	75	Smoke Emission Limitations.
1-COGEN/-/COD	6NYCRR 227-2	65	Reasonably available control technology for NOx
1-COGEN/-/CON	6NYCRR 227-2	72	Reasonably available control technology for NOx
1--COMB	6NYCRR 227-2.3(b)	87	Application requirements.
1--COMB	6NYCRR 227-2.4(c)	88	Mid-size boilers.
1--COMB/-/BLR/BLER1	6NYCRR 227-2.4(c)(1)(ii)	95	2010 NOx RACT presumptive limit.
1--COMB/-/BLR/BLER2	6NYCRR 227-2.4(d)	96	Small boilers, small combustion turbines, and small stationary internal combustion engines.
FACILITY	6NYCRR 227-2.4(f)	42, 43	Stationary internal combustion engines.
1--COMB/-/GNR	6NYCRR 227-2.4(f)	98	Stationary internal combustion engines.
1--COMB/-/PED	6NYCRR 227-2.4(f)	100	Stationary internal combustion engines.
1--COMB/-/PEG	6NYCRR 227-2.4(f)	101	Stationary internal combustion engines.
1--COMB	6NYCRR 227-2.5(c)	89, 90	Alternative RACT option.
1--COMB	6NYCRR 231-10	91	Emission Reduction Credits (ERCs)
1-COGEN/-/COD	6NYCRR 231-6	66	Mods to Existing Major Facilities in Nonattainment and Attainment Areas of the State in the OTR
1-COGEN/-/CON	6NYCRR 231-6	73	Mods to Existing

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1-COGEN/-/WGB

6NYCRR 231-6

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Attainment Areas of
the State in the OTR
Mods to Existing
Major Facilities in
Nonattainment and
Attainment Areas of
the State in the OTR

Applicability Discussion:

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

ECL 19-0301

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

6 NYCRR 200.6

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

6 NYCRR 200.7

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

6 NYCRR 201-1.4

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

6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

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

6 NYCRR 201-3.3 (a)

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

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6 NYCRR Subpart 201-6

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

6 NYCRR 201-6.4 (a) (4)

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

6 NYCRR 201-6.4 (a) (7)

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

6 NYCRR 201-6.4 (a) (8)

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

6 NYCRR 201-6.4 (c)

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

6 NYCRR 201-6.4 (c) (2)

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

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

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

6 NYCRR 201-6.4 (d) (4)

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

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semiannually.

6 NYCRR 201-6.4 (e)

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

6 NYCRR 201-6.4 (f) (6)

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

6 NYCRR 202-1.1

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

6 NYCRR 202-2.1

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

6 NYCRR 202-2.5

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

6 NYCRR 211.2

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

6 NYCRR 215.2

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

40 CFR Part 68

This Part lists the regulated substances and there applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F

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

Facility Specific Requirements

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In addition to Title V, NORTH RIVER WASTEWATER TREATMENT PLANT has been determined to be subject to the following regulations:

40 CFR 60.4

This condition lists the USEPA Region 2 address for the submittal of all communications to the "Administrator". In addition, all such communications must be copied to NYSDEC Bureau of Quality Assurance (BQA).

40 CFR 60.4205 (b)

This requirement applies to owners and operators of 2007 model year and later emergency stationary CI IC engines with a displacement less than 30 liters/cylinder that are not fire pump engines. An applicable source must comply with the emission standards for new nonroad CI engines for all pollutants (HC, PM, NOx, NMHC + NOx and CO) for the same model year and maximum engine power as per 40 CFR 60.4202.

40 CFR 60.4206

This requirement mandates that owners or operators of stationary compression ignition IC engines that achieve the emission standards as required in 40 CFR 60.4204 and 4205 maintain the engines according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

40 CFR 60.4207 (b)

These conditions states the fuel requirements for compression ignition stationary engines with a displacement of less than 30 liters per cylinder

40 CFR 60.4211 (a)

This regulation states that the owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII and must operate and maintain the stationary compression ignition internal combustion engine and control device according to the manufacturer's written instructions.

40 CFR 60.4211 (c)

The facility must comply with relavant condition of this regulations

40 CFR 60.4211 (f)

These conditions state the hour limits for emergency engines operating in nonemergency engine situations

40 CFR 60.4214 (b)

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Initial notification, reporting, and recordkeeping requirements for owners or operators of a stationary CI internal combustion engine.

40 CFR 60.4230 (a) (4) (i)

Owners and operators of stationary spark ignited internal combustion engines (SI ICE), that commence construction after June 12, 2006, where the stationary SI ICE are manufactured on or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP) are subject to the requirements of 40 CFR 60 Subpart JJJJ.

40 CFR 60.48c (a)

This regulation requires the owner and operator of each affected facility to submit notification of the date of construction or reconstruction, anticipated startup, and actual startup of the facility. The notification must include the following information:

- (1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- (2) If applicable, a copy of any Federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c., or 40 CFR 60.43c.
- (3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

40 CFR 60.48c (g)

The owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each day.

