



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air Title V Facility
Permit ID: 2-6302-00012/00013
Effective Date: 04/03/2008 Expiration Date: 04/02/2013

Permit Issued To: NYC DEPT OF ENVIRONMENTAL PROTECTION
96-05 HORACE HARDING EXPWY
FLUSHING, NY 11368

Contact: DOUGLAS S GREELEY
NYCDEP/BWT
96-05 HORACE HARDING EXPWY 2ND FL
CORONA, NY 11368
(718) 595-5050

Facility: NYC-DEP TALLMAN ISLAND WPCP
127-01 POWELLS COVE BLVD
COLLEGE POINT, NY 11356

Contact: VINCENT SAPIENZA
NYCDEP / BWPC
96-05 HORACE HARDING EXPWY
FLUSHING, NY 11368
(718) 595-4906

Description:
Application for renewal of Air Title V Facility.

After submitting the Title permit renewal application, additional plant upgrading design information was developed on the following proposed activities:

To perform overhaul of the existing pump and blower engines
To install sewage pumps powered by Con Ed (under the plant's Emergency Pumping Plan Stage I) for emergency pumping of dry weather flow in case of failure of the existing pump engines; and additional sewage pumps and two (2) 1600 KW/2,332 HP engine generators (one standby) under the Stage II Pumping System to provide power for emergency pumping of also wet weather flow in case of failure of the existing pump engines. (NYCDEP submitted on June 28, 2005 a State Facility Permit for the installation and operation of these emergency pumping engine-generators and is incorporating these engine-generators into this revised Tallman Island WPCP Part 201 Title V permit renewal application). After completion of the overhaul of the existing engines, the Stage II engine-generators will be utilized as the backup power for sewage pump around operation under the plant upgrading contract TI-3 for replacing the existing engine-coupled main sewage pumps with electrical motor sewage pumps and other upgrading construction if needed.
To upgrade the plant's existing wastewater treatment processes, including introduction of



the Biological Nutrient Removal (BNR) nitrogen reduction treatment
To upgrade the plant's existing combustion processes, including decommissioning of the existing five (5) pump and five (5) blower engines, and installation of two (2) 14.65 MMBtu/hr boilers to compensate for heat lost due to removal of the existing pump and blower engines; Installation of one (1) 8 MMBtu/hr interim boiler in September 2008 to serve sludge heating needs in addition to heat for the building during the period after the removal of the existing pump and blower engines and prior to installation of the two permanent boilers, installation of one (1) new waste digester gas burner to replace the two existing digester gas burners (one has been already removed); and in a later phase re-designation of the two Stage II engine-generators (one standby) to be emergency generators and installation of one (1) additional 1475 Hp emergency engine generator to replace the existing 2168 Hp emergency engine generator.

In addition to construction equipment including portable engine powered equipment that are operated solely for the construction purpose and considered trivial activities under Part 201-3.3(c)(11), after the existing pump and blower engines are decommissioned and removed from operation, the upgrading construction may bring to the plant up to three (3) 500 kW/670 Hp interim portable engine generators for direct or indirect plant operation. These portable engine generators are not a permanent installation but may be used during the construction period only. These portable engine generators will be removed once the construction is completed. Each portable engine generator exhaust will be treated with a Selective Catalytic Reduction (SCR) after-combustion treatment system in order to comply with the Part 227 NOx RACT requirement.

After the 8 mmBtu/hr interim boiler is removed, when needed in future, the plant will bring in a contingent interim 14.65 MMBtu/hr boiler firing #2 low sulfur diesels to the plant through rental contracts or relocation of DEP's equipment from other facilities. This contingent interim boiler may be operated under an operational flexibility requirement for an interim period during the period when the plant's boiler(s) or heat distribution system does not function properly or need repair. This contingent interim boiler is not a permanent unit but an interim operational flexibility unit and the overall emissions shall not result in exceeding any established emission limitations for this Emission Unit 2-ENGPU. DEP will notify DEC in advance and comply with all other applicable regulations.

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
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 to the Department for approval.



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 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: 2-6302-00012/00013

Facility DEC ID: 2630200012



Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - TITLE V PERMIT

IDENTIFICATION INFORMATION

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FLUSHING, NY 11368

Facility: NYC-DEP TALLMAN ISLAND WPCP
127-01 POWELLS COVE BLVD
COLLEGE POINT, NY 11356

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

Permit Effective Date: 04/03/2008

Permit Expiration Date: 04/02/2013



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6 NYCRR 200.6: Acceptable Ambient Air Quality
- 2 6 NYCRR 201-6.5 (a) (7): Fees
- 3 6 NYCRR 201-6.5 (c): Recordkeeping and reporting of compliance monitoring
- 4 6 NYCRR 201-6.5 (c) (2): Monitoring, Related Recordkeeping, and Reporting Requirements.
- 5 6 NYCRR 201-6.5 (c) (3) (ii): Compliance Certification
- 6 6 NYCRR 201-6.5 (e): Compliance Certification
- 7 6 NYCRR 202-2.1: Compliance Certification
- 8 6 NYCRR 202-2.5: Recordkeeping requirements
- 9 6 NYCRR Part 215: Open Fires Prohibited at Industrial and Commercial Sites
- 10 6 NYCRR 200.7: Maintenance of Equipment
- 11 6 NYCRR 201-1.7: Recycling and Salvage
- 12 6 NYCRR 201-1.8: Prohibition of Reintroduction of Collected Contaminants to the air
- 13 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility
- 14 6 NYCRR 201-3.3 (a): Trivial Sources - Proof of Eligibility
- 15 6 NYCRR 201-6.5 (a) (4): Standard Requirement - Provide Information
- 16 6 NYCRR 201-6.5 (a) (8): General Condition - Right to Inspect
- 17 6 NYCRR 201-6.5 (d) (5): Standard Requirements - Progress Reports
- 18 6 NYCRR 201-6.5 (f) (6): Off Permit Changes
- 19 6 NYCRR 202-1.1: Required Emissions Tests
- 20 6 NYCRR 211.3: Visible Emissions Limited
- 21 6 NYCRR 211.3: Compliance Certification
- 22 6 NYCRR 211.3: Compliance Certification
- 23 40 CFR Part 68: Accidental release provisions.
- 24 40CFR 82, Subpart F: Recycling and Emissions Reduction
- 25 6 NYCRR Subpart 201-6: Emission Unit Definition
- 26 6 NYCRR 201-6.5: Compliance Certification
- 27 6 NYCRR 201-6.5 (c) (3): Compliance Certification
- 28 6 NYCRR 201-6.5 (g): Non Applicable requirements
- 29 6 NYCRR Subpart 201-7: Facility Permissible Emissions
- *30 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *31 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *32 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *33 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *34 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *35 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 36 6 NYCRR Subpart 202-1: Compliance Certification
- 37 6 NYCRR Subpart 202-1: Compliance Certification
- 38 6 NYCRR 211.3: Compliance Certification
- 39 6 NYCRR 225-1.2 (a) (2): Compliance Certification
- 40 6 NYCRR 225-1.8 (a): Compliance Certification
- 41 6 NYCRR 227-1.3 (a): Compliance Certification
- 42 6 NYCRR 227-1.3 (a): Compliance Certification



- 43 6 NYCRR 227.2 (b) (1): Compliance Certification
- 44 40CFR 52.21, Subpart A: Compliance Certification
- 45 40CFR 52.21, Subpart A: Compliance Certification
- 46 40CFR 52.21, Subpart A: Compliance Certification
- 47 40CFR 60.4208, NSPS Subpart III: Stationary CI-IC Engines -
Installation and importing deadlines for engines produced in the previous
model year
- 48 40CFR 63.1586, Subpart VVV: Existing Non-Industrial POTW Treatment
Plants

Emission Unit Level

- 49 6 NYCRR Subpart 201-6: Emission Point Definition By Emission Unit
- 50 6 NYCRR Subpart 201-6: Process Definition By Emission Unit
- 51 6 NYCRR Subpart 201-7: Emission Unit Permissible Emissions

EU=0-6MISC

- *52 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *53 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 54 6 NYCRR Part 212: Compliance Certification
- 55 6 NYCRR Part 212: Compliance Certification
- 56 6 NYCRR 230.2 (d) (1): Stage I and II requirements for tanks
constructed, replaced, or substantially modified after June 27, 1987
- 57 6 NYCRR 230.2 (g): Compliance Certification

EU=1-ENGBL

- *58 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *59 6 NYCRR Subpart 201-7: Capping Monitoring Condition

EU=1-ENGBL,Proc=DIE

- 60 6 NYCRR 227-2.5 (c): Compliance Certification

EU=1-ENGBL,Proc=DUA

- 61 6 NYCRR 227-2.5 (c): Compliance Certification

EU=1-ENGBL,Proc=PEG

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

EU=2-ENGPU

- *63 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- *64 6 NYCRR Subpart 201-7: Capping Monitoring Condition

EU=2-ENGPU,Proc=DIS

- 65 6 NYCRR 227-2.5 (c): Compliance Certification

EU=2-ENGPU,Proc=GEN

- 66 40CFR 60.4200, NSPS Subpart III: Compliance Certification
- 67 40CFR 60.4200, NSPS Subpart III: Compliance Certification

EU=2-ENGPU,Proc=GEN,ES=NEGEN

- 68 40CFR 60.4205(b), NSPS Subpart III: Compliance Certification
- 69 40CFR 60.4209(a), NSPS Subpart III: Compliance Certification
- 70 40CFR 60.4214, NSPS Subpart III: Compliance Certification



EU=2-ENGPU,Proc=IBR,ES=CBLER

71 6 NYCRR 227-2.4 (d): Compliance Certification

EU=2-ENGPU,Proc=IBR,ES=IBLER

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

EU=2-ENGPU,Proc=NBD

73 6 NYCRR 227-2.5 (c): Compliance Certification

EU=2-ENGPU,Proc=NBR,ES=SBLR1

74 6 NYCRR 227-2.4 (d): Compliance Certification

EU=2-ENGPU,Proc=NBR,ES=SBLR2

75 6 NYCRR 227-2.4 (d): Compliance Certification

EU=3-BLERS

*76 6 NYCRR Subpart 201-7: Capping Monitoring Condition

*77 6 NYCRR Subpart 201-7: Capping Monitoring Condition

EU=3-BLERS,Proc=DIF,ES=BLER1

78 6 NYCRR 227-2.4 (d): Compliance Certification

EU=3-BLERS,Proc=DIF,ES=BLER2

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

EU=4-WWTRE

*80 6 NYCRR Subpart 201-7: Capping Monitoring Condition

EU=5-SLUDG

*81 6 NYCRR Subpart 201-7: Capping Monitoring Condition

EU=P-AROUND,Proc=P02

*82 6 NYCRR Subpart 201-7: Capping Monitoring Condition

*83 6 NYCRR Subpart 201-7: Capping Monitoring Condition

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

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

85 ECL 19-0301: Contaminant List

86 6 NYCRR 201-1.4: Unavoidable noncompliance and violations

87 6 NYCRR 211.2: Air pollution prohibited

88 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 constitutes an affirmative defense to an action brought 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 and/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;
- (3) During the period of the emergency the facility owner and/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 and/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 and/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 201-6.3 (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 201-6.3 (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 201-6.5 (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 201-6.5 (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 201-6.5 (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 201-6.5 (a) (6)

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



Item I: Severability - 6 NYCRR 201-6.5 (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 201-6.5 (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 201-6.5 (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 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 200.6

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

Condition 2: Fees
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (a) (7)

Item 2.1:
The owner and/or operator of a stationary source shall pay fees to the Department consistent with the fee schedule authorized by ECL 72-0302.

Condition 3: Recordkeeping and reporting of compliance monitoring
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (c)

Item 3.1:



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

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

Any deviation from permit requirements must be clearly identified in all records and reports. Reports must be certified by a responsible official, consistent with Section 201-6.3 of this Part 201.

Condition 4: Monitoring, Related Recordkeeping, and Reporting Requirements.

Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement: 6 NYCRR 201-6.5 (c) (2)

Item 4.1:

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

Condition 5: Compliance Certification

Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement: 6 NYCRR 201-6.5 (c) (3) (ii)

Item 5.1:

The Compliance Certification activity will be performed for the Facility.

Item 5.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

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

Submit reports of any required monitoring at a minimum



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

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

(1) For emissions of a hazardous air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.

(2) For emissions of any regulated air pollutant, excluding those listed in paragraph (1) of this section, that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.

