



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 2-6202-00007/00015
Mod 0 Effective Date: 12/20/2012 Expiration Date: 12/19/2017
Mod 1 Effective Date: 11/29/2011 Expiration Date: No expiration date.
Mod 2 Effective Date: 10/17/2014 Expiration Date: 12/19/2017

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

Contact: NYC DEPT OF ENVIRONMENTAL PROTECTION
96-05 HORACE HARDING EXPWY 5TH FL
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:

This is a permit modification application for the North River WWTP Part 201 Title V permit to do the following:

1. Shut-down the plant's existing five (5) 1,700 brake horsepower (bhp) Enterprise model DGSR-46 pump engines and five (5) 940 bhp Mirrlees Blackstone KP5 Major blower engines. These 10 existing tri-fuel engines are to be removed from Emission Unit 1--COMB.
2. Install five (5) new 3.37 megawatt (MW) spark ignition reciprocating internal combustion engine generators that will be interconnected with the Con Edison electrical supply. 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 anaerobic digester gas will be pretreated to remove siloxanes, sulfur, and moisture prior to being sent to the engines to improve engine and catalyst performance. 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. The new cogeneration engines are to be permitted under a new Emission Unit 1-COGEN.



3. Install a 10.3 mmBtu/hr thermal oxidizer used to exhaust the waste gas from the pretreatment system. The thermal oxidizer will exhaust out one of the existing blower engine stacks with physical stack parameters such as location, height, and diameter remaining unchanged. The new thermal oxidizer is to be permitted with the new cogeneration engines under emission unit 1-COGEN.
4. Remove the plant's two existing emergency turbine generators from Emission Unit 1--COMB.
5. Install four (4) new 2 MW interim diesel emergency generators for use during the construction period to provide back-up power to the plant during emergencies. Once the cogeneration plant is installed and operating, these four emergency generators will be removed. The emergency generators are to be permitted with the new cogeneration engines and the thermal oxidizer under Emission Unit 1-COGEN.
6. Create emission reduction credits (ERCs) from the shut-down of the existing pump and blower engines.
7. Remove facility requirements to have continuous opacity monitors installed. With the shut-down and removal of the existing pump and blower engines, the facility is no longer required to have a COMs; all COMs requirements are requested to be removed from the permit.

With this modification, the plant's existing boilers, trailer mounted 2000 kilowatt (KW) emergency generator, 200 KW emergency Blackstart generator, waste gas burner, wastewater treatment processes, and odor control equipment remain unchanged.

With the new cogeneration plant, actual criteria and non-criteria pollutant emissions from the WWTP are all expected to be lower than existing plant emissions. This modification proposes to limit nitrogen oxide (NO_x), VOC, CO, and particulate matter (PM₁₀ /PM_{2.5}) below the Non-Attainment New Source Review (NANSR) and Prevention of Significant Deterioration (PSD) thresholds, therefore Part 231 requirements do not apply.

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: JOHN F CRYAN
NYSDEC - REGION 2
47-40 21ST ST
LONG ISLAND CITY, NY 11101-5407

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 expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for 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 EXPWY 5TH FL
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

Mod 0 Permit Effective Date: 12/20/2012

Permit Expiration Date: 12/19/2017

Mod 2 Permit Effective Date: 10/17/2014

Permit Expiration Date: 12/19/2017



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 2-1 6 NYCRR 201-6.4 (a) (7): Fees
- 2-2 6 NYCRR 201-6.4 (c): Recordkeeping and Reporting of Compliance Monitoring
- 2-3 6 NYCRR 201-6.4 (c) (2): Records of Monitoring, Sampling, and Measurement
- 2-4 6 NYCRR 201-6.4 (c) (3) (ii): Compliance Certification
- 2-5 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
- 2-6 6 NYCRR 201-1.7: Recycling and Salvage
- 12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 2-7 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
- 2-8 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
- 2-9 6 NYCRR 201-6.4 (a) (4): Requirement to Provide Information
- 2-10 6 NYCRR 201-6.4 (a) (8): Right to Inspect
- 2-11 6 NYCRR 201-6.4 (f) (6): Off Permit Changes
- 19 6 NYCRR 202-1.1: Required Emissions Tests
- 20 40 CFR Part 68: Accidental release provisions.
- 21 40 CFR 82, Subpart F: Recycling and Emissions Reduction
- 22 6 NYCRR Subpart 201-6: Emission Unit Definition
- 2-12 6 NYCRR Subpart 201-6: Compliance Certification
- 2-13 6 NYCRR 201-6.4 (d) (4): Progress Reports Due Semiannually
- 23 6 NYCRR Subpart 202-1: Compliance Certification
- 24 6 NYCRR Subpart 202-1: Compliance Certification
- 25 6 NYCRR 211.1: Air pollution prohibited
- 2-14 6 NYCRR Part 212: Compliance Certification
- 26 6 NYCRR Part 212: Compliance Certification
- 27 6 NYCRR Part 212: Compliance Certification
- 29 6 NYCRR Part 212: Compliance Certification
- 30 6 NYCRR 225-1.2: Compliance Certification
- 31 6 NYCRR 225-1.8 (a): Compliance Certification
- 32 6 NYCRR 225.1 (a) (3): Compliance Certification
- 33 6 NYCRR 227-1.3 (a): Compliance Certification
- 34 6 NYCRR 227.2 (b) (1): Compliance Certification
- 2-15 40 CFR 60.4206, NSPS Subpart IIII: Duration of emission standards for new stationary compression ignition IC engines
- 2-16 40 CFR 60.4211(c), NSPS Subpart IIII: Compliance Certification
- 2-17 40 CFR 60.4214(b), NSPS Subpart IIII: Compliance Certification
- 2-18 40 CFR 60.4230(a)(4)(i), NSPS Subpart JJJJ: Applicability of facilities subject to Subpart JJJJ
- 2-19 40 CFR 63, Subpart ZZZZ: Applicability

Emission Unit Level



- 35 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 36 6 NYCRR Subpart 201-6: Process Definition By Emission Unit
- 2-20 6 NYCRR Subpart 201-7: Emission Unit Permissible Emissions

EU=1-COGEN

- *2-21 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *2-22 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *2-23 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *2-24 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *2-25 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 2-26 6 NYCRR 227-1.3 (a): Compliance Certification

EU=1-COGEN

- 2-27 40CFR 60, NSPS Subpart JJJJ: Compliance Certification

EU=1-COGEN,Proc=COD

- 2-28 6 NYCRR Subpart 201-6: Compliance Certification
- 2-29 6 NYCRR Subpart 201-6: Compliance Certification
- 2-30 6 NYCRR Subpart 201-6: Compliance Certification
- 2-31 6 NYCRR Subpart 201-6: Compliance Certification
- 2-32 6 NYCRR Subpart 227-2: Compliance Certification

