

New York State Department of Environmental Conservation
Facility DEC ID: 2630200012



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 2-6302-00012/00020
Effective Date: 05/18/2006 Expiration Date: No expiration date

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

Contact: ALFONSO R LOPEZ
NYC DEPT OF ENVIRONMENTAL PROTECTION
59-17 JUNCTION BLVD
FLUSHING, NY 11368-5107
(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:

PERMIT DESCRIPTION
NYC-DEP Tallman Island WPCP
DEC ID # 2-6302-00012/00020

The Tallman Island WPCP is a municipal wastewater treatment plant capable of providing treatment for 80 million gallons per day dry-weather residential wastewater and up to 160 million gallons per day including wet weather flow. The plant's existing engines have been designated for replacement by electric motors under the ongoing Plant Upgrade Project.

The facility's current Title V Permit includes operation of five (5) engines directly connected to five (5) main sewage pumps (MSPs) capable of pumping 160 million gallons per day of primarily residential wastewater. These five (5) MSPs engines and their auxiliary systems are 34 to 42 years old, and have been designated for replacement by electric motors under the ongoing Plant Upgrade Project. 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. Due to this recent dry-weather bypass, NYC-DEP



New York State Department of Environmental Conservation
Facility DEC ID: 2630200012

has determined that overhaul of the engines and rehabilitation of the auxiliary system is necessary to improve the system reliability pending their replacement. The planned engine overhaul is an extensive process and NYC-DEP estimates that the planned engine overhaul of all of the five pump engines will take approximately 30 months to complete. The design work for the replacement of these engines is complete and the job has been bid. Construction of the associated MSP work is expected to be completed by the Fall of 2008.

This ASF permit application is submitted for the installation and operation of sewage pumps around engine-generators and associated sewage pumps at this facility in order to minimize the level of risk of a dry-weather bypass during the entire overhaul period and until the Plant Upgrade Project is complete. This consists of two phases, Phase I and Phase II. Phase I consists of installing sewage pumps that are powered by Con Ed under the Emergency Pumping Plan Phase I for emergency pumping of dry weather flow in case of failure of the existing pump engines, and Phase II consists of additional sewage pumps and two (2) 1600 KW/2,332 HP each engine-generators (one standby) are to be installed under the Phase II for emergency pumping of also wet weather flow in case of failure of the existing pump engines. This permit application reflects the latest design changes of the Emergency Pumping Plan by NYCDEP for NYC-DEP Tallman Island WPCP in order to ensure the plant's ability to pump the average dry-weather flow to the facility. Each of these engine-generators will be directly associated and connected to a sewage pump for the plant's sewage pump-around operation. Under the emergency plan, installing sewage pumps that are powered by Con Ed under the Emergency Pumping Plan Phase I for emergency pumping of dry weather flow in case of failure of the existing pump engines until Phase II construction is completed, which will provide power to include wet-weather flow pumping during engines overhaul. Phase II is scheduled to be constructed and ready to operate by May, 2006. Exhaust from the Phase II two engine-generators will be treated with its own Selective Catalytic Reduction (SCR) after combustion-treatment system (Emission Controls SCR21 & SCR22 for Phase II) in order to meet the Part 227 NOx RACT requirements.

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 a failure of the existing pump engines. According to the update design, seven (7) sewage pumps powered by Con Ed are to be installed under the Emergency Pumping Plan Phase I for emergency pumping of dry weather flow in case of failure of the existing pump engines, and eight (8) additional sewage pumps (totaling 15 sewage pumps, of which 11 online and 4 standby), and two (2) 1600 KW/2,332 HP engine-generators (one standby) are to be installed under the Phase 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.

Phase I of the sewage pump around operation, entails installing sewage pumps that are powered by Con Ed under the Emergency Pumping Plan Phase I to provide emergency power for redundant dry weather flow pumping ability. The Phase I Con Ed plan will only be operated (executed) to avoid dry-weather bypass in emergency situations if the plant's existing sewage pumps fail to operate due to engine failure or loss of electrical power. The Con Ed operation will power the associated six emergency sewage pumps in addition to a seventh pump that will act as an emergency back-up should one of the six installed pumps experience a failure or require maintenance, but also for heavy dry weather flow or wet weather conditions. Additionally, there will be an eighth temporary pump to be held in storage as a spare pump in



New York State Department of Environmental Conservation
Facility DEC ID: 2630200012

the event of a failure of one of the other temporary pumps. These emergency generators and sewage pumps will be taken out of service once the plant's Phase II pump-around system is installed and is available for operation.

