



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 2-6202-00007/00015
Effective Date:

Expiration Date:

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.



New York State Department of Environmental Conservation

Facility DEC ID: 2620200007

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.

- 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: ____ / ____ / ____



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.



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

- Facility Inspection by the Department
- Relationship of this Permit to Other Department Orders and Determinations
- Applications for permit renewals, modifications and transfers
- Permit modifications, suspensions or revocations by the Department

Facility Level

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



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.

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: NYC DEPT OF ENVIRONMENTAL PROTECTION
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

Permit Effective Date:

Permit Expiration Date:



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 2 6 NYCRR 201-6.4 (a) (7): Fees
- 3 6 NYCRR 201-6.4 (c): Recordkeeping and Reporting of Compliance Monitoring
- 4 6 NYCRR 201-6.4 (c) (2): Records of Monitoring, Sampling, and Measurement
- 5 6 NYCRR 201-6.4 (c) (3) (ii): Compliance Certification
- 6 6 NYCRR 201-6.4 (e): Compliance Certification
- 7 6 NYCRR 202-2.1: Compliance Certification
- 8 6 NYCRR 202-2.5: Recordkeeping requirements
- 9 6 NYCRR 215.2: Open Fires - Prohibitions
- 10 6 NYCRR 200.7: Maintenance of Equipment
- 11 6 NYCRR 201-1.7: Recycling and Salvage
- 12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 13 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
- 14 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
- 15 6 NYCRR 201-6.4 (a) (4): Requirement to Provide Information
- 16 6 NYCRR 201-6.4 (a) (8): Right to Inspect
- 17 6 NYCRR 201-6.4 (f) (6): Off Permit Changes
- 18 6 NYCRR 202-1.1: Required Emissions Tests
- 19 40 CFR Part 68: Accidental release provisions.
- 20 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 21 6 NYCRR Subpart 201-6: Emission Unit Definition
- 22 6 NYCRR Subpart 201-6: Compliance Certification
- 23 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
- 24 6 NYCRR Subpart 202-1: Compliance Certification
- 25 6 NYCRR Subpart 202-1: Compliance Certification
- 26 6 NYCRR 211.1: Air pollution prohibited
- 27 6 NYCRR 212-1.5 (e) (2): Compliance Certification
- 28 6 NYCRR 225-1.2 (h): Compliance Certification
- 29 6 NYCRR 227-1.3 (a): Compliance Certification
- 30 6 NYCRR 227-2.4 (f): Compliance Certification
- 31 6 NYCRR 227-2.4 (f): Compliance Certification
- 32 6 NYCRR 227.2 (b) (1): Compliance Certification
- 33 40CFR 60, NSPS Subpart IIII: Applicability
- 34 40CFR 60.4206, NSPS Subpart IIII: Duration of emission standards for new stationary compression ignition IC engines
- 35 40CFR 60.4211(c), NSPS Subpart IIII: Compliance Certification
- 36 40CFR 60.4214(b), NSPS Subpart IIII: Compliance Certification
- 37 40CFR 63, Subpart DDDDD: Applicability
- 38 40CFR 63, Subpart ZZZZ: Applicability

Emission Unit Level

- 39 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 40 6 NYCRR Subpart 201-6: Process Definition By Emission Unit
- 41 6 NYCRR Subpart 201-7: Emission Unit Permissible Emissions



EU=1-COGEN

- *42 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *43 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *44 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *45 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *46 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 47 6 NYCRR 227-1.3 (a): Compliance Certification

EU=1-COGEN

- 48 40CFR 60, NSPS Subpart JJJJ: Compliance Certification

EU=1-COGEN,Proc=COD

- 49 6 NYCRR Subpart 201-6: Compliance Certification
- 50 6 NYCRR Subpart 201-6: Compliance Certification
- 51 6 NYCRR Subpart 201-6: Compliance Certification
- 52 6 NYCRR Subpart 201-6: Compliance Certification
- 53 6 NYCRR Subpart 201-6: Compliance Certification
- 54 6 NYCRR Subpart 227-2: Compliance Certification
- 55 40CFR 60.4230(a)(4)(i), NSPS Subpart JJJJ: Applicability of facilities subject to Subpart JJJJ