40 CFR 63.6590 (c)

This regulation states that an affected source that is a new or reconstructed stationary RICE located at an area source must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for spark ignition engines.

40 CFR 63.6645 (f)

This regulation requires the facility to submit its initial notification in the format specified in 40 CFR 63 Subpart A.

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40 CFR Part 60, Subpart GG

Facility should comply with this regulation.

40 CFR Part 60, Subpart IIII

Facility should comply with this regulation.

40 CFR Part 60, Subpart JJJJ

Facility should comply with this regulation.

6 NYCRR 201-6.1 (a)

This regulation requires the following stationary sources to obtain a Title V permit:

1. Any major stationary source;
2. Any stationary source subject to a New Source Performance Standard (NSPS) in 40 CFR 60;
3. Any stationary source regulating hazardous air pollutants (HAP's);
4. Any affected source (subject to the Acid Rain requirements under Title IV of the Act);
5. Any stationary source in a category designated by the EPA or the department as per rulemaking.

6 NYCRR 211.1

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

6 NYCRR 212-1.5 (e) (2)

A process emission source subject to the Federal National Emission Standards for Hazardous Air Pollutants (NESHAP) satisfies the requirements of Part 212 for the respective air contaminant regulated by the Federal standard.

However, NESHAPs regulating High Toxicity Air Contaminants (HTACs) must provide evidence that the maximum offsite ambient air concentration is less than the AGC/SGC and that emissions are less than the PB trigger for the respective air contaminant.

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6 NYCRR 225-1.2 (h)

Sulfur-in-fuel limitation for the firing of distillate oil on or after July 1, 2016.

6 NYCRR 227.2 (b) (1)

This regulation is from the 1972 version of Part 227 and still remains as part of New York's SIP. The rule establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for any oil fired stationary combustion installation.

6 NYCRR 227-1.3 (a)

This regulation prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.

6 NYCRR 227-2.3 (b)

Deadline for application/information submission.

6 NYCRR 227-2.4 (c)

Emission limits for mid-size boilers.

6 NYCRR 227-2.4 (c) (1) (ii)

Future NOx RACT presumptive limit effective 7/1/14.

6 NYCRR 227-2.4 (d)

This section includes NOx RACT requirements for small boilers, small combustion turbines, and small stationary internal combustion engines.

6 NYCRR 227-2.4 (f)

NOx RACT emission limits for stationary internal combustion engines.

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6 NYCRR 227-2.5 (c)

This provision allows the owner or operator to demonstrate that the applicable presumptive RACT emission limit in section 227-2.4 of this Subpart is not economically or technically feasible. Based on this determination the Department is allowed to set a higher emission source specific emission limit.

6 NYCRR Subpart 201-7

Capping exist for this facility under 231

6 NYCRR Subpart 202-1

This subpart of Part 202 establishes the general criteria for verifying emissions by means of emissions sampling, testing and associated analytical determinations.

6 NYCRR Subpart 227-2

This regulation limits the emission of oxides of nitrogen (NOx) from stationary combustion installations (boilers, combustion turbines and internal combustion engines).

6 NYCRR Subpart 231-10

This subpart outlines the procedures used to create and use emission reduction credits (ERCs).

6 NYCRR Subpart 231-6

This Subpart applies to modifications to existing major facilities in non-attainment areas and attainment areas of the State within the OTR.

Compliance Certification

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Summary of monitoring activities at NORTH RIVER WASTEWATER TREATMENT PLANT:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
1--COMB/--BLR	93	record keeping/maintenance procedures
1--COMB/--BLR	94	record keeping/maintenance procedures
1--COMB/--GNR	99	record keeping/maintenance procedures
1-COGEN/--INT	76	record keeping/maintenance procedures
1-COGEN/--INT	77	record keeping/maintenance procedures
1-COGEN/--INT	78	work practice involving specific operations
1-COGEN/--INT	79	work practice involving specific operations
1-COGEN/--INT	80	record keeping/maintenance procedures
FACILITY	47	record keeping/maintenance procedures
1-COGEN/--INT	81	monitoring of process or control device parameters as surrogate
FACILITY	48	record keeping/maintenance procedures
1-COGEN	59	record keeping/maintenance procedures
1-COGEN/--INT	83	record keeping/maintenance procedures
1-COGEN/--WGB/WGBR2	85	record keeping/maintenance procedures
1--COMB/--FLA/WGBR1	97	monitoring of process or control device parameters as surrogate
FACILITY	22	record keeping/maintenance procedures
1-COGEN/--COD	60	record keeping/maintenance procedures
1-COGEN/--COD	61	record keeping/maintenance procedures
1-COGEN/--COD	62	record keeping/maintenance procedures
1-COGEN/--COD	63	intermittent emission testing
1-COGEN/--COD	64	intermittent emission testing
1-COGEN/--CON	68	record keeping/maintenance procedures
1-COGEN/--CON	69	record keeping/maintenance procedures
1-COGEN/--CON	70	intermittent emission testing
1-COGEN/--CON	71	intermittent emission testing
1-COGEN	52	record keeping/maintenance procedures
1-COGEN	53	record keeping/maintenance procedures
1--COMB	86	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
1-COGEN	54	work practice involving specific operations
1-COGEN	55	work practice involving specific operations
1-COGEN	56	work practice involving specific operations
1-COGEN	57	work practice involving specific operations
1-COGEN	58	work practice involving specific operations
FACILITY	24	record keeping/maintenance procedures
FACILITY	25	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	27	record keeping/maintenance procedures
FACILITY	28	record keeping/maintenance procedures
FACILITY	29	record keeping/maintenance procedures
FACILITY	30	record keeping/maintenance procedures
FACILITY	31	record keeping/maintenance procedures
FACILITY	32	record keeping/maintenance procedures
FACILITY	33	record keeping/maintenance procedures
FACILITY	34	record keeping/maintenance procedures
FACILITY	35	record keeping/maintenance procedures
FACILITY	36	record keeping/maintenance procedures
FACILITY	37	record keeping/maintenance procedures
FACILITY	38	record keeping/maintenance procedures
FACILITY	39	record keeping/maintenance procedures
FACILITY	40	monitoring of process or control device parameters as surrogate
FACILITY	44	intermittent emission testing
FACILITY	41	record keeping/maintenance procedures