Phase II of the sewage pump around operation entails the installation of eight (8) additional sewage pumps (totaling 15 sewage pumps, of which 11 online and 4 standby), and two (2) 1600 KW/2,332 HP engine-generators (one standby) are to be installed under the Phase II for emergency pumping of also wet weather flow in case of failure of the existing pump engines. The exhaust of each 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. These two Phase II engine-generators will be used as the plant's standby emergency generators to power eight emergency sewage pumps in case the sewage pump around operation occurs during the existing pump engine overhaul. Phase II provides sufficient capacity to pump 120 million gallons per day of flow. The system will initially be placed into service as an emergency system that will only be used should there be a failure of the existing pump engines. In the Fall of 2008, the plant's 34 to 42 year old pump engines will be removed. DEP's expects that the new Con Edison feeders will be in place and the Phase II pumps and motors will be powered by Con Edison. However, should the feeders not be in service by the required date, the Phase II generators will be used to power the pumps until such time as the Con Ed feeders are available.

Each of the two emergency generators in Phase II will only operate as a power source when the usual supply of power is unavailable (when the existing pump engines system fails). The two units in Phase II will never be operated simultaneously. The critical Phase emergency pumping system will be powered by the Phase II emergency generators. The facility will accept a cap of 22.5 tons per year of NOx Potential To Emit from the engine-generators of both units in Phase II. The two plant's two additional back-up engine-generators under Phase II (Emission Sources PH2E1 & PH2E2) are scheduled to be installed and ready to operate by May1, 2006.

The ASF permit contains a complete listing of the applicable federal, state and compliance monitoring requirements for the facility, its emission units, emission points, and its processes. NYC-DEP Tallman Island WPCP is subject to the following:

1. The facility is capping out of New Source Review by limiting the NOx emissions for the two back-up engine-generators (Emission Sources PH2E1 & PH2E2) in Phase II (Process P02) to 22.5 tons per year as per 6 NYCRR 201-7, and therefore limiting the fuel consumption to of # 2 fuel oil to the equivalence of 22.5 tpy of NOx emission depending on the emission factors from the stack testing. The facility is required to keep separate fuel records and hours of operation for each of these two back-up engine-generators in Phase II. The facility will verify the NOx RACT emission limit (factors) after SCR exhaust emission factor through the stack testing. These NOx emission limits (factors) will be used in the calculations towards the 22.5 tpy capping out of New Source Review requirements. And hence determine the # 2 fuel consumption limit in Phase II when this ASF permit is incorporated into the Title V permit.
2. Since the facility has elected to meet only the NOx RACT standard of 2.3 g/bhp-hr, therefore, the fuel usage limits for Phase II is based on the 2.3 g/bhp-hr, and not on the manufacturer's guaranteed limit of 1.5 g/bhp-hr. Also, the exhaust from the Phase II engine-generators will be treated with its own Selective Catalytic Reduction (SCR) after combustion-treatment system (Emission Controls SCR21 & SCR22 corresponding to Emission Sources PH2E1 & PH2E2, respectively) in order to meet the Part 227 NOx RACT requirements and to cap out of New Source Review under 6 NYCRR Subpart 231-2. The # 2 fuel



New York State Department of Environmental Conservation
Facility DEC ID: 2630200012

oil limit for Phase II is 522,274 gallons per year. The facility is required to keep records of the fuel consumption (in gallons per day) and the hours of operation (in hours per day) for each of these two back-up engine-generators in Phases II for five years.