(3) For all other deviations from permit requirements, the report shall be contained in the 6 month monitoring report required above.

(4) This permit may contain a more stringent reporting requirement than required by paragraphs (1), (2) or (3) above. If more stringent reporting requirements have been placed in this permit or exist in applicable requirements that apply to this facility, the more stringent reporting requirement shall apply.

If above paragraphs (1) or (2) are met, the source must notify the permitting authority by telephone during normal business hours at the Regional Office of jurisdiction for this permit, attention Regional Air Pollution Control Engineer (RAPCE) according to the timetable listed in paragraphs (1) and (2) of this section. For deviations and incidences that must be reported outside of normal business hours, on weekends, or holidays, the DEC Spill Hotline phone number at 1-800-457-7362 shall be used. A



written notice, certified by a responsible official consistent with 6 NYCRR Part 201-6.3(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 shall be submitted to the Administrator (or his or her representative) as well as two copies 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). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.5(e), contained elsewhere in this permit.

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 10/30/2008.



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

Condition 6: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement: 6 NYCRR 201-6.5 (e)

Item 6.1:

The Compliance Certification activity will be performed for the Facility.

Item 6.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Compliance certifications shall contain the following information:

- 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 recordkeeping 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.

Compliance certifications shall be submitted annually. Certification reports are due 30 days after the end of the calendar year.

All compliance certifications shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Compliance Monitoring and Enforcement (BCME) in the DEC central office). Please send annual compliance certifications to Chief of the Stationary Source Compliance Section, the Region 2 EPA representative for the Administrator, at the following address:

USEPA Region 2
Air Compliance Branch
290 Broadway
New York, NY 10007-1866

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



The address for the RAPCE is as follows:

Hunters Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407

The address for the BCME is as follows:

NYSDEC
Bureau of Compliance Monitoring
and Enforcement
50 Wolf Road
Albany, NY 12233-3258

Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 45 days after the reporting period.
The initial report is due 11/14/2008.
Subsequent reports are due on the same day each year

Condition 7: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 202-2.1

Item 7.1:

The Compliance Certification activity will be performed for the Facility.

Item 7.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emission statements shall be submitted on or before April
15th each year for emissions of the previous calendar
year.

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 04/03/2008 and 04/02/2013

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 Prohibited at Industrial and Commercial Sites
Effective between the dates of 04/03/2008 and 04/02/2013**

Applicable Federal Requirement:6 NYCRR Part 215

Item 9.1:

No person shall burn, cause, suffer, allow or permit the burning in an open fire of garbage, refuse, rubbish for salvage, or rubbish generated by industrial or commercial activities.

**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 04/03/2008 and 04/02/2013**

Applicable Federal Requirement:6 NYCRR 200.7

Item 10.1:

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

**Condition 11: Recycling and Salvage
Effective between the dates of 04/03/2008 and 04/02/2013**

Applicable Federal Requirement:6 NYCRR 201-1.7

Item 11.1:

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

**Condition 12: Prohibition of Reintroduction of Collected Contaminants to
the air
Effective between the dates of 04/03/2008 and 04/02/2013**



Applicable Federal Requirement:6 NYCRR 201-1.8

Item 12.1:

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

Condition 13: Exempt Sources - Proof of Eligibility
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 13.1:

The owner and/or operator of an emission source or unit that is eligible to be exempt may be required to certify that it operates within the specific criteria described in this Subpart. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 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.

Condition 14: Trivial Sources - Proof of Eligibility
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 14.1:

The owner and/or operator of an emission source or unit that is listed as being trivial in this Part may be required to certify that it operates within the specific criteria described in this Subpart. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 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.

Condition 15: Standard Requirement - Provide Information
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (a) (4)

Item 15.1:

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

Condition 16: General Condition - Right to Inspect



Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (a) (8)

Item 16.1:

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

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

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

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

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

Condition 17: Standard Requirements - Progress Reports
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (d) (5)

Item 17.1:

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 18: Off Permit Changes
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (f) (6)

Item 18.1:

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



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.

Operators of air contamination sources that are not exempt from permitting and where a continuous opacity monitor is not utilized for measuring smoke emissions, shall be required to perform the following:

1) Observe the stack(s) or vent(s) once per day for visible emissions. This observation(s) must be conducted during daylight hours except during adverse weather conditions (fog, rain, or snow).

2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:

- weather condition
- was a plume observed?

This logbook must be retained at the facility for five (5) years after the date of the last entry.

3) If the operator observes any visible emissions (other than steam - see below) two consecutive days, then a Method 9 analysis (based upon a 6-minute mean) of the affected emission point(s) must be conducted within two (2) business days of such occurrence. The results of the Method 9 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis if the opacity standard is contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance.

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

Parameter Monitored: OPACITY
Upper Permit Limit: 57 percent
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING



DESCRIPTION
Averaging Method: ONE CONTINUOUS 6-MINUTE PERIOD PER HOUR
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 22: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 211.3

Item 22.1:
The Compliance Certification activity will be performed for the Facility.

Item 22.2:
Compliance Certification shall include the following monitoring:

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

Monitoring Description:

Except as permitted by a specific part of Title 6 of the NYCRR, 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.

Operators of air contamination sources that are not exempt from permitting and where a continuous opacity monitor is not utilized for measuring smoke emissions, shall be required to perform the following:

- 1) Observe the stack(s) or vent(s) once per day for visible emissions. This observation(s) must be conducted during daylight hours except during adverse weather conditions (fog, rain, or snow).
- 2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:
 - weather condition
 - was a plume observed?

This logbook must be retained at the facility for five (5) years after the date of the last entry.

- 3) If the operator observes any visible emissions (other than steam - see below) two consecutive days, then a



Method 9 analysis (based upon a 6-minute mean) of the affected emission point(s) must be conducted within two (2) business days of such occurrence. The results of the Method 9 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis if the opacity standard is contravened. Upon notification, any corrective actions or future compliance schedules shall be presented to the Department for acceptance.

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

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

**Condition 23: Accidental release provisions.
Effective between the dates of 04/03/2008 and 04/02/2013**

Applicable Federal Requirement:40 CFR Part 68

Item 23.1:

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 24: Recycling and Emissions Reduction
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:40CFR 82, Subpart F

Item 24.1:

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 25: Emission Unit Definition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 25.1:

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

Emission Unit: 0-6MISC

Emission Unit Description:

This unit consists of the plant's one (1) waste sludge digester gas burner to flare excessive sludge digester gas if necessary and two fuel dispensing units (one gasoline and one diesel). No digester gas is to be wasted in the plant under normal operation.

Under the plant's upgrading construction, this waste sludge digester gas burner is to be removed.

Building(s): DGHA
FLARE
NCFA

Item 25.2:

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

Emission Unit: 1-ENGBL

Emission Unit Description:

This Emission Unit includes five (5) Delaval (Enterprise's) DGSR-6, 1013 HP engines directly connected to five process air blowers. All of these are capable of firing digester gas, blend of digester gas and natural gas, and diesel (fuel oil #2). Exhaust from each engine is



passed through a waste heat recovery boiler and then vented to the atmosphere through a stack.

Under the plant's upgrading construction, all of these 5 engines are to be removed. In addition to construction equipment including portable engine powered equipment that are operated solely for the construction purpose and considered trivial activities under Part 201-3.3(c)(11), after the existing pump and blower engines are decommissioned and removed from operation, the upgrading construction may bring to the plant up to three (3) 500 kW/670 Hp portable engine generators for direct or indirect plant operation. These portable engine generators are not a permanent installation but for construction period only. These portable engine generators will be removed once the construction is completed. Each portable engine generator exhaust will be treated with a Selective Catalytic Reduction (SCR) after-combustion treatment system in order to meet the Part 227 NO_x RACT requirement.

Building(s): MAIN
OUTDOOR

Item 25.3:

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

Emission Unit: 2-ENGPU

Emission Unit Description:

This Emission Unit consists of two (2) Delaval (Enterprise's) DGSG-6, 520 HP and three (3) Delaval (Enterprise's) DGSG-6, 546 HP engines, all directly connected to process wastewater pumps. All of these are capable of firing digester gas, blend of digester gas and natural gas, and diesel (fuel oil #2). Exhaust from each engine is passed through a waste heat recovery boiler and then vented to the atmosphere through a stack.

Under the plant's upgrading construction, all of these 5 engines are to be removed. Because of the removal of these engines, the plant upgrading will install two (2) maximum heat input 14.65 MMBtu/hr boilers firing sludge digester gas or natural gas to compensate for heat loss, one (1) new waste digester gas burner to flare excessive sludge digester gas, and one (1) additional 1475 HP emergency engine generator to replace the existing 2168 HP emergency engine generator. The plant will install one (1) 8 MMBtu/hr interim boiler firing low sulfur #2 diesel fuel in September 2008 to serve sludge heating needs in addition to heat for the building during the period after the removal of the these engines and prior to installation of the two permanent 14.65 MMBtu/hr boilers.

After the 8 mmBtu/hr interim boiler is removed, when



needed in future, the plant will bring in a contingent interim 14.65 MMBtu/hr boiler firing #2 low sulfur diesels to the plant through rental contracts or relocation of DEP's equipment from other facilities. This contingent interim boiler may be operated under an operational flexibility requirement for an interim period during the period when the plant's boiler(s) or heat distribution system is not functioning properly and repairs are necessary. This contingent interim boiler is not a permanent unit but an interim operational flexibility unit and the emissions shall not result in exceeding any established emission limitations for this Emission Unit 2-ENGPU. DEP will notify DEC in advance and comply with all other applicable regulations.

Building(s): MAIN

Item 25.4:

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

Emission Unit: 3-BLERS

Emission Unit Description:

This Emission Unit consists of two Cleaver Brooks, CB-250 HP boilers with input heat capacity of 10.5 MMBTU/Hr. These boilers are capable of firing diesel fuel #2. The exhausts from the boilers are vented to atmosphere through a common stack.

The treatment plant has a total of four (4) other exempt boilers/water heater; one rated with maximum heat input of 2.0 MMBTU/hr and one water heater with maximum heat input of 0.54 MMBTU/hr burning digester gas in the Pump & Blower building, and two each rated with maximum heat input of 5.23 MMBTU/hr and burning natural gas in the Dewatering Building.

There is also one exempt boiler rated with maximum heat input of 1.5 MMBTU/hr and one exempt water heater rated with maximum heat input of 0.42 MMBTU/hr burning natural gas in the adjacent North Collection Facility.

Building(s): MAIN

Item 25.5:

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

Emission Unit: 4-WWTRE

Emission Unit Description:

This emission unit includes the plant's wastewater treatment processes. These processes include the typical wastewater treatment processes of headworks, primary settling tanks, aeration tanks, final settling tanks, and



chlorination disinfection tanks and associated processes. Most of these processes are in tanks at the plant's outdoor space.

Emissions from these wastewater treatment related processes vary based on the constituents of the plant influent, over which the plant has no control. The emissions are based on current sampling and computer modeling.

The plant is also scheduled to proceed on the wastewater treatment processes upgrade construction that also introduces the Biological Nutrient Removal (BNR) nitrogen reduction treatment. Besides necessary repair and replacement of parts of the existing equipment, the wastewater treatment processes upgrading construction also includes the following:

Four (4) motor driven new centrifugal process air blowers and piping due to the scheduled decommissioning of the existing blower engines

Five (5) motor driven new main sewage pumps due to the scheduled decommissioning of the existing pump engines

New return activated sludge (RAS) pumping station

Aeration tank modifications for basic step-feed BNR

New diffuser system

New dissolved oxygen controls

New baffle walls

New froth hoods

Slow speed submersible mixers in the BNR anoxic zones

Replacement of spray water system

New surface wasting system

Replacement of mixed flow pumps

Added hypochlorite storage tank and metering system for RAS, surface wasting, spray water and froth hoods

New centrate pumping station

New 27 kV substation, 4,160 VAC feeders and ductbanks

Building(s): AERATION
CHLORINE
FINAL
PRIMARY
SCREEN

Item 25.6:

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

Emission Unit: 5-SLUDG

Emission Unit Description:

This unit includes the plant's sludge handling processes.



The processes include sludge degritting, sludge thickening, sludge digesters, sludge storage, and sludge dewatering. The dewatering facility has two (2) centrifuges, two (2) wet scrubbers and three (3) activated carbon adsorbers.