EU=1-COGEN,Proc=CON

- 56 6 NYCRR Subpart 201-6: Compliance Certification
- 57 6 NYCRR Subpart 201-6: Compliance Certification
- 58 6 NYCRR Subpart 201-6: Compliance Certification
- 59 6 NYCRR Subpart 201-6: Compliance Certification
- 60 6 NYCRR Subpart 227-2: Compliance Certification
- 61 40CFR 60.4230(a)(4)(i), NSPS Subpart JJJJ: Applicability of facilities subject to Subpart JJJJ

EU=1-COGEN,Proc=INT

- 62 40CFR 60.4205(b), NSPS Subpart IIII: Compliance Certification
- 63 40CFR 60.4207(b), NSPS Subpart IIII: Compliance Certification
- 64 40CFR 60.4207(b), NSPS Subpart IIII: Compliance Certification
- 65 40CFR 60.4211(a), NSPS Subpart IIII: Compliance Certification
- 66 40CFR 60.4211(f), NSPS Subpart IIII: Compliance Certification
- 67 40CFR 60.4211(f), NSPS Subpart IIII: Compliance Certification

EU=1--COMB

- 68 6 NYCRR 227-2.3 (b): Compliance Certification
- 69 6 NYCRR 227-2.4 (c): Compliance Certification
- 70 6 NYCRR 227-2.5 (c): Compliance Certification
- 71 6 NYCRR Subpart 231-10: Compliance Certification

EU=1--COMB,Proc=BED

- 72 6 NYCRR 227-2.4 (f): Compliance Certification

EU=1--COMB,Proc=BEG

- 73 6 NYCRR 227-2.4 (f): Compliance Certification
- 74 6 NYCRR 227-2.4 (f): Compliance Certification



EU=1--COMB,Proc=BLR

- 75 40CFR 60.4, NSPS Subpart A: EPA Region 2 address.
- 76 40CFR 60.48c(a), NSPS Subpart Dc: Compliance Certification
- 77 40CFR 60.48c(g), NSPS Subpart Dc: Compliance Certification
- 78 6 NYCRR 227-2.4 (c) (1) (ii): Compliance Certification

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

- 79 6 NYCRR 227-2.4 (d): Compliance Certification

EU=1--COMB,Proc=GNR

- 80 6 NYCRR 227-2.4 (f): Compliance Certification
- 81 40CFR 60, NSPS Subpart GG: Compliance Certification

EU=1--COMB,Proc=PED

- 82 6 NYCRR 227-2.4 (f): Compliance Certification

EU=1--COMB,Proc=PEG

- 83 6 NYCRR 227-2.4 (f): Compliance Certification
- 84 6 NYCRR 227-1.3 (a): Compliance Certification

EU=2--WWTRE

- 85 6 NYCRR 212-1.1 (a) (1): Applicability - Issuance of new or modified permit or Registration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 86 ECL 19-0301: Contaminant List
- 87 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 88 6 NYCRR 211.2: Visible Emissions Limited
- 89 6 NYCRR 211.2: Compliance Demonstration
- 90 6 NYCRR 211.2: Compliance Demonstration
- 91 6 NYCRR 211.2: Compliance Demonstration
- 92 6 NYCRR 211.2: Compliance Demonstration
- 93 6 NYCRR 211.2: Compliance Demonstration
- 94 6 NYCRR 211.2: Compliance Demonstration
- 95 6 NYCRR 211.2: Compliance Demonstration
- 96 6 NYCRR 211.2: Compliance Demonstration
- 97 6 NYCRR 211.2: Compliance Demonstration
- 98 6 NYCRR 211.2: Compliance Demonstration
- 99 6 NYCRR 211.2: Compliance Demonstration
- 100 6 NYCRR 211.2: Compliance Demonstration

NOTE: * preceding the condition number indicates capping.



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 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.

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



contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Condition 2: Fees
Effective for entire length of Permit

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 for entire length of Permit

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

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 for entire length of Permit

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 for entire length of Permit**

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 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 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.

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

**Condition 6: Compliance Certification
Effective for entire length of Permit**

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

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 – Stationary Source Compliance Section
USEPA Region 2
Air Compliance Branch
290 Broadway
New York, NY 10007-1866

The address for the RAPCE is as follows:

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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 7/30/2019.
Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective for entire length of Permit

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 for entire length of Permit

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 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 for entire length of Permit



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.
- (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**

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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 for entire length of Permit

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 for entire length of Permit

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 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.