EU=1-COGEN,Proc=CON

- 2-33 6 NYCRR Subpart 201-6: Compliance Certification
- 2-34 6 NYCRR Subpart 201-6: Compliance Certification
- 2-35 6 NYCRR Subpart 201-6: Compliance Certification
- 2-36 6 NYCRR Subpart 201-6: Compliance Certification
- 2-37 6 NYCRR Subpart 227-2: Compliance Certification

EU=1-COGEN,Proc=INT

- 2-38 40CFR 60.4205(b), NSPS Subpart IIII: Compliance Certification
- 2-39 40CFR 60.4207(b), NSPS Subpart IIII: Compliance Certification
- 2-40 40CFR 60.4207(b), NSPS Subpart IIII: Compliance Certification
- 2-41 40CFR 60.4211(a), NSPS Subpart IIII: Compliance Certification
- 2-42 40CFR 60.4211(f), NSPS Subpart IIII: Compliance Certification
- 2-43 40CFR 60.4211(f), NSPS Subpart IIII: Compliance Certification

EU=1--COMB

- 2-44 6 NYCRR 227-1.3 (a): Compliance Certification
- 2-45 6 NYCRR 227-2.3 (b): Compliance Certification
- 2-46 6 NYCRR 227-2.4 (c): Compliance Certification
- 60 6 NYCRR 227-2.5 (c): Compliance Certification
- 2-47 6 NYCRR Subpart 231-10: Compliance Certification
- 2-48 40CFR 60, NSPS Subpart GG: Compliance Certification

EU=1--COMB,Proc=BED

- 2-49 6 NYCRR 227-2.4 (f): Compliance Certification
- 61 6 NYCRR 227-2.4 (f): Compliance Certification

EU=1--COMB,Proc=BEG

- 2-50 6 NYCRR 227-2.4 (f): Compliance Certification
- 62 6 NYCRR 227-2.4 (f): Compliance Certification



63 6 NYCRR 227-2.4 (f): Compliance Certification

EU=1--COMB,Proc=BLR

37 40CFR 60.4, NSPS Subpart A: EPA Region 2 address.
38 40CFR 60.48c(a), NSPS Subpart Dc: Compliance Certification
39 40CFR 60.48c(g), NSPS Subpart Dc: Compliance Certification
40 6 NYCRR 227-2.4 (c) (1) (i): Compliance Certification
68 6 NYCRR 227-2.4 (c) (1) (ii): Compliance Certification

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

64 6 NYCRR 227-2.4 (d): Compliance Certification

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

41 6 NYCRR 212.3 (a): Emissions from Existing Sources

EU=1--COMB,Proc=GNR

2-51 6 NYCRR 227-2.4 (f): Compliance Certification
65 6 NYCRR 227-2.4 (f): Compliance Certification
42 40CFR 60, NSPS Subpart GG: Compliance Certification

EU=1--COMB,Proc=PED

2-52 6 NYCRR 227-2.4 (f): Compliance Certification
66 6 NYCRR 227-2.4 (f): Compliance Certification

EU=1--COMB,Proc=PEG

2-53 6 NYCRR 227-2.4 (f): Compliance Certification
67 6 NYCRR 227-2.4 (f): Compliance Certification
43 6 NYCRR 227-1.3 (a): Compliance Certification

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

44 ECL 19-0301: Contaminant List
2-54 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
45 6 NYCRR 201-1.4: Unavoidable noncompliance and violations
46 6 NYCRR 211.2: Visible Emissions Limited
47 6 NYCRR 211.2: Compliance Demonstration
48 6 NYCRR 211.2: Compliance Demonstration
49 6 NYCRR 211.2: Compliance Demonstration
50 6 NYCRR 211.2: Compliance Demonstration
51 6 NYCRR 211.2: Compliance Demonstration
52 6 NYCRR 211.2: Compliance Demonstration
53 6 NYCRR 211.2: Compliance Demonstration
54 6 NYCRR 211.2: Compliance Demonstration
55 6 NYCRR 211.2: Compliance Demonstration
2-55 6 NYCRR 211.2: Compliance Demonstration
56 6 NYCRR 211.2: Compliance Demonstration
57 6 NYCRR 211.2: Compliance Demonstration
59 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: 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: 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 C: 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 D: 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 E: 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 F: 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 G: 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 H: 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 I: 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 J: 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 K: 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. If additional applicable requirements under the Act become applicable where this permit's remaining term is



three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

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

Item L: Permit Exclusion - ECL 19-0305

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



(NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item M: Federally Enforceable Requirements - 40 CFR 70.6 (b)
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

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

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

Condition 1: Acceptable Ambient Air Quality
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR 200.6

Item 1.1:
Notwithstanding the provisions of 6 NYCRR Chapter III, Subchapter A, no person shall allow or permit any air contamination source to emit air contaminants in quantities which alone or in combination with emissions from other air contamination sources would contravene any applicable ambient air quality standard and/or cause air pollution. In such cases where contravention occurs or may occur, the Commissioner shall specify the degree and/or method of emission control required.

Condition 2-1: Fees
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-1.1:
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 2-2: Recordkeeping and Reporting of Compliance Monitoring
Effective between the dates of 10/17/2014 and 12/19/2017

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



Item 2-2.1:

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 2-3: Records of Monitoring, Sampling, and Measurement
Effective between the dates of 10/17/2014 and 12/19/2017**

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

Item 2-3.1:

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 2-4: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017**

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

Item 2-4.1:

The Compliance Certification activity will be performed for the Facility.

Item 2-4.2:

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.
The initial report is due 1/30/2015.
Subsequent reports are due every 6 calendar month(s).

Condition 2-5: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-5.1:

The Compliance Certification activity will be performed for the Facility.

Item 2-5.2:

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.

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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
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 7/30/2013.
Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR 202-2.1

Item 7.1:

The Compliance Certification activity will be performed for the Facility.

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Item 7.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Monitoring Frequency: ANNUALLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due by April 15th for previous calendar year

**Condition 8: Recordkeeping requirements
Effective between the dates of 12/20/2012 and 12/19/2017**

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 between the dates of 12/20/2012 and 12/19/2017**

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**

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

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

**Condition 10: Maintenance of Equipment
Effective between the dates of 12/20/2012 and 12/19/2017**

Applicable Federal Requirement: 6 NYCRR 200.7

Item 10.1:

Any person who owns or operates an air contamination source which is equipped with an emission control device shall operate such device and keep it in a satisfactory state of maintenance and repair in accordance with ordinary and necessary practices, standards and procedures, inclusive of manufacturer's specifications, required to operate such device



effectively.