3. In order to comply with 6 NYCRR 227-1.3(a), all of the two back-up engine-generators in Phase II will comply with the opacity limit of 20% using Good Engineering Practice, and will be operated and maintained in accordance with the manufacturer's recommended operation and maintenance procedures in order to comply with 6 NYCRR 227-1.3(a).
4. Emission stack test for NO_x for the two back-up engine-generators in Phase II (Emission Sources PH2E1 & PH2E2) will be required in order to establish the emission factors. NYSDEC will not accept the manufacturer's guarantee NO_x emission factors for these two back-up engine-generators in Phase II. Once the two engine-generators (Emission Sources PH2E1 & PH2E2) in Phase II are installed, the facility shall notify NYSDEC of the completed installation date for these two engine-generators. DEP must submit to NYSDEC the stack test protocol within 60 days of this permit issuance. DEP must conduct the stack testing for the two engine-generators in Phase II within 60 days of the approval of the protocol. The stack test results must be submitted to the Department within 60 days of the conduction of the stack test.
5. Each of the two emergency generators in Phase II will only operate as a power source when the usual supply of power is unavailable (when the existing pump engines system fails). Both units in Phase II will never be operated simultaneously.
6. The two Phase II engine-generators will be used as the plant's standby emergency generators to power eight emergency sewage pumps in case the sewage pump around operation occurs during the existing pump engine overhaul.
7. Emission stack test is required to determine NO_x emission from the two back-up engine-generators in Phase II (Emission Sources PH2E1 & PH2E2), Emission Controls SCR21 & SCR22 in Emission Unit P-AROUND, and Emission Points PH2G1 & PH2G2. Stack testing must be conducted during the first year of operation. DEP must submit to NYSDEC the stack test protocol within 60 days of the completed installation of the two engine-generators in Phase II. Once the two-engine generators (Emission Sources PH2E1 & PH2E2) in Phase II are installed, the facility shall notify NYSDEC of the completed installation date for these two engine-generators. DEP must conduct the stack testing for the two engine-generators in Phase II within 60 days of the approval of the protocol. The stack test results must be submitted to the Department within 60 days of the conduction of the test.
8. The facility is required to comply with the 2.3 gm/BHP-hr NO_x emission limit for each of the two lean burn internal combustion engines with compression ignition source in Phase II through stack testing as stated in Item # 4 above and as per 6 NYCRR 227-2.4(f)(2)(ii). These back-up engines-generators in Phase II are 2,332HP/1,600 KW each Cummins, defined as Emission Sources PH2E1 & PH2E2 with corresponding Emission Points PH2G1 & PH2G2, respectively, and final Emission Controls SCR21 & SCR22, respectively (with control of Selective Catalytic Reduction (SCR) after combustion treatment system) in Emission Unit P-AROUND.
9. The facility is not allowed to operate both back-up Cummins engine-generators in Phase II simultaneously. Based on the PTE calculation for NO_x emission, only one of the two back-up engine-



New York State Department of Environmental Conservation
Facility DEC ID: 2630200012

generator in Phase II is allowed to operate at a given time in order to comply with the capping out of New Source Review.

10. Through NYC DCAS (New York City Department of Citiwide Administrative Service), the permittee shall retain fuel oil supplier certificates for each shipment of oil received. Such certificates shall contain, as a minimum: supplier name, date of shipment, quantity shipped, oil sulfur content, and the method used to determine the sulfur content. Such certifications shall be available for inspection by, or submittal to, NYCDEC upon request.

11. In order to comply with 6 NYCRR 225-1.8(a), for NYC - DEP Tallman Island WPCP, NYC DCAS is required to meet and supply the low sulfur content of 20 % by weight for distillate fuel oils in order to meet the regulatory limit of 0.20 % sulfur content by weight.

12. Emission stack test is required to comply with the particulate emission limit of 0.10 lb/MM Btu as per 6 NYCRR 227.2(b)(1), from the two back-up engine-generators in Phase II (Emission Sources PH2E1 & PH2E2) with corresponding Emission Points PH2G1 & PH2G2, and corresponding Emission Controls SCR21 & SCR22, respectively in Emission Unit P-AROUND. Stack testing must be conducted during the first year of operation. Once the two-engine generators (Emission Sources PH2E1 & PH2E2) in Phase II are installed, the facility shall notify NYSDEC of the completed installation date for these two engine-generators. DEP must submit to NYSDEC, an acceptable stack test protocol within 60 days of the completed installation of the two engine-generators in Phase II. DEP must conduct the stack testing for the two engine-generators in Phase II within 60 days of the approval of the protocol. The stack test results must be submitted to the Department within 60 days of the conduction of the test. Facility shall keep records of all testing done at this stationary combustion installation for a period of five years.