Three (3) 31.4 mmBtu/hr and one (1) 8.4 mmBtu/hr York-Shibley 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.

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
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 for entire length of Permit



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 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.

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

**Condition 23: Progress Reports Due Semiannually
Effective for entire length of Permit**

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 for entire length of Permit**

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:

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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.

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

Condition 25: Compliance Certification
Effective for entire length of Permit

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.

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

Condition 26: Air pollution prohibited
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR 211.1

Item 26.1:

No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.



Condition 27: Compliance Certification
Effective for entire length of Permit

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

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.

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

Condition 28: Compliance Certification
Effective for entire length of Permit

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

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: 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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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.

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

**Condition 29: Compliance Certification
Effective for entire length of Permit**

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

Item 29.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

Item 29.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Condition 30: Compliance Certification
Effective for entire length of Permit

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

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:

DEP is currently installing five (5) new 3.37 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 (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. 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 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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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

Condition 31: Compliance Certification
Effective for entire length of Permit

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

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:

To ensure that all the combustions units run at optimum conditions and stays in compliance with the NOx 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.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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.

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

Condition 37: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63, Subpart DDDDD

Item 37.1:

Facilities that are major sources of HAP with industrial, commercial, or institutional boilers and/or process heaters must comply with applicable portions of 40 CFR 63 DDDDD.

Condition 38: Applicability
Effective for entire length of Permit

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 38.1:

Facilities that have reciprocating internal combustion engines must comply with applicable portions of 40 CFR 63 subpart ZZZZ.

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

Condition 39: Emission Point Definition By Emission Unit
Effective for entire length of Permit



Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 39.1:

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

Emission Unit:	1-COGEN		
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 39.2:

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		

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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	
	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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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
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 39.3:

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

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 40.1:

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

Item 40.2:

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 40.3:

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 40.4:

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) 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 Source/Control: WGBR2 - Process

Design Capacity: 1,510 cubic feet per minute (standard conditions)

Item 40.5:

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

Emission Unit: 1--COMB

Process: BED

Source Classification Code: 2-02-004-01

Process Description:

This process includes operation of the five (5) blower engines in the Main Building (MAIN) on backup #2 fuel oil. These blower engines are directly connected to blowers providing process air for wastewater treatment aeration tanks.

These five (5) Mirrlees-Blackstone K5 engines BENG1, BENG2, BENG3, BENG4 and BENG5 are each rated 940 HP and exhaust through their own exhaust stacks ENGB1, ENGB2, ENGB3, ENGB4 and ENGB5, respectively.

The plant is removing existing equipment and replacing with new equipment.

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



As of June 2018, all blower engines have been removed from the facility, so this process is not in existence.

Emission Source/Control: BENG1 - Combustion
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG2 - Combustion
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG3 - Combustion
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG4 - Combustion
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG5 - Combustion
Design Capacity: 940 horsepower (mechanical)

Item 40.6:

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

Emission Unit: 1--COMB

Process: BEG

Source Classification Code: 2-02-004-02

Process Description:

This process includes operation of the five (5) blower engines in the Main Building (MAIN) on primary gaseous fuel (sludge digester gas or natural gas, or blend) with #2 fuel oil pilot. These blower engines are directly connected to blowers providing process air for wastewater treatment aeration tanks.

These five (5) Mirrlees-Blackstone K5 engines BENG1, BENG2, BENG3, BENG4 and BENG5 are each rated 940 HP and exhaust through their own exhaust stacks ENGB1, ENGB2, ENGB3, ENGB4 and ENGB5, respectively.

The plant is removing existing equipment and replacing with new equipment.

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

As of June 2018, all blower engines have been removed from the facility, so this process is not in existence.

Emission Source/Control: BENG1 - Combustion
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG2 - Combustion

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG3 - Combustion
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG4 - Combustion
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG5 - Combustion
Design Capacity: 940 horsepower (mechanical)

Item 40.7:

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
Design Capacity: 31.4 million Btu per hour

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



Item 40.8:

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 40.9:

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.



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 40.10:

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

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

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.

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 40.11:

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.

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 40.12:

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 40.13:

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 40.14:



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 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 40.15:

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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 40.16:

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 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 40.17:

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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 40.18:

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

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 (NRTH1 and NRTH2).