Building(s): DEWB
GHOLDING
GRTB
SDGTA
STHA

Item 25.7:

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

Emission Unit: P-AROUD

Emission Unit Description:

The plant experienced a dry-weather bypass on November 8, 2004 due to a failure of the engines, power-train system that runs the main sewage pumps. This raised concerns about the vulnerability of the power-train system until completion of these engines, replacement. NYCDEP has determined that engine overhaul and rehabilitation of the auxiliary system would improve the system reliability pending their replacement.

The planned engineoverhaul is an extensive process and NYCDEP estimated that the planned overhaul of all of the five (5) pump engines will take approximately 30 months to complete. This time estimate may need to be revised as the work proceeds based upon the condition of each pump engine.

NYCDEP is taking steps to minimize the level of risk during the entire engine overhaul period and until the Plant Upgrade is complete, particularly during the bathing season. 7 sewage pumps powered by Con Ed have been installed under an Emergency Pumping Plan Stage I for emergency pumping of dry weather flow in case of failure of the existing pump engines. Additional 8 sewage pumps (total 15 sewage pumps, 11 online and 4 standby) and two (2) 1600 KW / 2,332 HP engine-generators (one standby) are to be installed under the Stage II emergency pumping to handle wet weather flow in case of failure of the existing pump engines. Each of the exhausts of these two engine-generators will be treated with its own Selective Catalytic Reduction (SCR) after-combustion treatment system in order to meet the Part 227 NOx RACT requirement.

After completion of the overhaul of the existing engines, the Stage II engine-generators will be utilized as the backup power for sewage pump around operation under the plant upgrading contract TI-3 for replacing the



existing engine-coupled main sewage pumps with electrical motor sewage pumps and other upgrading construction if needed.

Building(s): PHASEIIGEN

Condition 26: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 201-6.5

Item 26.1:

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

Emission Unit: 1-ENGBL

Emission Unit: 2-ENGPU

Item 26.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility shall be restricted to operating only 4 of the 5 engines described in each emission unit (Emission units 2-ENGPU and 1-ENGBL) at any time. In addition, only one of two boilers described in emission unit 3-BLERS can be operated at any time. In the event that it becomes necessary to bring an additional combustion unit on-line, the facility must first notify this Department and submit potential to emit calculations for following pollutants: PM10, NOx, SO2, Formaldehyde, VOC, HAPs for review.

A daily log will be kept on-site containing the following information:

- A. total operating time of each engine and boilers
- B. The date and times of operation
- C. Inspector's name

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 27: Compliance Certification



Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement: 6 NYCRR 201-6.5 (c) (3)

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:

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.

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 shall be submitted to the Administrator (or his or her representative) as well as two copies to the Department (one copy to the regional air pollution control engineer (RAPCE) in the regional office and one copy to the Bureau of Compliance Monitoring and Enforcement (BCME) in the DEC central office). Mailing addresses for the above referenced persons are contained in the monitoring condition for 6 NYCRR Part 201-6.5(e), contained elsewhere in this permit.

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



The initial report is due 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 28: Non Applicable requirements
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 201-6.5 (g)

Item 28.1:

This section contains a summary of those requirements that have been specifically identified as being not applicable to this facility and/or emission units, emission points, processes and/or emission sources within this facility. The summary also includes a justification for classifying any such requirements as non-applicable.

Condition 29: Facility Permissible Emissions
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 29.1:

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

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

CAS No: 000630-08-0 Name: CARBON MONOXIDE	PTE: 448,600 pounds per year
CAS No: 007446-09-5 Name: SULFUR DIOXIDE	PTE: 51,400 pounds per year
CAS No: 0NY210-00-0 Name: OXIDES OF NITROGEN	PTE: 443,600 pounds per year
CAS No: 0NY998-00-0 Name: VOC	PTE: 72,800 pounds per year

Condition 30: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 30.1:

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 231-2

Item 30.2:

Operation of this facility shall take place in accordance with the approved criteria, emission



limits, terms, conditions and standards in this permit.

Item 30.3:

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 30.4:

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 30.5:

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 30.6:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 30.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The existing facility-wide MAP emissions are above the 250 tpy for NOx and CO and therefore the facility is considered an existing "major stationary source" for the purposes of the federal 40 CFR 52.21 Prevention of Significant Deterioration ("PSD") regulation. The PSD regulations are triggered at this facility if it undergoes a "major modification" and "the projected actual emissions" equal or exceed the "baseline actual emissions" plus the applicable PSD de minimis and the increase in emissions is related to the "major modification." Under 6NYCRR Subpart 201-7.1, source owner or operator may elect to accept federally enforceable permit terms and conditions which restrict or cap emissions from a stationary source or emission unit in order to avoid being subject to one or more applicable requirements that the source or unit would otherwise be subject to. The facility is limited to facility wide emission cap of 221.8 tpy of NOx in order to cap out of PSD applicability. The



projected actual NO_x emissions resulting from the overall project are as follows: 123.3 tpy (baseline actual) plus 22.5 tpy (from pump around emission) equaling 145.8 tpy. To demonstrate that the 40 CFR52.21 PSD NO_x de minimis level of 40 tpy has not been met or exceeded, the Tallman Island facility must maintain records of NO_x emissions for the next five years documenting that the projected actual emissions resulting from the overhaul project do not equal or exceed 163.3 tpy (i.e. 123 tpy baseline actual plus 40 tpy de minimis). Record keeping shall commence on the day that the first emissions source associated with the overhaul project either resumes or begins regular operation and shall continue for five years following the day that the last emissions source associated with the overhaul project becomes available for regular operation. If the facility's actual emissions post-change exceed the baseline actual emissions by a significant amount (equal to or greater than 40 tpy), then the facility must report this increase to EPA within 60 days after the end of the relevant 12 month period. If EPA determines that the significant emission increase in actual emissions post-change was related to an increased operation of the existing emergency generator, the overhaul of the main pump engines, blower engines and/or pump around emissions, or is otherwise related to the overhaul project then the facility is subject to PSD. The facility is also obligated to maintain all information necessary to determine post-change emissions and make this information available upon request by the Department or general public.

All references to a 12-month period refer to a 12-month rolling average, calculated on a monthly basis.

This 221.8 tpy NO_x emission cap compliance is to be determined by:

BEG(0.833)+
BED(1.468)+
PEG(0.896)+
PED(2.067)+
BD(0.143)+B
G(0.098)+SEG(0.615)+EEG(3.35)+F(0.091)+FN(0.068)
< 443,600 Lb/yr

Where:

BEG \hat{c} Total blower engine dual fuel operation heat input, mmBtu/yr

BED \hat{c} Total blower engine diesel fuel operation heat input, mmBtu/yr

PEG \hat{c} Total pump engine dual fuel operation heat input, mmBtu/yr



PED ζ Total pump engine diesel fuel operation heat input,
mmBtu/yr
BD ζ Total boiler diesel fuel operation heat input,
mmBtu/yr
BG ζ Total boiler gas fuel operation heat input,
mmBtu/yr
SEG ζ Total stand-by engine generator diesel heat input,
mmBtu/yr
EEG ζ Total emergency engine generator diesel heat input,
mmBtu/yr
F ζ Total sludge existing digester gas flare heat input,
mmBtu/yr
FN ζ Total sludge new digester gas flare heat input,
mmBtu/yr

Facility will monitor the fuel usage to verify this.
Record keeping shall be maintained for at least 5 years.
Compliance of this condition shall be reported in the
semiannual compliance report.

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 10/30/2008.

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

Condition 31: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 31.1:

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 231-2

Item 31.2:

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

Item 31.3:

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 31.4:



Item 32.1:

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 231-2

Item 32.2:

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

Item 32.3:

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 32.4:

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 32.5:

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 32.6:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 32.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This is for all Exempt Sources.

The plant's exempt combustion sources include one (1) existing 2168 HP emergency engine generator, and six (6) <10 MMBTU/hr boilers and water heaters. The plant upgrading will decommission the existing 2168 HP emergency engine generator. Annual NOx emissions from these exempt



combustion sources will be limited to 15.6 tons per year. The actual NOx emissions will be determined by record of all fuel consumption at these exempt combustion sources and the calculations in the attached PTE calculations to demonstrate compliance of the 15.6 ton/yr NOx emission limit.

Formula for Exempt Activities

$$\text{NOx Emission} = \text{EBR}(0.098) + \text{EEG}(3.35) < 31200 \text{ lb/yr (15.6 tons/yr)}$$

Where:

EBR - Total exempt boiler gas fuel operation heat input, mmBtu/yr

EEG - Total existing emergency engine generator diesel heat input, mmBtu/yr

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 10/30/2008.

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

Condition 33: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 33.1:

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:

40 CFR 52.21

Item 33.2:

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

Item 33.3:

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 33.4:

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 33.5:

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 33.6:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 007446-09-5 SULFUR DIOXIDE

Item 33.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

NYCDEP calculated that the projected actual SO₂ emissions resulting from the overall project will not exceed 47.6 tons/year (i.e., 7.6 tpy baseline actual emissions plus 40 tpy PSD SO₂ de minimis). The Tallman Island facility must maintain records of SO₂ emissions for the next five years documenting that the projected actual emissions resulting from the overhaul project do not equal or exceed 47.6 tpy. Record keeping shall commence on the day that the first emissions source associated with the overhaul project either resumes or begins regular operation and shall continue for five years following the day that the last emissions source associated with the overhaul project becomes available for regular operation. If the facility's actual emissions post-change exceed the baseline actual emissions by a significant amount for SO₂ (equal or greater than 40 tpy), then the facility must report this increase to EPA within 60 days after the end of the relevant 12-month period. If EPA determines that the significant emission increase in actual emissions post-change was related to an increased operation of the existing emergency generator, the overhaul of the main pump engines, blower engines and/or pump around emissions, or is otherwise related to the overhaul project then the facility is subject to PSD. The facility is also obligated to maintain all information necessary to determine



post-change emissions and make this information available upon request by the Department or general public.

All references to a 12-month period refer to a 12-month rolling average, calculated on a monthly basis.

SO₂ emissions is determined by:

$$\text{BEG}(.045)+\text{BED}(.045)+\text{PEG}(0.070)+\text{PED}(.106)+\text{BD}(.190)+\text{BG}(.000588)+\text{SEG}(.152)+\text{EEG}(.152)+\text{F}(.016)+\text{FN}(.016)<95,200 \text{ lb/yr, (47.6 tons/yr)}$$

BEG = Total blower engine dual fuel operation heat input, mmBtu/yr

BED = Total blower engine diesel fuel operation heat input, mmBtu/yr

PEG = Total pump engine dual fuel operation heat input, mmBtu/yr

PED = Total pump engine diesel fuel operation heat input, mmBtu/yr

BD = Total boiler diesel fuel operation heat input, mmBtu/yr

BG = Total boiler gas fuel operation heat input, mmBtu/yr

SEG = Total stand-by engine generator diesel heat input, mmBtu/yr

EEG = Total emergency engine generator diesel heat input, mmBtu/yr

F = Total sludge existing digester gas flare heat input, mmBtu/yr

FN = Total sludge new digester gas flare heat input, mmBtu/yr

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 10/30/2008.

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

Condition 34: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 34.1:

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:



40 CFR 52.21

Item 34.2:

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

Item 34.3:

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 34.4:

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 34.5:

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 34.6:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 000630-08-0 CARBON MONOXIDE

Item 34.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

NYCDEP calculated that the projected actual CO emissions resulting from the overall project will not exceed 204.9 tons/year (i.e., 104.9 tpy baseline actual emissions plus 100 tpy PSD CO de minimis). The Tallman Island facility must maintain records of CO emissions for the next five years documenting that the projected actual emissions resulting from the overhaul project do not equal or exceed 204.9 tpy.

Record keeping shall commence on the day that the first emissions source associated with the overhaul project either resumes or begins regular operation and shall continue for five years following the day that the last emissions source associated with the overhaul project



becomes available for regular operation.
If the facility's actual emissions post-change exceed the baseline actual emissions by a significant amount for CO (equal or greater than 100 tpy), then the facility must report this increase to EPA within 60 days after the end of the relevant 12-month period. If EPA determines that the significant emission increase in actual emissions post-change was related to an increased operation of the existing emergency generator, the overhaul of the main pump engines, blower engines and/or pump around emissions, or is otherwise related to the overhaul project then the facility is subject to PSD. The facility is also obligated to maintain all information necessary to determine post-change emissions and make this information available upon request by the Department or general public.