13. Whenever any of the two back-up Cummins engine-generators in Phase II (Emission Sources PH2E1 & PH2E2) in Emission Unit P-AROUND are operating, the control unit (Emission Controls SCR21 & SCR22, respectively) must also be operating. NYC-DEP Tallman Island WPCP has chosen Selective Catalytic Reduction (SCR) as the method of controlling and reducing the NO_x emissions from the two back-up Cummins engine-generators in Phase II (Emission Sources PH2E1 & PH2E2). Exhaust from these two back-up engine-generators in Phase II will be treated with a Selective Catalytic Reduction (SCR) after combustion treatment system (Emission Controls SCR21 & SCR22, respectively) in order to meet Part 227, NO_x RACT requirements and to cap out of New Source Review.

14. The ASF has to be incorporated into the Title V for the facility within one year of the issuance of this ASF.

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
 DIVISION OF ENVIRONMENTAL PERMITS
 ONE HUNTERS POINT PLAZA, 47-40 21ST STREET
 LONG ISLAND CITY, NY 11101-5407

FINAL

New York State Department of Environmental Conservation
Facility DEC ID: 2630200012



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 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 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 and Modifications

Permit Modifications, Suspensions and Revocations by the Department

Facility Level

Submission of Applications for Permit Modification or Renewal-REGION 2

HEADQUARTERS



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

Condition 1: Facility Inspection by the Department
Applicable State Requirement: ECL 19-0305

Item 1.1:

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

Item 1.2:

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

Item 1.3:

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

Condition 2: Relationship of this Permit to Other Department Orders and Determinations
Applicable State Requirement: ECL 3-0301.2(m)

Item 2.1:

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

Condition 3: Applications for Permit Renewals and Modifications
Applicable State Requirement: 6NYCRR 621.13

Item 3.1:

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

Item 3.2:

The permittee must submit a renewal application at least 180 days before expiration of permits for Title V Facility Permits, or at least 30 days before expiration of permits for State Facility Permits.

Item 3.3:

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

New York State Department of Environmental Conservation
Facility DEC ID: 2630200012



transfer of ownership.

Condition 4: Permit Modifications, Suspensions and Revocations by the Department
Applicable State Requirement: 6NYCRR 621.14

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 Applications for Permit Modification or Renewal-REGION 2 HEADQUARTERS
Applicable State Requirement: 6NYCRR 621.5(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: 2-6302-00012/00020

Facility DEC ID: 2630200012

Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY PERMIT

IDENTIFICATION INFORMATION

Permit Issued To: NYC DEPT OF ENVIRONMENTAL PROTECTION
96-05 HORACE HARDING EXPWY
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: 05/18/2006

Permit Expiration Date: No expiration date.



LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level

- 1 6NYCRR 201-6.5(g): Non Applicable requirements
- *2 6NYCRR 201-7: Capping Monitoring Condition
- 3 6NYCRR 225-1.2(a)(2): Compliance Demonstration
- 4 6NYCRR 225-1.8(a): Compliance Demonstration
- 5 6NYCRR 227-1.3: Compliance Demonstration
- 6 6NYCRR 227-2.4(f)(2)(ii): Compliance Demonstration
- 7 6NYCRR 227.2(b)(1): Compliance Demonstration

Emission Unit Level

- 8 6NYCRR 201-7: Emission Unit Permissible Emissions
- 9 6NYCRR 201-7: Process Permissible Emissions

EU=P-AROUND,Proc=P02,ES=PH2E1

- 10 6NYCRR 227-1.3(a): Compliance Demonstration

EU=P-AROUND,Proc=P02,ES=PH2E2

- 11 6NYCRR 227-1.3(a): Compliance Demonstration

EU=P-AROUND,Proc=P02,ES=SCR21

- 12 6NYCRR 227-1.3(a): Compliance Demonstration

EU=P-AROUND,Proc=P02,ES=SCR22

- 13 6NYCRR 227-1.3(a): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 14 ECL 19-0301: Contaminant List
- 15 6NYCRR 201-1.4: Unavoidable noncompliance and violations
- 16 6NYCRR 201-5: Emission Unit Definition
- 17 6NYCRR 211.2: Air pollution prohibited

Emission Unit Level

- 18 6NYCRR 201-5: Emission Point Definition By Emission Unit
- 19 6NYCRR 201-5: Process Definition By Emission Unit

NOTE: * preceding the condition number indicates capping.