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1-COGEN/-/INT	75	monitoring of process or control device parameters as surrogate
1-COGEN/-/COD	65	intermittent emission testing
1-COGEN/-/CON	72	intermittent emission testing
1--COMB	87	record keeping/maintenance procedures
1--COMB	88	record keeping/maintenance procedures
1--COMB/-/BLR/BLER1	95	intermittent emission testing
1--COMB/-/BLR/BLER2	96	record keeping/maintenance procedures
FACILITY	42	record keeping/maintenance procedures
FACILITY	43	record keeping/maintenance procedures
1--COMB/-/GNR	98	intermittent emission testing
1--COMB/-/PED	100	intermittent emission testing
1--COMB/-/PEG	101	intermittent emission testing
1--COMB	89	record keeping/maintenance procedures
1--COMB	90	record keeping/maintenance procedures
1--COMB	91	record keeping/maintenance procedures
1-COGEN/-/COD	66	record keeping/maintenance procedures
1-COGEN/-/CON	73	record keeping/maintenance procedures
1-COGEN/-/WGB	84	record keeping/maintenance procedures

Basis for Monitoring

Facility has to monitor for the following contaminants as per relevant regulations.

225: fuel in sulfur

227: PM 10 and Opacity

227: NO_x

211/212: H₂S/Odor

DEP had performed a plant-wide Air Guide 1 Analysis including both the plant's combustion and process sources, and the report submitted to DEC 6/25/2014.

6 NYCRR Part 231 defines "PM10" and "PM2.5" as the sum of the filterable and condensable fractions of PM10 and PM2.5, respectively. The limits on PM10 and PM2.5 emissions for emission unit EU:1-COGEN include condensable PM10 and PM2.5; Facility will conduct its performance tests for both condensable and filterable PM10 and PM2.5; account for both condensable and filterable PM10 and PM2.5 when determining compliance with the permit limits on PM10 and PM2.5 emissions for EU:1- COGEN.

Formaldehyde emissions be included in the calculations of VOC emissions.

Facility is subject to the following federal regulations: NSPS 2G (2 existing turbine generators), 4J (Stationary spark ignition internal combustion engines, Cogen engines). Facility will not be subject to 4I (compression ignited internal combustion engines (interim engine generators, not plan to install now), NESHAP 3V, NESHAP 4Z, NESHAP 5D (all blower engines ceased operation since Jan 2018 and currently not a major source of HAP, NESHAP for major HAP source not applicable).

Existing Pump Engines: Delaval Transamerican R 46 1700 bhp

Existing Blower Engines: Mirrlees Blackstone K5 940 bhp. All blowers engines removed as of Jan 2018

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12/24/2019

DEP had performed a plant-wide Air Guide 1 Analysis including both the plant's combustion and process sources, and the report submitted to DEC 6/25/2014.

6 NYCRR Part 231 defines "PM10" and "PM2.5" as the sum of the filterable and condensable fractions of PM10 and PM2.5, respectively. The limits on PM10 and PM2.5 emissions for emission unit EU:1-COGEN include condensable PM10 and PM2.5; Facility will conduct its performance tests for both condensable and filterable PM10 and PM2.5; account for both condensable and filterable PM10 and PM2.5 when determining compliance with the permit limits on PM10 and PM2.5 emissions for EU:1- COGEN.

Formaldehyde emissions be included in the calculations of VOC emissions.

Facility is subject to the following federal regulations: NSPS 2G (2 existing turbine generators), 4J (Stationary spark ignition internal combustion engines, Cogen engines). Facility will not be subject to 4I (compression ignited internal combustion engines (interim engine generators, not plan to install now), NESHAP 3V, NESHAP 4Z, NESHAP 5D (all blower engines ceased operation since Jan 2018 and currently not a major source of HAP, NESHAP for major HAP source not applicable).

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