All references to a 12-month period refer to a 12-month rolling average, calculated on a monthly basis.

CO emissions is determined by:

$$\text{BEG}(.624)+\text{BED}(.067)+\text{PEG}(1.834)+\text{PED}(.294)+\text{BD}(.036)+\text{BG}(.082)+\text{SEG}(.268)+\text{EEG}(.73)+\text{F}(.168)+\text{FN}(.037)<409,800 \text{ lb/yr},$$

(204.9 tons/yr)

BEG = Total blower engine dual fuel operation heat input, mmBtu/yr

BED = Total blower engine diesel fuel operation heat input, mmBtu/yr

PEG = Total pump engine dual fuel operation heat input, mmBtu/yr

PED = Total pump engine diesel fuel operation heat input, mmBtu/yr

BD = Total boiler diesel fuel operation heat input, mmBtu/yr

BG = Total boiler gas fuel operation heat input, mmBtu/yr

SEG = Total stand-by engine generator diesel heat input, mmBtu/yr

EEG = Total emergency engine generator diesel heat input, mmBtu/yr

F = Total sludge existing digester gas flare heat input, mmBtu/yr

FN = Total sludge new digester gas flare heat input, mmBtu/yr

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



The initial report is due 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 35: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 35.1:

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 231-2

Item 35.2:

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

Item 35.3:

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 35.4:

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 35.5:

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 35.6:

The Compliance Certification activity will be performed for the Facility.

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

Item 35.7:

Compliance Certification shall include the following monitoring:

Capping: Yes
Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:



This is for all exempt emission sources.

The plant's exempt combustion sources include one (1) existing 2168 HP emergency engine generator, and six (6) <10 MMBTU/hr boilers and water heaters. The plant upgrading will decommission the existing 2168 HP emergency engine generator. Annual VOC emissions from these exempt combustion sources will be limited to 1.0 ton per year. The actual VOC emissions will be determined by record of all fuel consumption at these exempt combustion sources and the calculations in the attached PTE calculations to demonstrate compliance of the 1.0 ton/yr VOC emission limit.

Formula for Exempt Activities

VOC emissions = $EBR(0.005392) + EEG(0.219) < 2000$ lb/yr (1.0 tons/yr)

Where:

EBR - Total exempt boiler gas fuel operation heat input, mmBtu/yr

EEG - Total existing emergency engine generator diesel heat input, mmBtu/yr

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 36: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement: 6 NYCRR Subpart 202-1

Item 36.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 36.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions from these wastewater treatment related processes vary based on the constituents of the plant influent, over which the plant has no control. The emissions are based on current sampling and computer modeling.

For VOC emissions from wastewater treatment related sources, annual emissions will be estimated using TOXCHEM + modeling approach and at the least annually influent sampling results. For the combustion sources, annual emissions will be estimated using fuel usage, source testing data, vendor guarantee and/or published emission factors.

Reference Test Method: EPA 600 series

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 10/30/2008.

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

Condition 37: Compliance Certification

Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 202-1

Item 37.1:

The Compliance Certification activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 HAP

Item 37.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions from the wastewater treatment related processes vary based on the constituents of the plant influent, over which the plant has no control. The emissions are based on current sampling and computer modeling.

For HAP emissions from wastewater treatment related sources, annual emissions will be estimated using TOXCHEM + modeling approach and at the least annually influent sampling results. For the combustion sources, annual emissions will be estimated using fuel usage, source testing data, vendor guarantee and/or published emission factors.

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



Reference Test Method: EPA 600 series

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 10/30/2008.

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

Condition 38: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 211.3

Item 38.1:

The Compliance Certification activity will be performed for the Facility.

Item 38.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

The plant will follow the Good Engineering Practice and the manufacturer's recommended operation and maintenance procedures for the compliance of this requirement. A log will be kept of daily opacity observations at stack(s) or vent(s) during daylight hours.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: daily observations

Monitoring Frequency: DAILY

Averaging Method: 6-MINUTE AVERAGE (METHOD 22)

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 39: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 225-1.2 (a) (2)

Item 39.1:

The Compliance Certification activity will be performed for the Facility.

Item 39.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



No person shall sell, offer for sale, purchase or use any distillate oil which has a sulfur content greater than the limit presented below. 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: 0.2 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 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 40: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 40.1:

The Compliance Certification activity will be performed for the Facility.

Item 40.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

ALL NYC'S SERVICE CONTRACTS REQUIRE SUPPLIERS TO PROVIDE FUEL OILS THAT MEET THE LOW SULFUR CONTENT REQUIREMENT OF 0.2% BY WEIGHT FOR NO.2 DIESEL. MONITORING IS DONE RANDOMLY CITYWIDE BY NYC DEPT OF CITYWIDE ADMINISTRATIVE SERVICES.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.2 percent by weight
Reference Test Method: ASTM D4951
Monitoring Frequency: QUARTERLY
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 10/30/2008.
Subsequent reports are due every 6 calendar month(s).



Condition 41: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 41.1:

The Compliance Certification activity will be performed for the Facility.

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

Item 41.2:

Compliance Certification shall include the following monitoring:

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

Monitoring Description:

No owner or operator of a combustion installation shall emit greater than 20 percent opacity except for one six minute period per hour, not to exceed 27 percent, based upon the six minute average in reference test Method 9 in Appendix A of 40 CFR 60.

Operators of stationary combustion installations which fire oil, at Title V facilities, that do not utilize a continuous opacity monitor (COM) for the measuring of smoke emissions or do not have a certified visible emissions evaluator on-site shall be required to perform the following:

- 1) once per day, during daylight hours except during conditions of extreme weather (fog, snow, rain), observe the stack or stacks of all stationary combustion installations which are operating on oil, at that time, for any visible emissions (visible emissions do not include steam plumes),
- 2) record in a bound log book, the daily results of the visual observation - were there visible emissions observed - yes or no, including explanations for days when weather conditions prohibit such observations of visible emissions, and
- 3) maintain the data in this log book for five years.

**** NOTE **** Steam plumes generally form after leaving the top of the stack (this is known as a detached plume). The distance between the stack and the beginning of the detached plume may vary, however, there is (normally) a distinctive distance between the plume and stack. Steam



plumes are white in color and have a billowy consistency. Steam plumes dissipate within a short distance of the stack (the colder the air the longer the steam plume will last) and leave no dispersion trail down wind of the stack.

If the operator observes any visible emissions (other than steam) two days consecutively firing oil (the firing of other fuels in between days of oil operation does not count as an interruption in the consecutive days of operation on oil. For example: if the facility fires oil on a Sunday, then gas on Monday, and then oil on Tuesday, the firing of gas on Monday would not interrupt the count of consecutive days firing oil), a Method 9 analysis of the affected emission point(s) shall be conducted by a certified visible emissions evaluator within 2 business days of the occurrence. The operator must contact the Regional Air Pollution Control Engineer (for their location) within one business day of performing the Method 9 analysis, during normal business hours (8:30am to 4:45 pm), if the analysis shows an exceedence of the required standards for opacity. Upon notification any corrective actions or future compliance schedules shall be presented to the Region for acceptance.

The operation and maintenance of all combustion sources at the facility shall be conducted in accordance with manufacturer's specifications. Records of maintenance for each source shall be kept for the most recent five years and shall be made available for review by NYSDEC representatives upon request.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: EPA Approved
Monitoring Frequency: DAILY
Averaging Method: 6 MINUTE AVERAGE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 42: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

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

Item 42.2:



Compliance Certification shall include the following monitoring:

Monitoring Type: 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 Approved
Monitoring Frequency: ANNUALLY
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 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 43: Compliance Certification

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Following oil fired combustion sources are subject to this condition: Existing emergency generator, PENG1, PENG2, PENG3, PENG4, PENG5, OENG1, OENG2, OENG3, OENG4, OENG5, CBLR, IBLR

The two hr average emission of particulate matter from these sources shall not exceed 0.1 lb/mmBtu heat input.

1. Submit the Department an acceptable stack test protocol
2. Perform the stack test, based on approved stack test protocol

Facility shall keep records for a period of 5 yrs.

Parameter Monitored: PARTICULATES

Upper Permit Limit: 0.1 pounds per million Btus

Reference Test Method: EPA approved

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 10/30/2008.

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

Condition 44: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 44.1:

The Compliance Certification activity will be performed for the facility:

The Compliance Certification applies to:

Emission Unit: 1-ENGBL

Emission Unit: 2-ENGPU

Item 44.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

After each main pump engine OR blower engine has been overhauled, Tallman Island WPCP shall NOT operate that overhauled engine at a rate greater than 85% design capacity.

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A log of pump operation shall be kept at the facility for 5 years.

Monitoring Frequency: DAILY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 45: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 45.1:
The Compliance Certification activity will be performed for the Facility.

Item 45.2:
Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:

The facility shall maintain records of emissions for at least five years. If any of the annual limits for NO_x, CO and SO₂ listed in this permit is reached or exceeded, the facility must also submit an analysis to NYSDEC and EPA to demonstrate whether the applicable PSD de minimis levels for all the remaining criteria pollutants have also been exceeded. The NYCDEP must report the increase in emissions to NYSDEC and USEPA within 60 days.

Monitoring Frequency: CONTINUOUS
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 46: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:40CFR 52.21, Subpart A

Item 46.1:
The Compliance Certification activity will be performed for the facility:
The Compliance Certification applies to:

Emission Unit: 1-ENGBL

Emission Unit: 2-ENGPU

Item 46.2:
Compliance Certification shall include the following monitoring:



Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The existing 2168 HP emergency generator that may also be used to power the seven existing Godwind Pumps shall not operate more than 500 hrs/yr.

A log of generator operation shall be kept at the facility showing hrs of operation.

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 47: Stationary CI-IC Engines - Installation and importing deadlines for engines produced in the previous model year Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:40CFR 60.4208, NSPS Subpart IIII

Item 47.1:

Owners or operators are subject to the following deadlines for importing or installing stationary compression ignition internal combustion (CI-IC) engines produced in the previous model year:

(a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.

(b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.

(c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.

(d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

(e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.

(f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.

(g) In addition to the requirements specified in §§60.4201, 60.4202, 60.4204, and 60.4205, it is

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prohibited to import a stationary CI IC engine with a displacement of less than 30 liters per cylinder that does not meet the applicable requirements specified in paragraphs (a) through (f) above after the dates specified in those paragraphs.

(h) The deadlines listed above do not apply to owners or operators of a stationary CI IC engine that has been modified, reconstructed, and does not apply to engines that were removed from one existing location and reinstalled at a new location.

Condition 48: Existing Non-Industrial POTW Treatment Plants
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:40CFR 63.1586, Subpart VVV

Item 48.1:
40CFR63 Subpart VVV imposes no control requirements for existing non-industrial POTW treatment plants.

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

Condition 49: Emission Point Definition By Emission Unit
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-6

Item 49.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 0-6MISC

Emission Point: FLAR1
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.623 NYTME (km.): 598.033

Item 49.2:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-ENGBL

Emission Point: 1EP01
Height (ft.): 53 Diameter (in.): 14
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: 1EP02
Height (ft.): 53 Diameter (in.): 14
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: 1EP03
Height (ft.): 53 Diameter (in.): 14
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: 1EP04



Height (ft.): 53 Diameter (in.): 14
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: 1EP05
Height (ft.): 53 Diameter (in.): 14
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: PGENA
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.71 NYTME (km.): 597.916 Building: OUTDOOR

Emission Point: PGENB
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.71 NYTME (km.): 597.916 Building: OUTDOOR

Emission Point: PGENC
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.71 NYTME (km.): 597.916 Building: OUTDOOR

Item 49.3:

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

Emission Unit: 2-ENGPU

Emission Point: 2EP01
Height (ft.): 23 Diameter (in.): 10
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: 2EP02
Height (ft.): 23 Diameter (in.): 10
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: 2EP03
Height (ft.): 23 Diameter (in.): 10
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: 2EP04
Height (ft.): 23 Diameter (in.): 10
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: 2EP05
Height (ft.): 23 Diameter (in.): 10
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Emission Point: EEGEN
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.71 NYTME (km.): 597.916

Emission Point: FLARE
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.623 NYTME (km.): 598.033

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Emission Point: IBLRS
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.623 NYTME (km.): 598.033

Emission Point: NBLER
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Item 49.4:

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

Emission Unit: 3-BLERS

Emission Point: 3EP01
Height (ft.): 65 Diameter (in.): 48
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: MAIN

Item 49.5:

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

Emission Unit: 5-SLUDG

Emission Point: 5EP01
Height (ft.): 75 Diameter (in.): 36
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: DEWB

Emission Point: 5EP02
Height (ft.): 75 Diameter (in.): 36
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: DEWB

Emission Point: 5EP03
Height (ft.): 75 Diameter (in.): 36
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: DEWB

Emission Point: DEWBP
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: DEWB

Emission Point: METHA
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: DEWB

Emission Point: METHB
Height (ft.): Length (in.): Width (in.):
NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: DEWB

Item 49.6:

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

Emission Unit: P-AROUD

Emission Point: PH2G1



Process Description:

THIS PROCESS IS THE PLANT'S GASOLINE DISPENSING STAION WITH 550 GALLONS TANK. THIS IS LOCATED WITHIN THE NORTH COLLECTION FACILITY WHICH IS ADJACENT TO TALLMAN ISLAND WPCP.