FEDERALLY ENFORCEABLE CONDITIONS

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

This section contains terms and conditions which are federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Sealing - 6NYCRR Part 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation.

Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

No person shall operate any air contamination source sealed by the Commissioner in accordance with this section unless a modification has been made which enables such source to comply with all requirements applicable to such modification.

Unless authorized by the Commissioner, no person shall remove or alter any seal affixed to any contamination source in accordance with this section.

Item B: Acceptable Ambient Air Quality - 6NYCRR Part 200.6

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

Item C: Maintenance of Equipment - 6NYCRR Part 200.7

Any person who owns or operates an air contamination

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012



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.

Item D: Unpermitted Emission Sources - 6NYCRR Part 201-1.2

If an existing emission source was subject to the permitting requirements of 6NYCRR Part 201 at the time of construction or modification, and the owner and/or operator failed to apply for a permit for such emission source then the following provisions apply:

(a) The owner and/or operator must apply for a permit for such emission source or register the facility in accordance with the provisions of Part 201.

(b) The emission source or facility is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing sources or facilities.

Item E: Emergency Defense - 6NYCRR Part 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 F: Recycling and Salvage - 6NYCRR Part 201-1.7

Where practical, any person who owns or operates an air contamination source shall recycle or salvage air contaminants collected in an air cleaning device according to the requirements of 6 NYCRR.

Item G: Prohibition of Reintroduction of Collected Contaminants to the Air - 6NYCRR Part 201-1.8

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

Item H: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR Part 201-3.2(a)

The owner and/or operator of an emission source or unit that is eligible to be exempt, may be required to certify that it operates within the specific criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item I: Proof of Eligibility for Sources Defined as Trivial Activities - 6 NYCRR Part 201-3.3(a)

The owner and/or operator of an emission source or unit that is listed as being trivial in 6 NYCRR Part 201 may be required to certify that it operates within the specific



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

criteria described in 6 NYCRR Subpart 201-3. The owner or operator of any such emission source must maintain all required records on-site for a period of five years and make them available to representatives of the Department upon request. Department representatives must be granted access to any facility which contains emission sources or units subject to 6 NYCRR Subpart 201-3, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

Item J: Required Emission Tests - 6 NYCRR Part 202-1.1

An acceptable report of measured emissions shall be submitted, as may be required by the Commissioner, to ascertain compliance or noncompliance with any air pollution code, rule, or regulation. Failure to submit a report acceptable to the Commissioner within the time stated shall be sufficient reason for the Commissioner to suspend or deny an operating permit. Notification and acceptable procedures are specified in 6NYCRR Part 202-1.

Item K: Visible Emissions Limited - 6 NYCRR Part 211.3

Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Item L: Open Fires - 6 NYCRR Part 215

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

Item M: 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



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

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 N: 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.

FEDERAL APPLICABLE REQUIREMENTS

The following conditions are federally enforceable.

**Condition 1: Non Applicable requirements
Effective between the dates of 05/18/2006 and Permit Expiration Date**

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

Item 1.1:

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.

6NYCRR 231-2

Emission Unit: PAROUD

Reason: The facility is capping out of New Source Review (6 NYCRR 231-2) by limiting the NOx emissions from the two Cummins engine-generators in Phase II (Emission Sources PH2G1 & PH2G2) to 22.5 tons per year. Therefore, this facility is not subject to New Source Review Requirements of 6 NYCRR 231-2.

Exhaust from these two engine-generators will be treated with a Selective Catalytic Reduction (SCR) after combustion treatment system (Emission Controls SCR21 &



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

SCR22) in order to meet Part 227, NO_x RACT requirements and to cap out of New Source Review.