Condition 2-6: Recycling and Salvage
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR 201-1.7

Item 2-6.1:

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

Condition 12: Prohibition of Reintroduction of Collected Contaminants to the air
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR 201-1.8

Item 12.1:

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

Condition 2-7: Exempt Sources - Proof of Eligibility
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-7.1:

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

Condition 2-8: Trivial Sources - Proof of Eligibility
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-8.1:

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

Condition 2-9: Requirement to Provide Information
Effective between the dates of 10/17/2014 and 12/19/2017

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



Item 2-9.1:

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

Condition 2-10: Right to Inspect
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-10.1:

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

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

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

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

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

Condition 2-11: Off Permit Changes
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-11.1:

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

(i) For each such change, the written notification required above shall include a brief description

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of the change within the permitted facility, the date on which the change will occur, any change in emissions, and any permit term or condition that is no longer applicable as a result of the change.

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

Condition 19: Required Emissions Tests
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR 202-1.1

Item 19.1:

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

Condition 20: Accidental release provisions.
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:40 CFR Part 68

Item 20.1:

If a chemical is listed in Tables 1,2,3 or 4 of 40 CFR §68.130 is present in a process in quantities greater than the threshold quantity listed in Tables 1,2,3 or 4, the following requirements will apply:

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

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

Condition 21: Recycling and Emissions Reduction
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:40CFR 82, Subpart F

Item 21.1:

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 22: Emission Unit Definition
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 22.1(From Mod 2):

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 3.37 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 (13.5 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.

Catalytic oxidation will be used to control emissions from the new cogeneration engines. Impurities present in the digester gas fuel such as siloxanes and sulfur create silica and sulfides during the combustion process and would potentially damage the catalytic oxidizer. Therefore, these impurities are required to be removed from the digester gas fuel prior to its combustion in the engines in order to protect the downstream oxidation catalyst. Pressure swing adsorption (PSA) technology will be used to remove these impurities. A byproduct gas stream is produced during PSA which will be treated using thermal oxidation (TO). This emission unit includes a 10.3 mmBtu/hr thermal oxidizer which would exhaust through one of the existing blower engine stacks.

In addition, this unit includes four (4) 2 MW interim diesel emergency generators 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.



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. Emission point ENGB1 is an existing blower engine stack which will be used to exhaust the new thermal oxidizer. 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 22.2(From Mod 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.

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

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

One (1) waste sludge digester gas burner to flare



excessive sludge digester gas.

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

Building(s): MAIN
PARK
SLUDGE

Item 22.3(From Mod 0):

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

The North Odor Control System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers 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
MAIN
SLUDGE

Condition 2-12: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 2-12.1:

The Compliance Certification activity will be performed for the Facility.

Item 2-12.2:

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 13.5 mw maximum, with fifth unit as a stand by unit.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

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Condition 2-13: Progress Reports Due Semiannually
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-13.1:

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 23: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 202-1

Item 23.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 TOTAL HAP

Item 23.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Reference Test Method: EPA 600 series

Monitoring Frequency: ANNUALLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 24: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 202-1

Item 24.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 24.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Reference Test Method: EPA 600 series

Monitoring Frequency: ANNUALLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 25: Air pollution prohibited
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR 211.1

Item 25.1:

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 2-14: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Part 212

Item 2-14.1:

The Compliance Certification activity will be performed for the Facility.

Item 2-14.2:

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 DAR-1 Analysis shall be done for all emitted toxic air contaminants within 60 days after submission of Stack Test

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Report.

A DAR-10 Analysis shall be done for all emitted criteria air pollutants within 60 days after submission of Stack Test Report.

A Stack test, a DAR -1 analysis and a DAR-10 analysis are required once during the term of permit.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 26: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Part 212

Item 26.1:

The Compliance Certification activity will be performed for the Facility.

Item 26.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Within sixty days of approval of the stack test protocol, NYCDEP shall perform the stack test in accordance with the approved protocol.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2013.

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

Condition 27: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Part 212

Item 27.1:

The Compliance Certification activity will be performed for the Facility.

Item 27.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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Once during the permit term and no later than 365 days before the permit expiration date, NYCDEP shall submit an approvable protocol to stack test for pollutants emitted from its combustion processes and odor control systems.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2013.

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

Condition 29: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Part 212

Item 29.1:

The Compliance Certification activity will be performed for the Facility.

Item 29.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must maintain a daily log of Digester Gas produced and emitted to atmosphere, information of measurement, name of record keeper, date of information, and report it to the Department semiannually.

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 30: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR 225-1.2

Item 30.1:

The Compliance Certification activity will be performed for the Facility.

Item 30.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Purchase of fuel oil by all New York City agencies is managed by the New York City Department of Citywide

New York State Department of Environmental Conservation

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Administrative Services ("DCAS"). All NYC service contracts require suppliers to provide low sulfur fuel oils that meet the requirement of 0.2% by weight for #2 diesels. DCAS performs monitoring of the sulfur content in the fuel oil citywide on a random basis instead of conducting monitoring at each batch delivery. Facility must maintain such manifest for each oil delivery.

Reference Test Method: EPA approved

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 31: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement: 6 NYCRR 225-1.8 (a)

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: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

All New York City service contracts require suppliers to provide fuel oils that meet the low sulfur content requirement of 0.2% by weight for distillate fuel oils. The facility should accept fuel delivery only when supplier provides that the fuel delivered meets 0.2% by weight sulfur content requirements and the supplier tests the sulfur content of each delivery in a manner satisfactory to DEC. DEP must report to NYSDEC all the oil sulfur standard exceedances that occurred during the reporting period.

The permittee shall retain fuel oil supplier certifications for each shipment of oil received. Such certification shall contain, at a minimum, supplier name, date of shipment, quantity, heating value, sulfur content, method used to determine sulfur content. Such certifications shall be made available for inspection by, or submittal to NYSDEC, upon request.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

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Process Material: FUEL OIL
Parameter Monitored: SULFUR
Upper Permit Limit: 0.2 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY
TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 32: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR 225.1 (a) (3)

Item 32.1:

The Compliance Certification activity will be performed for the Facility.

Item 32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

No person shall sell, offer for sale, purchase or use any distillate oil which has sulfur content greater than 0.20 percent by weight. A log of the sulfur content in oil per delivery must be maintained on site for a minimum of five years after the date of the last entry.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.20 percent by weight
Monitoring Frequency: PER DELIVERY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 33: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 33.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY075-00-0 PARTICULATES

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Item 33.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Facility 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.

The initial report is due 1/30/2013.