Emission Source/Control: GDPMP - Process
Design Capacity: 550 gallons

Item 50.4:

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

Emission Unit: 1-ENGBL

Process: DIE

Source Classification Code: 2-02-004-01

Process Description:

THIS PROCESS INCLUDES OPERATION OF ALL BLOWER ENGINES FIRING ONLY DIESEL FUEL. THERE WILL ALWAYS BE ONE BLOWER ENGINE AS STANDBY.

UNDER THE PLANT'S UPGRADING CONST., ALL THE 5 ENGINES WILL BE REMOVED.

Emission Source/Control: 0ENG1 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Emission Source/Control: 0ENG2 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Emission Source/Control: 0ENG3 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Emission Source/Control: 0ENG4 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Emission Source/Control: 0ENG5 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Item 50.5:

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

Emission Unit: 1-ENGBL

Process: DUA

Source Classification Code: 2-02-004-02

Process Description:

THIS PROCESS INCLUDES OPERATION OF ALL BLOWER ENGINES FIRING DIGESTER GAS OR NATURAL GAS OR BLEND OF NATURAL GAS AND DIGESTER GAS OR DIESEL FUEL. PART OF THE DIESEL FUEL IS USED AS PILOT. THERE WILL ALWAYS BE ONE BLOWER ENGINE AS STANDBY.



UNDER THE PLANT'S UPGRADING CONST., ALL THE
5 ENGINES WILL BE REMOVED.

Emission Source/Control: 0ENG1 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Emission Source/Control: 0ENG2 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Emission Source/Control: 0ENG3 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Emission Source/Control: 0ENG4 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Emission Source/Control: 0ENG5 - Combustion
Design Capacity: 1,013 horsepower (mechanical)

Item 50.6:

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

Emission Unit: 1-ENGBL
Process: PEG Source Classification Code: 2-02-004-01
Process Description:

In addition to construction equipment including portable engine powered equipment that are operated solely for the construction purpose and considered trivial activities under Part 201-3.3(c)(11), after the existing pump and blower engines are decommissioned and removed from operation, the upgrading construction may bring to the plant up to three (3) 500 kW/670 Hp portable engine generators for direct or indirect plant operation. These portable engine generators are not a permanent installation but for construction period only. These portable engine generators will be removed once the construction is completed. Each portable engine generator exhaust will be treated with a Selective Catalytic Reduction (SCR) after-combustion treatment system in order to meet the Part 227 NO_x RACT requirement.

Emission Source/Control: PGEN1 - Combustion
Design Capacity: 500 kilowatts

Emission Source/Control: PGEN2 - Combustion
Design Capacity: 500 kilowatts

Emission Source/Control: PGEN3 - Combustion
Design Capacity: 500 kilowatts

Item 50.7:



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

Emission Unit: 2-ENGPU
Process: DIS Source Classification Code: 2-02-004-01
Process Description:
This process includes operations of all pump engines firing only diesel fuel. There will always be one pump engine as standby.

Under the plant's upgrading construction, all of these 5 engines are to be removed.

Emission Source/Control: PENG1 - Combustion
Design Capacity: 520 horsepower (mechanical)

Emission Source/Control: PENG2 - Combustion
Design Capacity: 520 horsepower (mechanical)

Emission Source/Control: PENG3 - Combustion
Design Capacity: 546 horsepower (mechanical)

Emission Source/Control: PENG4 - Combustion
Design Capacity: 546 horsepower (mechanical)

Emission Source/Control: PENG5 - Combustion
Design Capacity: 546 horsepower (mechanical)

Item 50.8:

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

Emission Unit: 2-ENGPU
Process: FLA Source Classification Code: 5-01-007-89
Process Description:

Under the plant's upgrading construction, all of these 5 engines are to be removed. Because of the removal of these engines, the plant upgrading will install one (1) new waste digester gas burner to flare excessive sludge digester gas

This process is the plant's new Flare (FLA) process for the new waste digester gas burner to flare excessive sludge digester gas. This new waste digester gas burner NWDGB will exhaust through its stack FLARE.

When needed, the plant will bring in a contingent waste digester gas burner to the plant through rental contracts or relocation of DEP's equipment from other facilities. This contingent waste digester gas burner is not a permanent installation and will not result in increased emissions since there will be no increase in digester gas production. DEP will notify DEC in advance and comply with all other applicable regulations.



Emission Source/Control: NWDGB - Combustion

Item 50.9:

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

Emission Unit: 2-ENGPU

Process: GEN

Source Classification Code: 2-02-004-01

Process Description:

Under the plant's upgrading construction, all of these 5 engines are to be removed. The plant upgrading will install one (1) additional 1475 HP emergency engine generator to replace the existing 2168 HP emergency engine generator.

This process is the plant's new Emergency Engine Generators (GEN) process for the new additional 1475 HP emergency engine generator to fire #2 low sulfur diesel fuel oils. This new additional 1475 HP emergency engine generator NEGEN will exhaust through its stack EGEN and will be operated for no more than 500 hours per year.

Emission Source/Control: NEGEN - Combustion
Design Capacity: 1,475 horsepower (mechanical)

Item 50.10:

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

Emission Unit: 2-ENGPU

Process: IBR

Source Classification Code: 1-03-005-01

Process Description:

Under the plant's upgrading construction, all of these 5 engines are to be removed. Because of the removal of these engines, the plant upgrading will install two (2) maximum heat input 14.65 MMBtu/hr (process NBR, boilers: SBLR1 and SBLR2) boilers firing sludge digester gas or natural gas to compensate for heat lost. The plant will install one (1) 8 MMBtu/hr interim boiler firing low sulfur #2 diesel fuel in September 2008 to serve sludge heating needs in addition to heat for the building during the period after the removal of the 5 engines and prior to installation of the two permanent 14.65 MMBtu/hr boilers.

The 8 mmBtu/hr (IBLER) interim boiler will be removed once the two permanent 14.65 MMBtu/hr boilers are available for operation. After the 8 MMBtu/hr interim boiler is removed, when needed in future, the plant will



bring in a contingent interim 14.65 MMBtu/hr (CBLER) boiler firing #2 low sulfur diesels to the plant through rental contracts or relocation of DEP's equipment from other facilities. This contingent interim boiler may be operated under an operational flexibility requirement for the interim period during the period when the plant's boiler(s) or heat distribution system is not functioning properly and repairs are necessary. This contingent interim boiler is not a permanent unit but an interim operational flexibility unit and the emissions shall not result in exceeding any established emission limitations for this Emission Unit 2-ENGPU. DEP will notify DEC in advance and comply with all other applicable regulations.

This process is the plant's Interim Boiler (IBR) process for the 8 MMBtu/hr interim boiler and the contingent 14.65 MMBtu/hr boiler CBLER to fire #2 low sulfur diesel fuel oils. The new 8 MMBtu/hr interim boiler IBLER will exhaust through its stack IBLRS.

Emission Source/Control: CBLER - Combustion
Design Capacity: 14.6 million BTUs per hour

Emission Source/Control: IBLER - Combustion
Design Capacity: 8 million BTUs per hour

Item 50.11:

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

Emission Unit: 2-ENGPU
Process: NBD Source Classification Code: 2-02-004-02

Process Description:

This process includes operation of all pump engines firing digester gas or natural gas or #2 low sulfur diesel fuels. Part of the diesel fuel is used as pilot. There will be always one pump engine as standby.

Under the plant's upgrading construction, all of these 5 engines are to be removed.

Emission Source/Control: PENG1 - Combustion
Design Capacity: 520 horsepower (mechanical)

Emission Source/Control: PENG2 - Combustion
Design Capacity: 520 horsepower (mechanical)

Emission Source/Control: PENG3 - Combustion
Design Capacity: 546 horsepower (mechanical)

Emission Source/Control: PENG4 - Combustion
Design Capacity: 546 horsepower (mechanical)

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Emission Source/Control: PENG5 - Combustion
Design Capacity: 546 horsepower (mechanical)

Item 50.12:

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

Emission Unit: 2-ENGPU
Process: NBR Source Classification Code: 1-03-006-02
Process Description:

Under the plant's upgrading construction, all of these 5 engines are to be removed. Because of the removal of these engines, the plant upgrading will install two (2) maximum heat input 14.65 MMBtu/hr boilers firing sludge digester gas or natural gas to compensate for heat lost.

This process is the plant's New Boilers (NBR) process for the two new 14.6 MMBtu/hr supplemental boilers to fire either natural gas or sludge digester gas or blend. These two new 14.6 MMBtu/hr supplemental boilers SBLR1 and SBLR2 will exhaust through a common stack NBLER.

Emission Source/Control: SBLR1 - Combustion
Design Capacity: 14.6 million BTUs per hour

Emission Source/Control: SBLR2 - Combustion
Design Capacity: 14.6 million Btu per hour

Item 50.13:

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

Emission Unit: 3-BLERS
Process: DIF Source Classification Code: 1-03-005-01
Process Description:

This process is for the two existing boilers to fire #2 low sulfur diesel fuels.

These two existing 10.5 mmBtu/hr boilers BLER1 and BLER2 exhaust through a common stack 3EP01.

Emission Source/Control: BLER1 - Combustion
Design Capacity: 10.5 million Btu per hour

Emission Source/Control: BLER2 - Combustion
Design Capacity: 10.5 million Btu per hour

Item 50.14:

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

Emission Unit: 4-WWTRE



Process: 0AS Source Classification Code: 5-01-007-31
Process Description:

This process is the plant's wastewater secondary treatment activated sludge aeration (AS) process. This process includes two (2) 373' x 102' x 15' (east battery) and two (2) 373' x 93' x 15' (west battery) activated diffused aeration tanks.

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. Each of these aeration tanks has four "passes".

The plant upgrading will introduce Biological Nutrient Removal (BNR) treatment to this process.

The total throughput is based on the design average dry weather flow of 80 MGD.

Emission Source/Control: 000AT - Process
Design Capacity: 80,000,000 gallons per day

Item 50.15:

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

Emission Unit: 4-WWTRE
Process: 0CC Source Classification Code: 5-01-007-60
Process Description:

This process is the plant's chlorine contact (CC) wastewater disinfection process consisting of one (1) 143' x 100' - 10' - 5" and one (1) 130' - 4" x 102' - 4" x 10' - 5" chlorine contact tanks (CCT).

In this process, 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.

The total throughput is based on the design average dry weather flow of 80 MGD.

Emission Source/Control: 00CCT - Process
Design Capacity: 80,000,000 gallons per day

Item 50.16:

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



Emission Unit: 4-WWTRE

Process: OFS

Source Classification Code: 5-01-007-40

Process Description:

This is the plant's wastewater treatment final settling (FS) process. This process includes two (2) 273' x 93' - 9½' x 12' - 1" (east battery), two (2) 189' x 55' x 12' - 1" (west battery), and two 189' x 74' - 8" x 12' final settling tanks (FST).

The purpose of this final settling process is two fold: settle out microorganisms and activated sludge solid waste generated during the aeration process to produce a clarified effluent, and to collect the settled activated sludge for conveyance back to the aeration tanks.

The total thruput is based on the design average dry weather flow of 80 MGD.

Emission Source/Control: 00FST - Process

Design Capacity: 80,000,000 gallons per day

Item 50.17:

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

Emission Unit: 4-WWTRE

Process: 0HW

Source Classification Code: 5-01-007-07

Process Description:

This process is the plant's headworks (HW) process prior to primary settling. This process includes the plant's four (4) influent bar screens HWS 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.

The total thruput is based on the design average dry weather flow of 80 MGD.