Condition 2: Capping Monitoring Condition
Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-7

Item 2.1:

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:

6NYCRR 231-2

Item 2.2:

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

Item 2.3:

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

Item 2.4:

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

Item 2.5:

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

Item 2.6:

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

Emission Unit: P-AROUND
Process: P02 Emission Source: PH2E1

Emission Unit: P-AROUND
Process: P02 Emission Source: PH2E2



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

Emission Unit: P-AROUND

Process: P02

Emission Source: SCR21

Emission Unit: P-AROUND

Process: P02

Emission Source: SCR22

Regulated Contaminant(s):

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

Item 2.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

In order to avoid applicability to New Source Review under 6 NYCRR Subpart 231-2, the NO_x emissions from the engine-generators covered by this process will be limited to 22.5 tons per year. This limit will be met by restricting the total amount of number 2 fuel oil (i.e., diesel fuel) burned by the two engine-generators in this process to no more than 522,274 gallons per consecutive 12-month period, as indicated below in this condition. Daily, monthly, and twelve-month rolling average fuel usage, in gallons, shall be recorded in a bound logbook and must be maintained for a period of five years to ensure that the emissions are within allowable limits. The fuel use bound logbook must be made available to the Department for inspection upon request during normal business hours.

The fuel usage limit for this condition is summarized by the following formula:

$$45,000 \text{ lb NO}_x/\text{yr} = (11.83 \text{ lb NO}_x/\text{hr}) / (137.3 \text{ gal/hr}) \times \text{DF2};$$

where;

DF2 = the total amount of number 2 fuel oil (diesel fuel) burned annually in gallons per year by the two engine-generators in Process P02 (Phase II).

The emission factor used in the above formula is based on a NO_x RACT limit of 2.3 g/bhp-hr and on the following



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

source specific data and calculations as supplied by the facility in its application for this ASF permit.

Phase II:

Basic Information from the manufacturer:

Number of Engines:	2
Manufacturer:	Cummins
Engine Model:	QSK60-G6
Max BHP Output:	2,332 BHP (Continuous
Operation Rating)	
Fuel Input:	137.3 gal/hr

Compliance with this condition must be summarized in the semi-annual report and the annual compliance certification as required under this ASF permit.

Since the facility has elected to meet only the NOx RACT standard of 2.3 g/bhp-hr, therefore, the fuel usage limits for Phase II is based on the 2.3 g/bhp-hr, and not on the manufacturer's guaranteed limit of 1.5 g/bhp-hr. Also, the exhaust from the Phase II engine-generators will be treated with Selective Catalytic Reduction (SCR) after combustion-treatment system (Emission Controls SCR21 & SCR22 corresponding to Emission Sources PH2E1 & PH2E2, respectively) in order to meet the Part 227 NOx RACT requirements and to cap out of New Source Review under 6 NYCRR Subpart 231-2.

To meet the annual NOx emission limit for Emission Unit P-AROUND, and to meet the annual number 2 fuel consumption limit for the back-up engine-generators in Phase II (Emission Sources PH2E1 & PH2E2), the facility will remove the two back-up engine-generators in Phase I (Emission Sources PH1E1 & PH1E2) once the two back-up engine-generators (Emission Sources PH2E1 & PH2E2) under Phase II are installed and ready to operate (scheduled for May, 2006).

Work Practice Type: PROCESS MATERIAL THRUPUT

Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL

Manufacturer Name/Model Number: 2,332 HP/1,600 KW Cummins QSK60-G6/DQKC Engine-

Generator

Upper Permit Limit: 522,274 gallons per year

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2006.
Subsequent reports are due every 6 calendar month(s).

Condition 3: Compliance Demonstration
Effective between the dates of 05/18/2006 and Permit Expiration Date

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

Item 3.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 3.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

No person shall use, purchase, sell, or offer for sale any distillate fuel 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: 0.20 percent by weight

Monitoring Frequency: PER DELIVERY

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

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2007.

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

Condition 4: Compliance Demonstration
Effective between the dates of 05/18/2006 and Permit Expiration Date

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

Item 4.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012



CAS No: 007446-09-5 SULFUR DIOXIDE

Item 4.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Purchase of fuel oil for all NYC agencies is conducted and managed by NYC DCAS (New York City Department of Citiwide Administrative Service). This monitoring service is responsible for delivering fuel to the source, and meeting the low sulfur monitoring requirement.

DEP proposes that the DCAS monitoring program be adopted as the method for meeting the low sulfur monitoring requirement.

Through NYC DCAS, the permittee shall retain fuel oil supplier certifications for each shipment of oil received.

Such certifications shall contain, as a minimum: supplier name, date of shipment, quantity shipped, oil sulfur content, and the method used to determine the sulfur content. Such certifications shall be available for inspection by, or submittal to, NYSDEC upon request.