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

Condition 34: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 34.1:

The Compliance Certification activity will be performed for the facility:



The Compliance Certification applies to:

Emission Unit: 1--COMB Process: BED	Emission Source: BENG1
Emission Unit: 1--COMB Process: BED	Emission Source: BENG2
Emission Unit: 1--COMB Process: BED	Emission Source: BENG3
Emission Unit: 1--COMB Process: BED	Emission Source: BENG4
Emission Unit: 1--COMB Process: BED	Emission Source: BENG5
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER1
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER2
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER3
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER4
Emission Unit: 1--COMB Process: GNR	Emission Source: BGEN1
Emission Unit: 1--COMB Process: GNR	Emission Source: EGEN1
Emission Unit: 1--COMB Process: GNR	Emission Source: TURG1
Emission Unit: 1--COMB Process: GNR	Emission Source: TURG2
Emission Unit: 1--COMB Process: PED	Emission Source: PENG1
Emission Unit: 1--COMB Process: PED	Emission Source: PENG2
Emission Unit: 1--COMB Process: PED	Emission Source: PENG3
Emission Unit: 1--COMB Process: PED	Emission Source: PENG4

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Emission Unit: 1--COMB

Process: PED

Emission Source: PENG5

Regulated Contaminant(s):

CAS No: ONY075-00-0 PARTICULATES

Item 34.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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

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

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

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.10 pounds per million Btus

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

**Condition 2-15: Duration of emission standards for new stationary compression ignition IC engines
Effective between the dates of 10/17/2014 and 12/19/2017**

Applicable Federal Requirement: 40CFR 60.4206, NSPS Subpart IIII



Item 2-15.1:

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

Condition 2-16: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-16.1:

The Compliance Certification activity will be performed for the Facility.

Item 2-16.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

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

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 2-17: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-17.1:

The Compliance Certification activity will be performed for the Facility.

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Item 2-17.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

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

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

**Condition 2-18: Applicability of facilities subject to Subpart JJJJ
Effective between the dates of 10/17/2014 and 12/19/2017**

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

Item 2-18.1:

This Condition applies to:

Emission Unit: 1COGEN
Process: COD

Emission Unit: 1COGEN
Process: CON

Item 2-18.2:

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.

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Condition 2-19: Applicability

Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 2-19.1:

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

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

Condition 35: Emission Point Definition By Emission Unit

Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 35.1(From Mod 2):

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

Emission Unit: 1-COGEN

Emission Point: CGNB1

Height (ft.): 161 Diameter (in.): 24
NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: PARK

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

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Emission Point: CGTG2
Height (ft.): 161 Diameter (in.): 48
NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: PARK

Item 35.2(From Mod 2):

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

Emission Unit: 1--COMB

Emission Point: EMBG1
Height (ft.): 15 Diameter (in.): 6
NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: MAIN

Emission Point: EMEG1
Height (ft.): 15 Diameter (in.): 16
NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: MAIN

Emission Point: EMTG1
Height (ft.): 161 Diameter (in.): 48
NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: PARK

Emission Point: EMTG2
Height (ft.): 161 Diameter (in.): 48
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

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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.): 4520.023 NYTME (km.): 588.033 Building: SLUDGE

Emission Point: MBLR1
Height (ft.): 161 Diameter (in.): 48
NYTMN (km.): 4520.023 NYTME (km.): 588.033 Building: PARK

Emission Point: MBLR2
Height (ft.): 161 Diameter (in.): 48
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 35.3(From Mod 0):

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.): 4520.023 NYTME (km.): 588.033 Building: SLUDGE

Condition 36: Process Definition By Emission Unit
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 36.1(From Mod 2):



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: 3,370 kilowatts

Emission Source/Control: COGN2 - Combustion
Design Capacity: 3,370 kilowatts

Emission Source/Control: COGN3 - Combustion
Design Capacity: 3,370 kilowatts

Emission Source/Control: COGN4 - Combustion
Design Capacity: 3,370 kilowatts

Emission Source/Control: COGN5 - Combustion
Design Capacity: 3,370 kilowatts

Item 36.2(From Mod 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: 3,370 kilowatts

Emission Source/Control: COGN2 - Combustion
Design Capacity: 3,370 kilowatts

Emission Source/Control: COGN3 - Combustion
Design Capacity: 3,370 kilowatts

Emission Source/Control: COGN4 - Combustion
Design Capacity: 3,370 kilowatts

Emission Source/Control: COGN5 - Combustion
Design Capacity: 3,370 kilowatts

Item 36.3(From Mod 2):

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

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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 Removal Date: 11/01/2017
Design Capacity: 2,000 kilowatts

Emission Source/Control: IGEN2 - Combustion Removal Date: 11/01/2017
Design Capacity: 2,000 kilowatts

Emission Source/Control: IGEN3 - Combustion Removal Date: 11/01/2017
Design Capacity: 2,000 kilowatts

Emission Source/Control: IGEN4 - Combustion Removal Date: 11/01/2017
Design Capacity: 2,000 kilowatts

Item 36.4(From Mod 2):

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

Emission Unit: 1-COGEN
Process: TOC Source Classification Code: 5-01-007-99
Process Description: thermal oxidizer

Emission Source/Control: TOXDR - Process
Design Capacity: 10.3 million Btu per hour

Item 36.5(From Mod 2):

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.

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Emission Source/Control: BENG1 - Combustion Removal Date: 12/01/2016
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG2 - Combustion Removal Date: 12/01/2016
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG3 - Combustion Removal Date: 12/01/2015
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG4 - Combustion Removal Date: 12/01/2015
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG5 - Combustion Removal Date: 12/01/2017
Design Capacity: 940 horsepower (mechanical)

Item 36.6(From Mod 2):

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.

Emission Source/Control: BENG1 - Combustion Removal Date: 12/01/2016
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG2 - Combustion Removal Date: 12/01/2016
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG3 - Combustion Removal Date: 12/01/2015
Design Capacity: 940 horsepower (mechanical)

Emission Source/Control: BENG4 - Combustion Removal Date: 12/01/2015
Design Capacity: 940 horsepower (mechanical)

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Emission Source/Control: BENG5 - Combustion Removal Date: 12/01/2017
Design Capacity: 940 horsepower (mechanical)

Item 36.7(From Mod 2):

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 36.8(From Mod 2):

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 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 36.9(From Mod 2):

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 Removal Date: 12/01/2017
Design Capacity: 2,800 kilowatts

Emission Source/Control: TURG2 - Combustion Removal Date: 12/01/2017
Design Capacity: 2,800 kilowatts

Item 36.10(From Mod 2):

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

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

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

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

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

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

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Emission Source/Control: PENG1 - Combustion Removal Date: 12/01/2015
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG2 - Combustion Removal Date: 12/01/2016
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG3 - Combustion Removal Date: 12/01/2016
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG4 - Combustion Removal Date: 12/01/2016
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG5 - Combustion Removal Date: 12/01/2017
Design Capacity: 1,700 horsepower (mechanical)

Item 36.11(From Mod 2):

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 Removal Date: 12/01/2015
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG2 - Combustion Removal Date: 12/01/2016
Design Capacity: 1,700 horsepower (mechanical)

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Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Emission Source/Control: PENG3 - Combustion Removal Date: 12/01/2016
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG4 - Combustion Removal Date: 12/01/2016
Design Capacity: 1,700 horsepower (mechanical)

Emission Source/Control: PENG5 - Combustion Removal Date: 12/01/2017
Design Capacity: 1,700 horsepower (mechanical)

Item 36.12(From Mod 0):

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 36.13(From Mod 0):

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. The plant will upgrade the disinfection process to also include dechlorination using sodium bisulfite, including construction of four (4) new 6,000 gallon bulk storage tanks and two (2) new 2,000 gallon day tanks for sodium bisulfite. The construction is estimated to occur over a period of approximately 30 months.