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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 40.19:

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 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 40.20:

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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 42: Capping Monitoring Condition
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 42.1:

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 42.2:

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

Item 42.3:

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 42.4:

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 42.5:

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 42.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

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

Item 42.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The facility is proposing an annual 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:

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

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 306.72 lbs/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 = 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 378.89 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= NOx emission factor from the waste gas burner firing digester gas, as certified by the manufacturer of 41.40 lbs/mmcf, based on a digester gas HHV of 690 mmBtu/mmcf;

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

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.

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

Condition 43: Capping Monitoring Condition
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 43.1:

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 43.2:

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

Item 43.3:

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 43.4:

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 43.5:

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 43.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

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

Item 43.7:

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:

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

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 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.

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.

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

**Condition 44: Capping Monitoring Condition
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 44.1:

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 44.2:

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

Item 44.3:

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 44.4:

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 44.5:

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 44.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 44.7:

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:

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

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 56.53 lbs/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 = VOC emission factor from the cogeneration engines firing natural gas in lbs/mmcf based on the most recent stack test. An emission factor of 69.83 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= VOC emission factor from the waste gas burner firing digester gas, as certified by the manufacturer of 55.2 lbs/mmcf, based on a digester gas HHV of 690 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.

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.

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

**Condition 45: Capping Monitoring Condition
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 45.1:

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 45.2:

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

Item 45.3:

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 45.4:



New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007

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 45.5:

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 45.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

CAS No: 0NY075-02-5 PM 2.5

Item 45.7:

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:

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

Where:

A = PM2.5 emission factor from the cogeneration engines firing digester gas in lbs/mmcf based on the most recent stack test. An emission factor of 19.40 lbs/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 = PM2.5 emission factor from the cogeneration engines firing natural gas in lbs/mmcf based on the most recent stack test. An emission factor of 23.97 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= PM2.5 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.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

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.

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

**Condition 46: Capping Monitoring Condition
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 46.1:

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 46.2:

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

Item 46.3:

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 46.4:

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 46.5:

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 46.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 46.7:

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:

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

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 221.92 lbs/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 = CO emission factor from the cogeneration engines firing natural gas in lbs/mmcf based on the most recent stack test. An emission factor of 274.14 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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



cogeneration engines in mmcf/yr;
E= CO emission factor from the waste gas burner firing digester gas, as certified by the manufacturer of 207 lbs/mmcf, based on a digester gas HHV of 690 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;
H= 12-month rolling total fuel oil consumed in the interim emergency engines in 1000 gallons/yr.

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.

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

Condition 47: Compliance Certification
Effective for entire length of Permit

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

Item 47.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

Emission Unit: 1--COMB
Process: BLR

Emission Unit: 1--COMB
Process: FLA

Emission Unit: 1--COMB
Process: GNR

Emission Unit: 1--COMB
Process: PED

Emission Unit: 1--COMB
Process: PEG

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Item 47.2:

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

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: EPA Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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



Condition 48: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 40 CFR 60, NSPS Subpart JJJJ

Item 48.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Item 48.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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.

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 49: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 49.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: COD

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Item 49.2:

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.

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.

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

**Condition 50: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 50.1:

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 50.2:

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 either solely digester gas or a blend of digester gas and natural gas to determine the PM2.5 emission factor for compliance with 6 NYCRR Part 231, New

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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.

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

**Condition 51: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 51.1:

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 51.2:

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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

Condition 52: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 52.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: COD

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

Item 52.2:

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.

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



Condition 53: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 53.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: COD

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

Item 53.2:

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.

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.

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

Condition 54: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 227-2

Item 54.1:

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: COD

Regulated Contaminant(s):

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

Item 54.2:

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 NO_x emission test for the cogeneration engines while utilizing either solely digester gas or a blend of digester gas and natural gas to determine the NO_x emission factor for compliance with 6 NYCRR Part 227-2, NO_x 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.

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

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.

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

**Condition 55: Applicability of facilities subject to Subpart JJJJ
Effective for entire length of Permit**

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

Item 55.1:

This Condition applies to Emission Unit: 1-COGEN

Process: COD

Item 55.2: 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 56: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 56.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: CON

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

Item 56.2:

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 solely 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.

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



Condition 57: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 57.1:

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 57.2:

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

Condition 58: Compliance Certification
Effective for entire length of Permit

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 58.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Process: CON

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 58.2:

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.

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.

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.