Emission Source/Control: 00HWS - Process

Design Capacity: 80,000,000 gallons per day

Item 50.18:

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

Emission Unit: 4-WWTRE

Process: OPS

Source Classification Code: 5-01-007-20

Process Description:

This process is the plant's primary settling (PS) process consisting of seven (7) primary settling tanks PST.

There are three (3) 124' x 50' x 12' (east battery), two (2) 96' x 50' x 12' (west battery), and two (2) 96' x 54' x 12' (west battery) primary settling tanks.

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 to cyclone degritting. Each primary settling tank is equipped with sludge collectors, dipping weirs, scum removal equipment, inlet sluice gate overflow weirs.

The total thruput is based on the design average dry weather flow of 80 MGD.

Emission Source/Control: 00PST - Process
Design Capacity: 80,000,000 gallons per day

Item 50.19:

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

Emission Unit: 5-SLUDG
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 one (1) 100,000 CF digester gas holding tank (DGHTK) for later use at combustion units.

The Total Thruput is estimated based on the design sludge digester gas production.

Emission Source/Control: DGHTK - Process
Design Capacity: 100,000 cubic feet

Item 50.20:

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

Emission Unit: 5-SLUDG
Process: SAD Source Classification Code: 5-01-007-81
Process Description:

This process is the plant's Sludge Anaerobic Digester (SAD) process including four (4) sludge digestion tanks (DIGTK) each 194,900 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 95o 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.

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

Emission Source/Control: DIGTK - Process
Design Capacity: 779,600 cubic feet

Item 50.21:

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

Emission Unit: 5-SLUDG
Process: SDG Source Classification Code: 5-01-007-71
Process Description:
THIS SLUDGE DEGRITTING PROCESS INCLUDES FOUR (4) SLUDGE DEGRITTERS (720 GPM), FOUR GRIT CLASSIFIERS (18'-4"x3'-0) AND GRIT CONTAINERS.

Emission Source/Control: CYCDG - Process
Design Capacity: 2,880 gallons per minute

Emission Source/Control: GRCLW - Process
Design Capacity: 6 horsepower (mechanical)

Emission Source/Control: GRCON - Process
Design Capacity: 6 cubic yards

Item 50.22:

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

Emission Unit: 5-SLUDG
Process: SDW Source Classification Code: 5-01-007-99
Process Description:
THE SLUDGE DEWATERING PROCESS HAS TWO (2) 250 GPM CENTRIFUGES. THERE ARE TWO (2) WET SCRUBBERS, AND THREE (3) ACTIVATED CARBON ADSORBERS FOR REMOVING H₂S AND ODORS FROM THE FACILITY'S VENTILATION AND PROCESS AIR.

Emission Source/Control: DEWC1 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: DEWC2 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: DEWC3 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: DEWS1 - Control

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Control Type: WET SCRUBBER

Emission Source/Control: DEWS2 - Control
Control Type: WET SCRUBBER

Emission Source/Control: METH1 - Control
Control Type: FLARING

Emission Source/Control: METH2 - Control
Control Type: FLARING

Emission Source/Control: DEWAT - Process
Design Capacity: 500 gallons per minute

Item 50.23:

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

Emission Unit: 5-SLUDG
Process: SST Source Classification Code: 5-01-007-99
Process Description:

This process is the plant's Sludge Storage Tanks (SST) process including three (3) sludge storage tanks (SSTK); two sludge storage tanks have a diameter of 35' and are 28,000 ft³ each and one sludge storage tank has a diameter of 75' and is 115,000 ft³.

Excessive sludge will be stored in these storage tanks.

Emission Source/Control: SSTKS - Process
Design Capacity: 212,000 cubic feet

Item 50.24:

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

Emission Unit: 5-SLUDG
Process: STH Source Classification Code: 5-01-007-71
Process Description:

THE PROCESS INCLUDES FOUR (4) 50' DIAMETER, 21,293 CUBIC FEET/TANK AND (4) 60' DIAMETER, 32,228 CUBIC FEET/TANK MECHANICAL SLUDGE THICKENERS.

Emission Source/Control: SLTHK - Process
Design Capacity: 214,084 pounds per day

Item 50.25:

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

Emission Unit: P-AROUND
Process: P02 Source Classification Code: 2-02-004-01
Process Description:



The plant experienced a dry-weather bypass on November 8, 2004 due to a failure of the engines, power-train system that runs the main sewage pumps. This raised concerns about the vulnerability of the power-train system until completion of these engines, replacement. NYCDEP has determined that engine corrective maintenance and rehabilitation of the auxiliary system would improve the system reliability pending their replacement.

The planned engine overhaul is an extensive process and NYCDEP estimated that the planned corrective maintenance of all of the five (5) pump engines will take approximately 30 months to complete. This time estimate may need to be revised as the work proceeds based upon the condition of each pump engine.

NYCDEP is taking steps to minimize the level of risk during the entire overhaul period and until the Plant Upgrade is complete, particularly during the bathing season. NYCDEP has directed its upgrade consultant to prepare a plan to prevent sewage bypassing due to failure of the existing pump engines. According to the update design, 7 sewage pumps powered by Con Ed are to be installed under the Emergency Pumping Plan Stage I for emergency pumping of dry weather flow in case of failure of the existing pump engines, and 8 additional sewage pumps (total 15 sewage pumps, 11 online and 4 standby) and two (2) 1600 KW / 2,332 HP engine-generators (one standby) are to be installed under the Stage II for emergency pumping of also wet weather flow in case of failure of the existing pump engines. Each of the exhausts of these two engine-generators will be treated with its own Selective Catalytic Reduction (SCR) after-combustion treatment system in order to meet the Part 227 NOx RACT requirement.

After completion of the corrective maintenance overhaul of the existing engines, the Stage II engine-generators will be utilized as the backup power for sewage pump around operation under the plant upgrading contract TI-3 for replacing the existing engine-coupled main sewage pumps with electrical motor sewage pumps and other upgrading construction if needed.

The two (2) Stage II engine-generators PH2E1 and PH2E2 are trailer mounted and exhausting through their own exhaust stacks PH2G1 and PH2G2, respectively. Each of the exhaust stacks will be treated with its own Selective Catalytic Reduction (SCR) after-combustion treatment system SCR21 and SCR22, respectively in order to meet the Part 227 NOx RACT requirement.

The Total Thruput is determined to meet NOx emissions of 22.5 t/yr at NOx RACT maximum allowed 2.3 g/bhp-hr. Allowed fuel consumption may be increased for lower NOx

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emission.

Emission Source/Control: PH2E1 - Combustion
Design Capacity: 2,332 horsepower (mechanical)

Emission Source/Control: PH2E2 - Combustion
Design Capacity: 2,332 horsepower (mechanical)

Emission Source/Control: SCR21 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Emission Source/Control: SCR22 - Control
Control Type: SELECTIVE CATALYTIC REDUCTION (SCR)

Condition 51: Emission Unit Permissible Emissions
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 51.1:

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

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

Emission Unit: 0-6MISC

CAS No: 000630-08-0
Name: CARBON MONOXIDE
PTE(s): 1.49 pounds per hour

13,000 pounds per year

Emission Unit: 1-ENGBL

CAS No: 000630-08-0
Name: CARBON MONOXIDE
PTE(s): 15.22 pounds per hour

133,400 pounds per year

Emission Unit: 0-6MISC

CAS No: 007446-09-5
Name: SULFUR DIOXIDE
PTE(s): 0.1369 pounds per hour

1,200 pounds per year

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN
PTE(s): 7,000 pounds per year

Emission Unit: 1-ENGBL

CAS No: 0NY210-00-0

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Name: OXIDES OF NITROGEN
PTE(s): 196,600 pounds per year

Emission Unit: 2-ENGPU

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN
PTE(s): 150,600 pounds per year

Emission Unit: 3-BLERS

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN
PTE(s): 13,200 pounds per year

Emission Unit: P-AROUD

CAS No: 0NY210-00-0
Name: OXIDES OF NITROGEN
PTE(s): 45,000 pounds per year

Emission Unit: 0-6MISC

CAS No: 0NY998-00-0
Name: VOC
PTE(s): 800 pounds per year

Condition 52: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 52.1:

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 231-2

Item 52.2:

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

Item 52.3:

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 52.4:

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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 52.5:

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 52.6:

The Compliance Certification activity will be performed for:

Emission Unit: 0-6MISC

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 52.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Annual VOC emissions from the Emission Unit 6-MISC will be limited to 0.4 tons per year. The actual VOC emissions will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 0.4 ton/yr VOC emission limit.

$$F(0.009) < 800 \text{ lb/yr } (.4 \text{ ton/yr})$$

F = Total sludge existing digester gas flare heat input, mmBtu/yr

Facility will monitor the fuel usage to verify this. Recordkeeping shall be maintained for 5 years. Compliance of this condition shall be reported in the semiannual compliance report.

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 10/30/2008.

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

Condition 53: Capping Monitoring Condition



Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 53.1:

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 231-2

Item 53.2:

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

Item 53.3:

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 53.4:

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 53.5:

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 53.6:

The Compliance Certification activity will be performed for:

Emission Unit: 0-6MISC

Regulated Contaminant(s):

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

Item 53.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Annual NOx emissions from the Emission Unit 6-MISC will be limited to 3.5 tons per year. The actual NOx emissions

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will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 3.5 ton/yr NOx emission limit.

NOx emissions will be calculated by:

$$F(0.091) < 7000 \text{ lb/yr (3.5 ton/yr)}$$

F = Total sludge existing digester gas flare heat input, mmBtu/yr

Facility will monitor the fuel usage to verify this. Recordkeeping shall be maintained for 5 years. Compliance of this condition shall be reported in the semiannual compliance report.

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 10/30/2008.

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

Condition 54: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Part 212

Item 54.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-6MISC

Item 54.2:

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 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 10/30/2008.

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

Condition 55: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013



Applicable Federal Requirement:6 NYCRR Part 212

Item 55.1:

The Compliance Certification activity will be performed for:

Emission Unit: 0-6MISC

Item 55.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The facility must maintain a daily log on site to record the presence of odors and the corrective actions taken in the event of these odors, and report it to the department a semiannually.

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 56: Stage I and II requirements for tanks constructed, replaced, or substantially modified after June 27, 1987 Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 230.2 (d) (1)

Item 56.1:

This Condition applies to Emission Unit: 0-6MISC

Item 56.2:

Stage I and Stage II vapor collection systems are required at any gasoline dispensing site located in the New York City Metropolitan Area which is constructed, replaced, or substantially modified after June 27, 1987, regardless of the annual gasoline throughput at the site.

This requirement does not apply for gasoline tanks with a capacity less than 550 gallons which are used exclusively for farm tractors used for agricultural purposes or for snowplowing.

Condition 57: Compliance Certification Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR 230.2 (g)

Item 57.1:

The Compliance Certification activity will be performed for:

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Emission Unit: 0-6MISC

Item 57.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Daily visual inspections of components of stage II vapor collection systems must be performed to ensure the integrity and efficiency of the system.

Monitoring Frequency: DAILY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 58: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 58.1:

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

6 NYCRR Subpart 231-2

Item 58.2:

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

Item 58.3:

The owner or operator of the permitted facility must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility regulated by this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations or law.

Item 58.4:

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

Item 58.5:

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



the Act.

Item 58.6:

The Compliance Certification activity will be performed for:

Emission Unit: 1-ENGBL

Regulated Contaminant(s):

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

Item 58.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This is for process DUE, DIE and PEG and emission sources ENG1, ENG2, ENG3, ENG4, ENG5, PGEN1, PGEN2, PGEN3.

Annual NOx emissions from this Emission Unit 1-ENGBL will be limited to the unit's Proposed Cap Potential To Emit (PTE) of 98.3 tons per year. The actual NOx emissions will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 98.3 ton/yr NOx emission limit. (Annual maximum, rolled monthly)

Nox emissions will be calculated by:

$$\text{NOx Emission} = \text{BEG}(0.833) + \text{BED}(1.468) + \text{SEG}(0.615) < 196600$$

lb/yr (98.3 tons/yr)

Where:

BEG - Total blower engine dual fuel operation heat input, mmBtu/yr

BED - Total blower engine diesel fuel operation heat input, mmBtu/yr

SEG - Total contingent engine generator diesel fuel operation heat input, mmBtu/yr (Using the same Stage II engine generators NOx emission factor for the 3 contingent engine generators because they are all equipped with SCR for complying with the 2.3 g/bhp-hr NOx RACT limit)



Emission Unit: 1-ENGBL

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

Item 59.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This is for process DUE, DIE and PEG and emission sources
ENG1, ENG2, ENG3, ENG4, ENG5, PGEN1, PGEN2, PGEN3.