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 36.14(From Mod 0):

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

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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 36.15(From Mod 0):

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

Emission Unit: 2-WWTRE
Process: GHT Source Classification Code: 5-01-007-99
Process Description:

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

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

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

Item 36.16(From Mod 0):



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 36.17(From Mod 0):

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

Emission Unit: 2-WWTRE

Process: PHW

Source Classification Code: 5-01-007-07

Process Description:

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

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

Emission Source/Control: NTHOC - Control

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Control Type: WET SCRUBBER

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

Emission Source/Control: WEWEL - Process

Item 36.18(From Mod 0):

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).

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 36.19(From Mod 0):

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 36.20(From Mod 0):

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

Emission Unit: 2-WWTRE
Process: SST Source Classification Code: 5-01-007-81
Process Description:

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

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



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

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

Item 36.21(From Mod 0):

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

Emission Unit: 2-WWTRE
Process: STG Source Classification Code: 5-01-007-71
Process Description:

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

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

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

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

**Condition 2-20: Emission Unit Permissible Emissions
Effective between the dates of 10/17/2014 and 12/19/2017**

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2-20.1:

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

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

Emission Unit: 1-COGEN

CAS No: 000630080 (From Mod 2)

Name: CARBON MONOXIDE

PTE(s): 22.71 pounds per hour

199,000 pounds per year

CAS No: 0NY075005 (From Mod 2)

Name: PM-10

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PTE(s): 29,000 pounds per year

3.31 pounds per hour

CAS No: 0NY210000 (From Mod 2)

Name: OXIDES OF NITROGEN

PTE(s): 32.91 pounds per hour

288,340 pounds per year

CAS No: 0NY998000 (From Mod 2)

Name: VOC

PTE(s): 49,000 pounds per year

5.59 pounds per hour

CAS No: 0NY075025 (From Mod 2)

Name: PM 2.5

PTE(s): 19,000 pounds per year

2.168 pounds per hour

Condition 2-21: Capping Monitoring Condition

Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 2-21.1:

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 2-21.2:

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

Item 2-21.3:

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 2-21.4:

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 2-21.5:

The emission of pollutants that exceed the applicability thresholds for an applicable requirement,

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for which the facility has obtained an emissions cap, constitutes a violation of Part 201 and of the Act.

Item 2-21.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 2-21.7:

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 99.50 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:

$$[(A \times B) + (C \times D) + (E \times F) + (G \times H) + (I \times J)] / 2000 < 99.50 \text{ tons/year}$$

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 cogeneration engines in mmcf/yr;

E = CO emission factor from the thermal oxidizer firing waste gas, as certified by the manufacturer of 23.06 lbs/mmcf, based on a waste gas HHV of 313 mmBtu/mmcf;

F = 12-month rolling total wasted digester gas sent to the thermal oxidizer in mmcf/yr;

G = AP-42 CO emission factor from the thermal oxidizer firing natural gas of 84 lb/mmcf



H= 12-month rolling total natural gas sent to thermal oxidizer, in mmcf/yr.

I= 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;

J= 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: 99.5 tons per year

Reference Test Method: epa approved

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2015.

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

Condition 2-22: Capping Monitoring Condition
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2-22.1:

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 2-22.2:

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

Item 2-22.3:

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 2-22.4:

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

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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 2-22.5:

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 2-22.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

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

Item 2-22.7:

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 14.50 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:

$$[(A \times B) + (C \times D) + (E \times F) + (G \times H) + (I \times J)] / 2000 < 14.50 \text{ tons/year}$$

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 30.96 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 = 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= AP-42 PM10 emission factor from the thermal oxidizer of



7.60 lbs/mmcf;
F= 12-month rolling total wasted digester gas sent to the thermal oxidizer in mmcf/yr;
G= AP-42 PM 10 emission factor from the thermal oxidizer firing natural gas of 7.6 lb/mmcf
H= 12-month rolling total natural gas sent to thermal oxidizer, in mmcf/yr.
I= 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;
J= 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: 14.5 tons per year

Reference Test Method: epa approved

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MINIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2015.

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

Condition 2-23: Capping Monitoring Condition
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2-23.1:

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 2-23.2:

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

Item 2-23.3:

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 2-23.4:

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 2-23.5:

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 2-23.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

CAS No: 0NY075-02-5 PM 2.5

Item 2-23.7:

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 9.50 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:

$$[(A \times B) + (C \times D) + (E \times F) + (G \times H) + (IXJ)] / 2000 < 9.50 \text{ tons/year}$$

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= AP-42 PM2.5 emission factor from the thermal oxidizer of 7.60 lbs/mmcf;
F= 12-month rolling total wasted digester gas sent to the thermal oxidizer in mmcf/yr;
G= AP-42 PM 2.5 emission factor from the thermal oxidizer firing natural gas of 7.6 lb/mmcf
H= 12-month rolling total natural gas sent to thermal oxidizer, in mmcf/yr.
I= 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;
J= 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: 9.5 tons per year

Reference Test Method: epa approved

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2015.

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

Condition 2-24: Capping Monitoring Condition
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2-24.1:

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 2-24.2:

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



Item 2-24.3:

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 2-24.4:

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 2-24.5:

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 2-24.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

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

Item 2-24.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The facility is proposing an annual NOx emissions cap of 144.17 tons per year from Emission Unit 1-COGEN. The following formula will be used to calculate monthly NOx emissions and to demonstrate compliance with this cap on a rolling 12-month basis:

$$[(A \times B) + (C \times D) + (E \times F) + (G \times H) + (I \times J)] / 2000 < 144.17 \text{ tons/year}$$

Where:

A = NOx 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 = NOx 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 thermal oxidizer firing waste gas, as certified by the manufacturer of 78.18 lbs/mmcf, based on a waste gas HHV of 313 mmBtu/mmcf;
F= 12-month rolling total wasted digester gas sent to the thermal oxidizer in mmcf/yr;
G= AP-42 NOx emission factor from the thermal oxidizer firing natural gas of 100 lb/mmcf
H= 12-month rolling total natural gas sent to thermal oxidizer, in mmcf/yr.
I= 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;
J= 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: 144.17 tons per year

Reference Test Method: epa approved

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2015.