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

**Condition 59: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 59.1:

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 59.2:

Compliance Certification shall include the following monitoring:

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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.

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

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.

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

**Condition 60: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement: 6 NYCRR Subpart 227-2

Item 60.1:

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 60.2:

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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.

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

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.

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

**Condition 61: Applicability of facilities subject to Subpart JJJJ
Effective for entire length of Permit**

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

Item 61.1:

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

Item 61.2: 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 62: Compliance Certification
Effective for entire length of Permit**

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

Item 62.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Process: INT

Item 62.2:

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.

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

**Condition 63: Compliance Certification
Effective for entire length of Permit**

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

Item 63.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 63.2:

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

Condition 64: Compliance Certification
Effective for entire length of Permit

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

Item 64.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: INT

Item 64.2:

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 III 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 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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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.

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

**Condition 65: Compliance Certification
Effective for entire length of Permit**

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

Item 65.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 65.2:

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 IIII 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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
Subsequent reports are due every 6 calendar month(s).

Condition 66: Compliance Certification
Effective for entire length of Permit

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

Item 66.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: INT

Item 66.2:

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 any combination of the purposes specified in paragraphs (i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year. There is no time limit on the use of emergency stationary ICE in emergency situations.

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in



the NERC Reliability Standard EOP- 002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

Parameter Monitored: HOURS OF OPERATION

Upper Permit Limit: 100 hours per year

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 67: Compliance Certification
Effective for entire length of Permit

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

Item 67.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 67.2:

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.

(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.

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

**Condition 68: Compliance Certification
Effective for entire length of Permit**

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

Item 68.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Regulated Contaminant(s):

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

Item 68.2:

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.

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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.

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

Condition 69: Compliance Certification
Effective for entire length of Permit

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

Item 69.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Regulated Contaminant(s):

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

Item 69.2:

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.

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

Condition 70: Compliance Certification
Effective for entire length of Permit

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

Item 70.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Regulated Contaminant(s):

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

Item 70.2:

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.

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

**Condition 71: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:6 NYCRR Subpart 231-10

Item 71.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Regulated Contaminant(s):

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

Item 71.2:

Compliance Certification shall include the following monitoring:

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 NO_x.

Nox emission reductions from permanent shutdown is 134.90 tpy. Of these, 119.67 tpy of NO_x ERC is being used to internally offset the NO_x 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.

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

Condition 72: Compliance Certification
Effective for entire length of Permit

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

Item 72.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB
Process: BED

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:

As per NYC DEP's variance request for NO_x RACT limit in their compliance plan dated June 29, 2004, until NYCDEP finds a feasible control technology or an alternate option to meet the NO_x RACT limit for their engines, the NO_x emissions verified during the stack test on 7/2007 shall be set forth as the alternative emission permit limit for each engine. NYCDEP is in process of removing old engines and installing new engines.

Alternative emission limit for the 5 blower engines, when burning diesel fuel, must not be greater than 8.6



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.

NYCDEP informed NYSDEC (6/2018) that all 5 blower engines have been removed. Process not in existence.

Upper Permit Limit: 8.6 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.

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

**Condition 73: Compliance Certification
Effective for entire length of Permit**

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

Item 73.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: BEG

Regulated Contaminant(s):

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

Item 73.2:

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.

Current PM program includes, 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. 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.

NYCDEP informed NYSDEC (6/2018) that all 5 blower engines have been removed. Process not in existence.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

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

Condition 74: Compliance Certification
Effective for entire length of Permit

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

Item 74.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: BEG

Regulated Contaminant(s):

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

Item 74.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

As per NYC DEP's variance request for NO_x RACT limit in their compliance plan dated June 29, 2004, until NYCDEP finds a feasible control technology or an alternate option to meet the NO_x RACT limit for their engines, the NO_x emissions verified during the most recent stack test on 6/2000 shall be set forth as the alternative emission permit limit for each engine.

Alternative emission limit for the 5 blower engines, when burning dual fuel (Digester Gas and/or natural gas and/or Diesel Oil) must not be greater than 3.93 grams/bhp-hr.

Stack testing once during the permit term is required to demonstrate compliance with the permit limit. Stack test protocol must be send to Department for approval prior to testing.

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



NYCDEP informed NYSDEC (6/2018) that all 5 blower engines have been removed. Process not in existence.