Annual VOC emissions from this Emission Unit 1-ENGBL will be limited to the unit's Proposed Cap Potential To Emit (PTE) of 7.5 tons per year. The actual VOC emissions will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 7.5 ton/yr VOC emission limit (annual maximum rolled monthly)

VOC Emission = $BEG(0.071)+BED(0.002)+SEG(0.048) < 15000$
lb/yr (7.5 tons/yr)

Where:

BEG - Total blower engine dual fuel operation heat input, mmBtu/yr

BED - Total blower engine diesel fuel operation heat input, mmBtu/yr

SEG - Total contingent engine generator diesel fuel operation heat input, mmBtu/yr (Using the same Stage II engine generators NOx emission factor for the 3 contingent engine generators because they are all equipped with SCR for complying with the 2.3 g/bhp-hr NOx RACT limit)

Facility will monitor the fuel usage to verify this. Recordkeeping shall be maintained for 5 years. Compliance of this condition shall be reported in the semiannual compliance report.

Reference Test Method: EPA Approved

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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 10/30/2008.

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

Condition 60: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 60.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-ENGBL

Process: DIE

Regulated Contaminant(s):

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

Item 60.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This is for emission sources ENG1, ENG2, ENG3, ENG4, ENG5

As required by the revision to 6NYCRR Part 227-2, effective 2/11/2004, DEP timely submitted to DEC on 6/29/2004 a NOx Reasonably Available Control Technology (RACT) compliance plan for the 28 dual fuel internal combustion engines located at 4 DEP WPCPs, including five (5) pump-drive and five (5) blower-drive engines, and one (1) emergency engine generator at the Tallman Island WPCP.

This compliance plan included economical and technical feasibility analyses and demonstrated that there was no commercially proven technology available to DEP to meet the revised NOx RACT emission limit of 2.3 g/bhp-hr.

Following this compliance plan, DEP conducted a pilot testing of the emulsified diesel fuel technology at one of the Tallman Island WPCP engines from 7/12-15/2004 and submitted a report to DEC on 1/21/2005. DEP also submitted to DEC on 10/12/2006 an addendum to the NOx RACT compliance plan regarding new engine generators in the plant, and DEC determined the DEP's alternative limits in the NOx RACT compliance plan to be acceptable for the Tallman Island WPCP. As DEP's continuous effort on NOx RACT compliance, a DEP consultant started in April 2006 an \$113,044 (with \$50,000 grant from the New York State Energy Research and Development Authority, NYSERDA)

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feasibility study for using selective catalytic reduction (SCR) technology to control NOx emissions from internal combustion engines burning anaerobic sludge digester gas and is currently working on preparation of a report.

The NOx RACT upper limit is the highest blower engine 1-hour run emission observed in the latest stack tests conducted in October 2005. As part of the plant's ongoing upgrading construction, these blower engines are scheduled to be removed in 2010.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 6.7 grams per brake horsepower-hour

Reference Test Method: EPA approved

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 61: Compliance Certification

Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 61.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-ENGBL

Process: DUA

Regulated Contaminant(s):

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

Item 61.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This is for emission sources ENG1, ENG2, ENG3, ENG4, ENG5

As required by the revision to 6NYCRR Part 227-2, effective 2/11/2004, DEP timely submitted to DEC on 6/29/2004 a NOx Reasonably Available Control Technology (RACT) compliance plan for the 28 dual fuel internal combustion engines located at 4 DEP WPCPs, including five (5) pump-drive and five (5) blower-drive engines, and one (1) emergency engine generator in the Tallman Island WPCP. This compliance plan included economical and technical



feasibilities analyses and demonstrated that there was no commercially proven technology was available to DEP to meet the revised NOx RACT emission limit of 2.3 g/bhp-hr.

Following this compliance plan, DEP conducted a pilot testing of the emulsified diesel fuel technology at one of the Tallman Island WPCP engines from 7/12-15/2004 and submitted a report to DEC on 1/21/2005. DEP also submitted to DEC on 10/12/2006 an addendum to the NOx RACT compliance plan regarding new engine generators in the plant, and DEC determined the DEP's alternative limits in the NOx RACT compliance plan to be acceptable for the Tallman Island WPCP. As DEP's continuous effort on NOx RACT compliance, a DEP consultant started in April 2006 an \$113,044 (with \$50,000 grant from engines are the New York State Energy Research and Development Authority, NYSERDA) feasibility study for using selective catalytic reduction (SCR) technology to control NOx emissions from internal combustion engines burning anaerobic sludge digester gas and is currently working on preparation of a report.

The NOx RACT upper limit is the highest blower engine 1-hour run emission observed in the latest stack tests conducted in October 2005. As part of the plant's ongoing upgrading construction, these blower engines are scheduled to be removed in 2010.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 3.5 grams per brake horsepower-hour

Reference Test Method: EPA approved

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 62: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 62.1:

The Compliance Certification activity will be performed for:

Emission Unit: 1-ENGBL

Process: PEG

Regulated Contaminant(s):

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



Item 62.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

These is for sources PGEN1, PGEN2, PGEN3

In addition to construction equipment including portable engine powered equipment that are operated solely for the construction purpose and considered trivial activities under Part 201-3.3(c)(11), after the existing pump and blower engines are decommissioned and removed from operation, the upgrading construction may bring to the plant up to three (3) 500 kW/670 Hp portable engine generators for direct or indirect plant operation. These portable engine generators are not a permanent installation but are for construction period only. These portable engine generators will be removed once the construction is completed. Each portable engine generator exhaust will be treated with a Selective Catalytic Reduction (SCR) after-combustion treatment system in order to meet the Part 227 NO_x RACT requirement.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 2.3 grams per brake horsepower-hour

Reference Test Method: EPA approved

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 63: Capping Monitoring Condition

Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 63.1:

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 231-2

Item 63.2:

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



Item 63.3:

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 63.4:

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 63.5:

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 63.6:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 63.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This is for processes NBD, DIS and Emission Sources PENG1, PENG2, PENG3, PENG4, PENG5.

Annual VOC emissions from this Emission Unit 2-ENGPU will be limited to 19.3 tons per year. The actual VOC emissions will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 19.3 ton/yr VOC emission limit. annual maximum rolled monthly.

VOC

emis

sion

=PEG

(0.2

64)+

PED(.005)+NBR(0.001851)+FN(0.009)+IBR(0.002)+EEG(.219)<



38,600 lb/yr (19.3 tons/yr)

Where:

PEG - Total pump engine dual fuel operation heat input, mmBtu/yr

PED - Total pump engine diesel fuel operation heat input, mmBtu/yr

NBR - Total new boilers natural gas fuel operation heat input, mmBtu/yr

FN - Total sludge new digester gas flare heat input, mmBtu/yr

IBR - Total interim boiler diesel fuel operation heat input, mmBtu/yr

EEG - Total new emergency engine generator diesel heat input, mmBtu/yr

Facility will monitor the fuel usage to verify this. Recordkeeping shall be maintained for 5 years. Compliance of this condition shall be reported in the semiannual compliance report.

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 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 64: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 64.1:
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 231-2

Item 64.2:
Operation of this facility shall take place in accordance with the approved criteria, emission



limits, terms, conditions and standards in this permit.

Item 64.3:

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 64.4:

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 64.5:

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 64.6:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Regulated Contaminant(s):

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

Item 64.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

This is for processes NBD, DIS and Emission Sources PENG1, PENG2, PENG3, PENG4, PENG5.

Annual NOx emissions from this Emission Unit 2-ENGPU will be limited to 75.3 tons per year. The actual NOx emissions will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 75.3 ton/yr NOx emission limit, annual maximum rolled monthly.

Nox emissions will be calculated by:

$$\text{NOx Emission} = \text{PEG}(0.896) + \text{PE}$$

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



$D(2.067)+NBR(0.098)+FN(0.068)+IBR(0.143)+EEG(3.35) < 150600$
lb/yr (75.3 tons/yr)

Where:

PEG - Total pump engine dual fuel operation heat input,
mmBtu/yr

PED - Total pump engine diesel fuel operation heat input,
mmBtu/yr

NBR - Total new boilers natural gas fuel operation heat
input, mmBtu/yr

FN - Total sludge new digester gas flare heat input,
mmBtu/yr

IBR - Total interim boiler diesel fuel operation heat
input, mmBtu/yr

EEG - Total new emergency engine generator diesel heat
input, mmBtu/yr

Facility will monitor the fuel usage to verify this.
Recordkeeping shall be maintained for 5 years. Compliance
of this condition shall be reported in the semiannual
compliance report.

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 10/30/2008.

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

Condition 65: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 65.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Process: DIS

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:

This is for emission sources PENG1, PENG2, PENG3, PENG4, PENG5.

As required by the revision to 6NYCRR Part 227-2, effective 2/11/2004, DEP timely submitted to DEC on 6/29/2004 a NOx Reasonably Available Control Technology (RACT) compliance plan for the 28 dual fuel internal combustion engines located at 4 DEP WPCPs, including five (5) pump-drive and five (5) blower-drive engines, and one (1) emergency engine generator in the Tallman Island WPCP.

This compliance plan included economical and technical feasibility analyses and demonstrated that there was no commercially proven technology available to DEP to meet the revised NOx RACT emission limit of 2.3 g/bhp-hr.

Following this compliance plan, DEP conducted a pilot testing of the emulsified diesel fuel technology at one of the Tallman Island WPCP engines from 7/12-15/2004 and submitted a report to DEC on 1/21/2005. DEP also submitted to DEC on 10/12/2006 an addendum to the NOx RACT compliance plan regarding new engine generators in the plant, and DEC determined the DEP's alternative limits in the NOx RACT compliance plan to be acceptable for the Tallman Island WPCP. As DEP's continuous effort on NOx RACT compliance, a DEP consultant started in April 2006 an \$113,044 (with \$50,000 grant from the New York State Energy Research and Development Authority, NYSERDA) feasibility study for using selective catalytic reduction (SCR) technology to control NOx emissions from internal combustion engines burning anaerobic sludge digester gas and is currently working on preparation of a report.

The NOx RACT upper limit is the highest pump engine 1-hour run emission observed in the latest stack tests conducted in October 2005. As part of the plant's ongoing upgrading construction, these blower engines are scheduled to be removed in 2010.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 7.7 grams per brake horsepower-hour

Reference Test Method: epa approved

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 66: Compliance Certification

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:40CFR 60.4200, NSPS Subpart IIII

Item 66.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU
Process: GEN

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

Item 66.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC
OPERATIONS

Monitoring Description:

This is for process GEN, Emission Source NEGEN.

The 40 CFR 60 Subpart IIII requires new engine generators >560 KW (equivalent to > 750 HP) installed after July 11, 2005 to be certified by manufacturer for compliance with the 40 CFR 60 Subpart IIII PM emission limitation of 0.2 g/kW-hr (equivalent to 0.15 g/bhp-hr).

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: FUEL

Parameter Monitored: PM-10

Upper Permit Limit: 0.2 grams per kilowatt hour

Reference Test Method: epa approved

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING
DESCRIPTION

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 67: Compliance Certification

Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:40CFR 60.4200, NSPS Subpart IIII

Item 67.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU
Process: GEN

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



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

Item 67.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

This is for process GEN, Emission Source NEGEN.

The 40 CFR 60 Subpart IIII requires new engine generators >560 KW (equivalent to > 750 HP) installed after July 11, 2005 to be certified by manufacturer for compliance with the 40 CFR 60 Subpart IIII CO emission limitation of 3.5 g/kW-hr (equivalent to 2.6 g/bhp-hr).

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: FUEL

Parameter Monitored: CARBON MONOXIDE

Upper Permit Limit: 3.5 tons per year

Reference Test Method: epa approved

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 68: Compliance Certification

Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 68.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Process: GEN

Emission Source: NEGEN

Item 68.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of a 2007 model year or later emergency stationary compression ignition (CI) internal combustion engine with a maximum engine power less than or equal to 2,237 kW (3,000 HP) that is not a fire pump engine and has a displacement of less than 10



liters/cylinder will require certification to the following emission standards:

1. For engines with a maximum engine power less than 37 kW (50 HP):
 - 2007 model year engines - emission standards specified in 40 CFR 89.112 and 40CFR 89.113, as applicable,
 - 2008 model year and later - emission standards specified in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable.
2. For engines with a maximum engine power greater than or equal to 37 kW (50 HP):
 - 2007 model year and later - emission standards specified in 40 CFR 89.112 and 40CFR 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 applicable emission standard referenced above and 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 10/30/2008.