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

Condition 2-25: Capping Monitoring Condition
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 2-25.1:

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:

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6 NYCRR Subpart 231-6

Item 2-25.2:

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

Item 2-25.3:

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 2-25.4:

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 2-25.5:

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 2-25.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 2-25.7:

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:

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

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 thermal oxidizer firing waste gas, as certified by the manufacturer of 0.26 lbs/mmcf, based on a waste gas HHV of 313 mmBtu/mmcf;

F= 12-month rolling total wasted digester gas sent to the thermal oxidizer in mmcf/yr;

G= AP-42 VOC emission factor from the thermal oxidizer firing natural gas of 5.50 lb/mmcf

H= 12-month rolling total natural gas sent to thermal oxidizer, in mmcf/yr.

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

J= 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 approved

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2015.

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

Condition 2-26: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-26.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:



Emission Unit: 1--COMB
Process: BED

Emission Unit: 1--COMB
Process: BEG

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

Item 2-26.2:

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.

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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.

The initial report is due 1/30/2015.

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

Condition 2-27: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement: 40CFR 60, NSPS Subpart JJJJ

Item 2-27.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Item 2-27.2:

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

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Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 2-28: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 2-28.1:

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 2-28.2:

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 Source Review, as per EPA stack testing method. Since the five cogeneration engines are identical, two of the five engines are required to conduct the stack test.

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.

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The initial report is due 1/30/2015.
Subsequent reports are due every 6 calendar month(s).

Condition 2-29: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 2-29.1:

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 2-29.2:

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. Since the five cogeneration engines are identical, two of the five engines are required to conduct the stack test.

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

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

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

Reference Test Method: 40 cfr 60 appendix a
Monitoring Frequency: Once every five years
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2015.
Subsequent reports are due every 6 calendar month(s).

Condition 2-30: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

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Facility DEC ID: 2620200007



Item 2-30.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: COD

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 2-30.2:

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. Since the five cogeneration engines are identical, two of the five engines are required to conduct the stack test.

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.

The initial report is due 1/30/2015.

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

Condition 2-31: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 2-31.1:

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 2-31.2:

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. Since the five cogeneration engines are identical, two of the five engines are required to conduct the stack test.

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.

The initial report is due 1/30/2015.

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

Condition 2-32: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement: 6 NYCRR Subpart 227-2

Item 2-32.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: COD

Regulated Contaminant(s):

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Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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

Item 2-32.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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

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: 2.0 grams per brake horsepower-hour

Reference Test Method: 40 cfr 60 appendix a

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 2-33: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 2-33.1:

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 2-33.2:

Compliance Certification shall include the following monitoring:

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Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

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

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

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

Reference Test Method: 40 cfr 60 appendix a

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 2-34: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 2-34.1:

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 2-34.2:

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

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emission factor for compliance with 6 NYCRR Part 231, New Source Review, as per EPA stack testing method. Since the five cogeneration engines are identical, two of the five engines are required to conduct the stack test.

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

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

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

Reference Test Method: 40 cfr 60 appendix a
Monitoring Frequency: Once every five years
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2015.
Subsequent reports are due every 6 calendar month(s).

Condition 2-35: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement: 6 NYCRR Subpart 201-6

Item 2-35.1:
The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: CON

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

Item 2-35.2:
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. Since the five cogeneration engines are identical, two of the five engines are required to conduct the stack test.

A stack test protocol shall be submitted to the Department

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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.

The initial report is due 1/30/2015.

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

Condition 2-36: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 2-36.1:

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 2-36.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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

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.

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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.
The initial report is due 1/30/2015.
Subsequent reports are due every 6 calendar month(s).

Condition 2-37: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement: 6 NYCRR Subpart 227-2

Item 2-37.1:

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 2-37.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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

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

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Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Reference Test Method: 40 cfr 60 Appendix A
Monitoring Frequency: Once every five years
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2015.
Subsequent reports are due every 6 calendar month(s).

Condition 2-38: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-38.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: INT

Item 2-38.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 2-39: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-39.1:

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Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 2-39.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

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

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: DIESEL OIL

Parameter Monitored: CETANE INDEX

Lower Permit Limit: 40 ratio

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 2-40: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-40.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Item 2-40.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

The owner or operator of a stationary compression ignition internal combustion engine displacing less than 30 liters per cylinder and which is subject to the requirements of subpart IIII of 40 CFR Part 60 may not fire any diesel fuel which exceeds a sulfur content of 15 ppm as per the non-road diesel fuel sulfur content standard set forth in 40 CFR Part 80.510(b) except that any diesel fuel purchased or otherwise obtained prior to October 1, 2010 may be used until depleted. Compliance shall be demonstrated by either sampling each delivery and conducting an appropriate analysis or by obtaining a certificate of analysis showing the sulfur content or range of sulfur content for each shipment of non-road diesel fuel provided by the fuel supplier. In either case, the owner or operator must verify that any required fuel analysis has been conducted using methodology acceptable to the Department. Records of all certificates of analysis provided by the fuel supplier and on-site fuel sampling results must be maintained on site for a minimum of five years.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: DIESEL OIL

Parameter Monitored: SULFUR CONTENT

Upper Permit Limit: 15 parts per million by weight

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 2-41: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-41.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 2-41.2:

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:

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 2-42: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-42.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN

Process: INT

Item 2-42.2:

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.
The initial report is due 1/30/2015.
Subsequent reports are due every 6 calendar month(s).

Condition 2-43: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-43.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-COGEN
Process: INT

Item 2-43.2:

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.

The initial report is due 1/30/2015.

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



Condition 2-44: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-44.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Item 2-44.2:

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.

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Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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.
The initial report is due 1/30/2015.
Subsequent reports are due every 6 calendar month(s).

Condition 2-45: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-45.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

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

Item 2-45.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Facility should comply with the December 2011 Nox RACT plan.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (ANNIVERSARY)
Initial Report Due: 01/18/2015 for the period 10/17/2014 through 12/19/2014

Condition 2-46: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-46.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

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Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Regulated Contaminant(s):

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

Item 2-46.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 60: Compliance Certification

Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 60.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Regulated Contaminant(s):

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

Item 60.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)



Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 2-47: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement: 6 NYCRR Subpart 231-10

Item 2-47.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Regulated Contaminant(s):

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

Item 2-47.2:

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.

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

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

No_x 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 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)

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Facility DEC ID: 2620200007



Reports due 30 days after the reporting period.
The initial report is due 1/30/2015.
Subsequent reports are due every 6 calendar month(s).

Condition 2-48: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

Applicable Federal Requirement:40CFR 60, NSPS Subpart GG

Item 2-48.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Item 2-48.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The two emergency turbine generators are to be removed with this modification. Until the units are removed, the following condition remains in place:

NYCDEP conducted Nox and SOx stack emission tests on NRWPCP emergency turbine generators on January 18 and 19, 2007, following procedures in an EPA approved protocol and subsequent instructions. These stack tests determined that NOx and SOx emissions at each turbine generators maximum achievable load and three partial loads. A report was submitted to EPA on 2/20/2007. The results of all tests demonstrated compliance with 40 CFR 60, subpart GG, NOx and SOx emission limits. (except the maximum achievable load of the turbine generator # 1 exceeded the NOx limit).