Upper Permit Limit: 3.93 grams per brake horsepower-hour
Reference Test Method: EPA Approved
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.
Subsequent reports are due every 6 calendar month(s).

**Condition 75: EPA Region 2 address.
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 60.4, NSPS Subpart A

Item 75.1:

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

Item 75.2:

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
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 76: Compliance Certification
Effective for entire length of Permit**

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

Item 76.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Emission Unit: 1--COMB
Process: BLR

Item 76.2:

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

Condition 77: Compliance Certification
Effective for entire length of Permit

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

Item 77.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB
Process: BLR

Item 77.2:

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.



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

Condition 79: Compliance Certification
Effective for entire length of Permit

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

Item 79.1:

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 79.2:

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)
Reports due 30 days after the reporting period.
Subsequent reports are due every 12 calendar month(s).

Condition 80: Compliance Certification
Effective for entire length of Permit

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

Item 80.1:

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 80.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Monitoring Description:

The two emergency turbine generators are to be removed with this permit modification. 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.

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.

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

**Condition 81: Compliance Certification
Effective for entire length of Permit**

Applicable Federal Requirement:40CFR 60, NSPS Subpart GG

Item 81.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: GNR

Item 81.2:

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 NOx and SOx 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 NOx and SOx 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 NOx and SOx limits (except the maximum achievable load of the turbine generator #1 exceeded the NOx 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 3.37 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 (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. 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.

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.

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

Condition 82: Compliance Certification
Effective for entire length of Permit

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

Item 82.1:

The Compliance Certification activity will be performed for:

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Emission Unit: 1--COMB
Process: PED

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

Item 82.2:

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 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 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.

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

Condition 83: Compliance Certification
Effective for entire length of Permit

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

Item 83.1:

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 83.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The five pump engines are being removed with this permit

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Emission Unit: 1--COMB	Emission Point: ENGP2
Emission Unit: 1--COMB	Emission Point: ENGP3
Emission Unit: 1--COMB	Emission Point: ENGP4
Emission Unit: 1--COMB	Emission Point: ENGP5
Emission Unit: 1--COMB	Emission Point: FLARE
Emission Unit: 1--COMB	Emission Point: MBLR1
Emission Unit: 1--COMB	Emission Point: MBLR2
Emission Unit: 1--COMB	Emission Point: MBLR3

Item 84.2:

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

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

Condition 85: Applicability - Issuance of new or modified permit or Registration
Effective for entire length of Permit

Applicable Federal Requirement: 6 NYCRR 212-1.1 (a) (1)

Item 85.1:

This Condition applies to:

Emission Unit: 1-COGEN

Emission Unit: 1-COMB

Item 85.1:

This Condition applies to Emission Unit: 2-WWTRE

Item 85.2.3:

Part 212 applies to process emission sources and/or emission points associated with a process operation, unless excepted from the provision of this Part pursuant to Section 212-1.4 of this Subpart:

(1) upon issuance of a new or modified permit or registration for a facility containing process emission sources and/or emission points.



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.

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 86: Contaminant List
Effective for entire length of Permit**

Applicable State Requirement:ECL 19-0301

Item 86.1:

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 87: Malfunctions and start-up/shutdown activities
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR 201-1.4

Item 87.1:

(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 88: Visible Emissions Limited
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR 211.2



Item 88.1:

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 89: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.2

Item 89.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 89.2:

Compliance Demonstration 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 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.

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

Condition 90: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.2

Item 90.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 90.2:

Compliance Demonstration 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 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.

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Condition 91: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.2

Item 91.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 91.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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.

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

Condition 92: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.2

Item 92.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 92.2:

Compliance Demonstration 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.

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

Condition 93: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.2

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Item 93.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 93.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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.

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

**Condition 94: Compliance Demonstration
Effective for entire length of Permit**

Applicable State Requirement:6 NYCRR 211.2

Item 94.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 94.2:

Compliance Demonstration 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.

New York State Department of Environmental Conservation

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

Condition 95: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.2

Item 95.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 95.2:

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

Condition 96: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.2

Item 96.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 96.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

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.

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.

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

Condition 97: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.2

Item 97.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 97.2:

Compliance Demonstration 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.

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

Condition 98: Compliance Demonstration
Effective for entire length of Permit

Applicable State Requirement:6 NYCRR 211.2

Item 98.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 98.2:

Compliance Demonstration 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



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)

Reports due 30 days after the reporting period.

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