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

Condition 69: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement: 40CFR 60.4209(a), NSPS Subpart III

Item 69.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Process: GEN

Emission Source: NEGEN

Item 69.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The owner or operator of an emergency stationary compression ignition IC engine must install and maintain a non-resettable hour meter prior to startup to monitor engine usage



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 10/30/2008.

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

Condition 70: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:40CFR 60.4214, NSPS Subpart IIII

Item 70.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Process: GEN

Emission Source: NEGEN

Item 70.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Owners and operators of non-emergency stationary CI IC engines that are greater than 2,237 KW (3,000HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the following notification, reporting and recordkeeping requirements:

(1) Submit an initial notification including the following information as required in §60.7(a)(1).

(i) Name and address of the owner or operator;

(ii) The address of the affected source;

(iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;

(iv) Emission control equipment; and

(v) Fuel used.

(2) Keep records of the information listed below:

(i) All notifications submitted to comply with this subpart and all documentation supporting any notification.

(ii) Maintenance conducted on the engine.

(iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.

(iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the



emission standards.

If the stationary CI IC engine is an emergency stationary internal combustion engine, an initial notification is not required to be submitted. Starting with the model years in table 5 to Subpart III of Part 60, if the emergency engine does not meet the standards applicable to nonemergency 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 nonresettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.

If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.

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 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 71: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 71.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Process: IBR

Emission Source: CBLER

Item 71.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

A boiler tune-up shall be performed annually. The owner or operator of a small boiler shall maintain a log (in the format acceptable to the Department) containing the following information: (1) The date which the equipment was adjusted; and (2) The name, title, and affiliation of the person who adjusted the equipment.

Reference Test Method: EPA

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



Monitoring Frequency: ANNUALLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 10/30/2008.
Subsequent reports are due every 6 calendar month(s).

Condition 72: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 72.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Process: IBR

Emission Source: IBLER

Item 72.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

A boiler tune-up shall be performed annually. The owner or operator of a small boiler shall maintain a log (in the format acceptable to the Department) containing the following information: (1) The date which the equipment was adjusted; and (2) The name, title, and affiliation of the person who adjusted the equipment.

Reference Test Method: EPA approved

Monitoring Frequency: ANNUALLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 73: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 73.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Process: NBD

Regulated Contaminant(s):

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

Item 73.2:

Compliance Certification shall include the following monitoring:



Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This is for emission sources PENG1, PENG2, PENG3, PENG4, PENG5.

As required by the revision to 6NYCRR Part 227-2, effective 2/11/2004, DEP timely submitted to DEC on 6/29/2004 a NOx Reasonably Available Control Technology (RACT) compliance plan for the 28 dual fuel internal combustion engines located at 4 DEP WPCPs, including five (5) pump-drive and five (5) blower-drive engines, and one (1) emergency engine generator in the Tallman Island WPCP.

This compliance plan included economical and technical feasibility analyses and demonstrated that there was no commercially proven technology available to DEP to meet the revised NOx RACT emission limit of 2.3 g/bhp-hr.

Following this compliance plan, DEP conducted a pilot testing of the emulsified diesel fuel technology at one of the Tallman Island WPCP engines from 7/12-15/2004 and submitted a report to DEC on 1/21/2005. DEP also submitted to DEC on 10/12/2006 an addendum to the NOx RACT compliance plan regarding new engine generators in the plant, and DEC determined the DEP's alternative limits in the NOx RACT compliance plan to be acceptable for the Tallman Island WPCP. As DEP's continuous effort on NOx RACT compliance, a DEP consultant started in April 2006 an \$113,044 (with \$50,000 grant from the New York State Energy Research and Development Authority, NYSERDA) feasibility study for using selective catalytic reduction (SCR) technology to control NOx emissions from internal combustion engines burning anaerobic sludge digester gas and is currently working on preparation of a report.

The NOx RACT upper limit is the highest pump engine 1-hour run emission observed in the latest stack tests conducted in October 2005. As part of the plant's ongoing upgrading construction, these blower engines are scheduled to be removed in 2010.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 4.9 grams per brake horsepower-hour

Reference Test Method: epa approved

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

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

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 74: Compliance Certification



Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 74.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Process: NBR

Emission Source: SBLR1

Item 74.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

A boiler tune-up shall be performed annually. The owner or operator of a small boiler shall maintain a log (in the format acceptable to the Department) containing the following information: (1) The date which the equipment was adjusted; and (2) The name, title, and affiliation of the person who adjusted the equipment.

Reference Test Method: epa approved

Monitoring Frequency: ANNUALLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 75: Compliance Certification

Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 75.1:

The Compliance Certification activity will be performed for:

Emission Unit: 2-ENGPU

Process: NBR

Emission Source: SBLR2

Item 75.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

A boiler tune-up shall be performed annually. The owner or operator of a small boiler shall maintain a log (in the format acceptable to the Department) containing the following information: (1) The date which the equipment was adjusted; and (2) The name, title, and affiliation of the person who adjusted the equipment.



Item 76.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Annual VOC emissions from this Emission Unit 3-BLERS will be limited to 0.1 tons per year. The actual VOC emissions will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 0.1 ton/yr VOC emission limit, annual maximum rolled monthly.

VOC emissions= $BD (.002) + BG (.005392) < 200 \text{ lb/yr (0.1 tons/yr)}$.

BD = Total boiler diesel fuel operation heat input, mmBtu/yr

BG = Total boiler gas fuel operation heat input, mmBtu/yr

Facility will monitor the fuel usage to verify this. Recordkeeping shall be maintained for 5 years. Compliance of this condition shall be reported in the semiannual compliance report.

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 10/30/2008.

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

Condition 77: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 77.1:

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 231-2

Item 77.2:

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

Item 77.3:

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00013

Facility DEC ID: 2630200012



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 77.4:

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 77.5:

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 77.6:

The Compliance Certification activity will be performed for:

Emission Unit: 3-BLERS

Regulated Contaminant(s):

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

Item 77.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Annual NO_x emissions from this Emission Unit 3-BLERS will be limited to 6.6 tons per year. The actual NO_x emissions will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 6.6 ton/yr NO_x emission limit (annual maximum rolled monthly).

Nox emissions will be calculated by:

$BD (.143) + BG (.098) < 13200 \text{ lb/yr (6.6 tons/yr)}$.

BD = Total boiler diesel fuel operation heat input, mmBtu/yr

BG = Total boiler gas fuel operation heat input, mmBtu/yr

Facility will monitor the fuel usage to verify this. Recordkeeping shall be maintained for 5 years. Compliance



Item 79.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

A boiler tune-up shall be performed annually. The owner or operator of a small boiler shall maintain a log (in the format acceptable to the Department) containing the following information: (1) The date which the equipment was adjusted; and (2) The name, title, and affiliation of the person who adjusted the equipment.

Reference Test Method: epa approved

Monitoring Frequency: ANNUALLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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

Condition 80: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 80.1:

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 231-2

Item 80.2:

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

Item 80.3:

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 80.4:

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 80.5:

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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 80.6:

The Compliance Certification activity will be performed for:

Emission Unit: 4-WWTRE

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 80.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions from these wastewater treatment related processes vary based on the constituents of the plant influent, over which the plant has no control. The emissions are based on current available sampling data and computer modeling.

Annual VOC emissions from this Emission Unit 4-WWTRE will be limited to the unit's Proposed Cap Potential To Emit (PTE) of 3.9 tons per year. The actual annual VOC emissions from wastewater treatment related sources will be estimated using TOXCHEM + modeling approach and at the least annually influent sampling results to demonstrate compliance of the 3.9 ton/yr VOC emission limit.

Reference Test Method: epa

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 10/30/2008.

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

Condition 81: Capping Monitoring Condition

Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 81.1:

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 231-2



Item 81.2:

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

Item 81.3:

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 81.4:

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 81.5:

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 81.6:

The Compliance Certification activity will be performed for:

Emission Unit: 5-SLUDG

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 81.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Emissions from these sludge handling processes vary based on the constituents of the plant influent, over which the plant has no control. The emissions are based on current available sampling data and computer modeling.

Annual VOC emissions from this Emission Unit 5-SLUDG will be limited to the unit's Proposed Cap Potential To Emit (PTE) of 2.3 tons per year. The actual annual VOC emissions from sludge handling processes will be estimated using TOXCHEM + modeling approach and at the least annually influent sampling results to demonstrate compliance of the 2.3 ton/yr VOC emission limit.

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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 10/30/2008.

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

Condition 82: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 82.1:

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 231-2

Item 82.2:

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

Item 82.3:

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 82.4:

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 82.5:

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 82.6:

The Compliance Certification activity will be performed for:

Emission Unit: P-AROUND

Process: P02

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Regulated Contaminant(s):

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

Item 82.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Annual NOx emissions from the Emission Unit P-AROUD will be limited to 22.5 tons per year. The actual NOx emissions will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 22.5 ton/yr NOx emission limit, annual maximum rolled monthly.

NOx emission will be calculated by:

$SEG (0.615) < 45000 \text{ lb/yr} (22.5 \text{ ton/yr})$

SEG = total stand by engine generator diesel heat input, mmBtu/yr

Facility will monitor the fuel usage to verify this. Recordkeeping shall be maintained for 5 years. Compliance of this condition shall be reported in the semiannual compliance report.

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 10/30/2008.

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

Condition 83: Capping Monitoring Condition
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 83.1:

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 231-2



Item 83.2:

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

Item 83.3:

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 83.4:

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 83.5:

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 83.6:

The Compliance Certification activity will be performed for:

Emission Unit: P-AROUND

Process: P02

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 83.7:

Compliance Certification shall include the following monitoring:

Capping: Yes

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

Annual VOC emissions from this Emission Unit P-AROUND will be limited to 1.8 tons per year. The actual VOC emissions will be determined by record of all fuel consumption at the sources in this emission unit and the calculations in the attached PTE calculations to demonstrate compliance of the 1.8 ton/yr VOC emission limit, annual maximum rolled monthly.

VOC emission = $SEG (0.048) < 3,600 \text{ lb/yr} (1.8 \text{ ton/yr})$

SEG = total stand by engine generator diesel heat input, mmBtu/yr

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Facility will monitor the fuel usage to verify this.
Recordkeeping shall be maintained for 5 years. Compliance
of this condition shall be reported in the semiannual
compliance report.

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 10/30/2008.

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

Condition 84: Compliance Certification
Effective between the dates of 04/03/2008 and 04/02/2013

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

Item 84.1:

The Compliance Certification activity will be performed for:

Emission Unit: P-AROUD

Process: P02

Regulated Contaminant(s):

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

Item 84.2:

Compliance Certification shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

This is for emission source PH2E1 and PH2E2

Each of the two (2) Stage II engine-generators PH2E1 and
PH2E2 exhaust stacks will be treated with its own
Selective Catalytic Reduction (SCR) after-combustion
treatment system SCR21 and SCR22, respectively, in order
to meet the Part 227 NOx RACT requirement.

Parameter Monitored: OXIDES OF NITROGEN

Upper Permit Limit: 2.3 grams per brake horsepower-hour

Reference Test Method: epa

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 10/30/2008.

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 85: Contaminant List
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable State Requirement:ECL 19-0301

Item 85.1:

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: 007446-09-5
Name: SULFUR DIOXIDE

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

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

CAS No: 0NY100-00-0
Name: HAP

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

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

**Condition 86: Unavoidable noncompliance and violations
Effective between the dates of 04/03/2008 and 04/02/2013**

Applicable State Requirement:6 NYCRR 201-1.4

Item 86.1:

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 87: Air pollution prohibited
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable State Requirement:6 NYCRR 211.2

Item 87.1:

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 88: Compliance Demonstration
Effective between the dates of 04/03/2008 and 04/02/2013

Applicable State Requirement:6 NYCRR 211.2

Item 88.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 88.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:

The plant should follow the Good Engineering Practice and take precautions to minimize odors. The plant shall evaluate the operations and maintenance of odor control systems and keep the system in compliance. The plant must maintain a daily log on site to record the presence of odors and corrective actions taken in the event of these

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odors and report it to the Department semi-annually.

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 10/30/2008.

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