Turbine generators should operate in compliance with stack testing scenario and turbine generator 1 should not allowed to operate at maximum achievable load.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 2-49: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-49.1:

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--COMB

Process: BED

Regulated Contaminant(s):

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

Item 2-49.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The five blower engines are being removed with this permit modification. Until these engines are removed, the NO_x emissions verified during the most recent stack test on 7/2007 shall be set forth as the alternative emission permit limit for each engine.

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.

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.

The initial report is due 1/30/2015.

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

Condition 61: Compliance Certification

Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 61.1:

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 61.2:

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:

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

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. Stack test protocol must be send to Department for approval prior to testing.

Upper Permit Limit: 8.6 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.

The initial report is due 1/30/2013.

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

Condition 2-50: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-50.1:

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 2-50.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

The five blower 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.

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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 until the engines are removed. Stack test protocol must be sent to Department for approval prior to testing.

Upper Permit Limit: 3.93 grams per brake horsepower-hour

Reference Test Method: epa approved

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 62: Compliance Certification

Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 62.1:

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 62.2:

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.

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.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 63: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 63.1:

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 63.2:

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



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.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 37: EPA Region 2 address.
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:40CFR 60.4, NSPS Subpart A

Item 37.1:

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

Item 37.2:

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 38: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 38.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB
Process: BLR

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Item 38.2:

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 39: Compliance Certification

Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 39.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: BLR

Item 39.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.



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

Condition 40: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 40.1:

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

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

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

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

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

Item 40.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This condition applies to natural gas only fired mid-size boilers and is applicable until June 30th 2014. The owner or operator shall submit a testing protocol to the Department for approval a minimum of 30 days prior to any stack testing.

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

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: 40 CFR 60 Appendix A - method 7, 7E, or 19
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 68: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Item 68.1:

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

Emission Unit: 1--COMB Process: BLR	Emission Source: BLER1
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER3
Emission Unit: 1--COMB Process: BLR	Emission Source: BLER4
Regulated Contaminant(s): CAS No: 0NY210-00-0	OXIDES OF NITROGEN

Item 68.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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

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

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

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 0.05 pounds per million Btus
Reference Test Method: 40 CFR 60 Appendix A - Method 7, 7E, or 19
Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 64: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 64.1:

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

Emission Source: BLER2

Regulated Contaminant(s):

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

Item 64.2:

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.

The initial report is due 7/30/2013.

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

Condition 41: Emissions from Existing Sources

Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:6 NYCRR 212.3 (a)

Item 41.1:

This Condition applies to:

Emission Unit: 2WWTRE

Process: GHT

Emission Unit: 2WWTRE

Process: SDA

Emission Unit: 2WWTRE

Process: STG

Item 41.1:

This Condition applies to Emission Unit: 1--COMB

Process: FLA

Emission Source:

WGBR1

Item 41.2.3: No person will cause or allow emissions that violate the requirement specified in Table 2, Table 3, or Table 4 of 6NYCRR Part 212 for the environmental rating issued by the commissioner.



Condition 2-51: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-51.1:

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 2-51.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

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.

The initial report is due 1/30/2015.

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

Condition 65: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

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

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Item 65.1:

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 65.2:

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 1/2007 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. Stack test protocol must be send 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 DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 42: Compliance Certification

Effective between the dates of 12/20/2012 and 12/19/2017

Applicable Federal Requirement:40CFR 60, NSPS Subpart GG

Item 42.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB
Process: GNR

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Item 42.2:

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).

NYCDEP conducted NO_x and SO_x stack emission tests on NRWPCP emergency turbine generators on January 18, 19, 2007 following procedures in an EPA approved protocol and subsequent instructions. These stack tests determined NO_x and SO_x emissions at each turbine generators maximum achievable load and three partial loads. A study report was submitted to EPA on 2/20/2007. Results of the tests indicated all tests demonstrated compliance with the 40 CFR 60, subpart GG, NO_x and SO_x limits (except the maximum achievable load of the turbine generator #1 exceeded the NO_x limit). The two turbine generators are used for emergency power and will be operated less than 500 hrs per year, and will not participate in any load sharing program (CDRP/PLM). Under certain severe circumstances, if operation of these units are necessary to avoid potential black outs which may be threaten public safety and health, these units will only be limited to operate at loads that are in compliance with 40 CFR 60, subpart GG limits.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 2-52: Compliance Certification

Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-52.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: PED

Regulated Contaminant(s):

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

Item 2-52.2:

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:

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.

The initial report is due 1/30/2015.

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

Condition 66: Compliance Certification

Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 66.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1--COMB

Process: PED

Regulated Contaminant(s):

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

Item 66.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

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

Alternative emission limit for the pump engines, when

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



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. Stack test protocol must be send 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 DURING THE TERM OF THE PERMIT
Averaging Method: 1-HOUR AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 2-53: Compliance Certification
Effective between the dates of 10/17/2014 and 12/19/2017

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

Item 2-53.1:

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 2-53.2:

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 duel fuel (Digester Gas and/or natural gas and/or Diesel Oil), must not be greater than 7.65 grams/bhp-hr.

Stack testing once during the permit term is required to demonstrate compliance with the permit limit until the engines are removed. Stack test protocol must be sent to Department for approval prior to testing.

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Upper Permit Limit: 7.65 grams per brake horsepower-hour

Reference Test Method: epa approved

Monitoring Frequency: Once every five years

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2015.

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

Condition 67: Compliance Certification

Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 67.1:

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 67.2:

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 7/2007 shall be set forth as the alternative emission permit limit for each engine.

Alternative emission limit for the pump engines when burning dual fuel (Natural Gas and/or Digester Gas and/or Diesel Oil) must not be greater than 7.65 grams/bhp-hr.

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

Upper Permit Limit: 7.65 grams per brake horsepower-hour

Reference Test Method: EPA Approved

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: 1-HOUR AVERAGE

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

New York State Department of Environmental Conservation

Permit ID: 2-6202-00007/00015

Facility DEC ID: 2620200007



Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 43: Compliance Certification
Effective between the dates of 12/20/2012 and 12/19/2017

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

Item 43.1:

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

Emission Unit: 1--COMB	Emission Point: EMBG1
Emission Unit: 1--COMB	Emission Point: EMEG1
Emission Unit: 1--COMB	Emission Point: EMTG1
Emission Unit: 1--COMB	Emission Point: EMTG2
Emission Unit: 1--COMB	Emission Point: ENGB1
Emission Unit: 1--COMB	Emission Point: ENGB2
Emission Unit: 1--COMB	Emission Point: ENGB3
Emission Unit: 1--COMB	Emission Point: ENGB4
Emission Unit: 1--COMB	Emission Point: ENGB5
Emission Unit: 1--COMB	Emission Point: ENGP1
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 43.2:

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.

The initial report is due 1/30/2013.

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



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: 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 44: Contaminant List
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:ECL 19-0301

Item 44.1:

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

CAS No: 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 2-54: Malfunctions and start-up/shutdown activities
Effective between the dates of 10/17/2014 and 12/19/2017**

Applicable State Requirement:6 NYCRR 201-1.4

Item 2-54.1:

(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 45: Unavoidable noncompliance and violations
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement: 6 NYCRR 201-1.4

Item 45.1:

At the discretion of the commissioner a violation of any applicable emission standard for necessary scheduled equipment maintenance, start-up/shutdown conditions and malfunctions or upsets may be excused if such violations are unavoidable. The following actions and recordkeeping and reporting requirements must be adhered to in such circumstances.

(a) The facility owner and/or operator shall compile and maintain records of all equipment 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 commissioner's representative when requested to do so in writing or when so required by a condition of a permit issued for the corresponding air contamination source except where conditions elsewhere in this permit which contain more stringent reporting and notification provisions for an applicable requirement, in which case they supercede those stated here. Such reports shall describe why the violation was unavoidable and shall include the time, frequency and duration of the maintenance and/or start-up/shutdown activities and the identification of air contaminants, and the estimated emission rates. If a facility owner and/or operator is subject to continuous stack monitoring and quarterly reporting requirements, he need not submit reports for equipment maintenance or start-up/shutdown for the facility to the commissioner's representative.

(b) In the event that emissions of air contaminants in excess of any emission standard in 6 NYCRR Chapter III Subchapter A occur due to a malfunction, the facility owner and/or operator shall report such malfunction by telephone to the commissioner's representative as soon as possible during normal working hours, but in any event not later than two working days after becoming aware that the malfunction occurred. Within 30 days thereafter, when requested in writing by the commissioner's representative, the facility owner and/or operator shall submit a written report to the commissioner's representative describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates. These reporting requirements are superceded by conditions elsewhere in this permit which contain reporting and notification provisions for applicable requirements more stringent than those above.

(c) The Department may also require the owner and/or operator to include in reports described under (a) and (b) above an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions depending on the deviation of the malfunction and the air contaminants emitted.

(d) In the event of maintenance, start-up/shutdown or malfunction conditions which result in emissions exceeding any applicable emission standard, the facility owner and/or



operator shall take appropriate action to prevent emissions which will result in contravention of any applicable ambient air quality standard. Reasonably available control technology, as determined by the commissioner, shall be applied during any maintenance, start-up/shutdown or malfunction condition subject to this paragraph.

(e) 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.

Condition 46: Visible Emissions Limited
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 46.1:

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 47: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 47.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 47.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The permittee shall transmit real time Continuous Opacity Monitors (COMs) data to the Department by a telemetry system to the NYSDEC office, on a continuous basis.

NYCDEP is required to maintain (including required QA/QC check) the telemetry system in a working order at all the times.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 48: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017



Applicable State Requirement:6 NYCRR 211.2

Item 48.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 48.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The permittee shall transmit real time Air Quality Monitoring Network (AQMN) data to the Department by a telemetry system to the NYSDEC office, on a continuous basis.

NYCDEP is required to maintain (including required QA/QC check) the telemetry system in a working order at all the times.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 49: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 49.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 49.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The permittee shall transmit real time H2S data from four in-plant continuous monitoring stations and the three community monitoring stations to the Department by a telemetry system to the NYSDEC office, on a continuous basis.

NYCDEP is required to maintain (including required QA/QC check) the telemetry system in a working order at all the times.

Monitoring Frequency: CONTINUOUS

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)



Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 50: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 50.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 50.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

NYCDEP shall investigate observation by any community monitoring station of a one-hour-average H₂S reading of 10 ppb or more from any community monitoring stations where the wind direction from the meteorological station suggests that such reading may be attributed to the North River WPCP. In such cases, NYCDEP shall perform an inspection within the plant to determine any odor sources within the plant may require corrective measures and NYCDEP shall timely implement such measures. NYCDEP will notify NYSDEC Region 2 office within 2 business days of such incidents and shall submit complete inspection reports of such incidents with the Quarterly Reports.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

Condition 51: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 51.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 51.2:
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

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engine stacks to monitor opacity, in accordance with the plan approved by the Department, unless it is already operating under an approved plan.

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 52: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 52.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 52.2:

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

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 53: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017



Applicable State Requirement:6 NYCRR 211.2

Item 53.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 53.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The implementation of the approved AQMN Plan shall commence within thirty days of DEC's approval, and shall be completed within ninety days of DEC's approval, unless it has been done already.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 54: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 54.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 54.2:

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.

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Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Reporting Requirements: QUARTERLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 55: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 55.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 55.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

1. Within sixty days of permit issuance, submit for NYSDEC's approval, an Air Quality Monitoring Network (AQMN) Plan for Hydrogen Sulfide (H₂S) monitoring at the community monitoring stations including an approvable QA/QC plan, unless it is already operating under an approved plan. The permittee is required to do so for every new consultant designing/operating its AQMN. The AQMN Plan shall also include installation, operation and maintenance of Meteorological Stations.

2. After twelve months of "quality data" NYCDEP may submit a request to discontinue the operation of the 3 community monitoring stations. Such request may be granted if there are no more than three exceedances of H₂S standard (10 ppb) attributed to the North River WPCP during the 12 month period. "Quality data" means that NYCDEP is required to attain a minimum 90% annual data capture level and a minimum of 85% data capture for each quarter. Any quarter with 85% or less of data capture requires investigation and corrective action by NYCDEP.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 2-55: Compliance Demonstration
Effective between the dates of 10/17/2014 and 12/19/2017

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 2-55.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 2-55.2:

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 of any occasion of H₂S reading above 50 ppb with the Quarterly Report.

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.

The initial report is due 1/30/2015.

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

Condition 56: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 56.1:

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The Compliance Demonstration activity will be performed for the Facility.

Item 56.2:

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

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 plant will maintain a daily log on site to record the presence of odors and corrective actions taken, and report those to the Department semi annually.

NYCDEP North River WPCP shall continually implement the findings of the odor control study.

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 57: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 57.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 57.2:

Compliance Demonstration shall include the following monitoring:

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Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2013.

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

Condition 59: Compliance Demonstration
Effective between the dates of 12/20/2012 and 12/19/2017

Applicable State Requirement:6 NYCRR 211.2

Item 59.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 59.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)



Reports due 30 days after the reporting period.
The initial report is due 1/30/2013.
Subsequent reports are due every 6 calendar month(s).