All New York City service contracts require supplier to provide fuel oils that meet the low sulfur content requirement of 0.20% by weight for distillate fuel oils. Upon each oil delivery, the oil supplier must provide a certificate that the oil delivered meets the 0.20% by weight sulfur content limitation. NYCDEP must report annually to NYSDEC all the oil sulfur standard exceedances that occurred during the reporting year. The permittee shall retain fuel oil supplier certifications for each shipment of oil received. Such certifications shall contain, as a minimum: supplier name, date of shipment, quantity shipped, oil sulfur content, and the method used to determine the sulfur content. Such certifications shall be available for inspection by, or submittal to, NYSDEC upon request.

For NYC-DEP Tallman Island WPCP, NYC DCAS is required to meet and supply the low sulfur content of 0.20 % by weight for distillate fuel oils in order to meet the regulatory limit of 0.20 % sulfur content by weight.

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012



The distillate oil will be used in the plant's two engine-generators (Emission Sources PH2E1 & PH2E2 - two 2,332 HP each Cummins QSK60-G6/DQKC Engine-Generator) in Phase II.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.20 percent by weight
Reference Test Method: ASTM D4951
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2007.
Subsequent reports are due every 12 calendar month(s).

Condition 5: Compliance Demonstration
Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 227-1.3

Item 5.1:

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

Emission Unit: P-AROUND
Process: P02 Emission Source: PH2E1

Emission Unit: P-AROUND
Process: P02 Emission Source: PH2E2

Emission Unit: P-AROUND
Process: P02 Emission Source: SCR21

Emission Unit: P-AROUND
Process: P02 Emission Source: SCR22

Item 5.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Operation of the internal combustion engines referenced



above shall be monitored for compliance with the visible emission standard according to the following procedure:

- 1) Observe the stack for each internal combustion engine which is operating on oil 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 firing oil (the firing of other fuels in between days of firing oil does not count as an interruption in the consecutive days of firing oil), 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.



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

Monitoring Frequency: DAILY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2007.
Subsequent reports are due every 12 calendar month(s).

Condition 6: Compliance Demonstration
Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 227-2.4(f)(2)(ii)

Item 6.1:

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

Emission Unit: P-AROUND
Process: P02 Emission Source: PH2E1

Emission Unit: P-AROUND
Process: P02 Emission Source: PH2E2

Emission Unit: P-AROUND
Process: P02 Emission Source: SCR21

Emission Unit: P-AROUND
Process: P02 Emission Source: SCR22

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

Item 6.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

Monitoring Description:

To demonstrate compliance with the 2.3 grams per brake horsepower-hour NO_x RACT emission limit specified in this requirement, the owner or operator of this facility must submit a test protocol for conducting a stack test for NO_x emissions for both of the Phase II diesel engine-generators (identified as Emission Sources PH2E1 & PH2E2) operating with SCR control (identified as Emission Control SCR21 & SCR22) within 60 days of this ASF permit issuance. The owner or operator of this facility will then be required to:

1. Conduct the stack test on each of the Phase II diesel



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

engine-generators (Emission Sources PH2E1 & PH2E2) operating with SCR control (Emission Control SCR21 & SCR22) within 60 days of the protocol approval date and;

2. Submit the stack test results to the Department within 60 days of the completion of the tests.

The facility shall keep records of all testing done at this stationary combustion installation for a period of five years.

Manufacturer Name/Model Number: Miratech/SCR
Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 2.3 grams per brake horsepower-hour
Reference Test Method: App A, Method 7, or 7E, or 19
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED PER OCCURRENCE
Reporting Requirements: SEMI-ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 7/30/2006.
Subsequent reports are due every 6 calendar month(s).

Condition 7: Compliance Demonstration
Effective between the dates of 05/18/2006 and Permit Expiration Date

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

Item 7.1:

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

Emission Unit: P-AROUND Emission Point: PH2G1
Process: P02 Emission Source: PH2E1

Emission Unit: P-AROUND Emission Point: PH2G2
Process: P02 Emission Source: PH2E2

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

Item 7.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012



Monitoring Description:

The owner or operator shall perform the following:

1. Submit to the Department, within 60 days of the issuance of this ASF permit, an acceptable protocol for the testing of particulate emissions to determine compliance with the limit cited in this condition for both Phase II engines (Emission Sources PH2E1 & PH2E2).
2. Perform a separate stack test for each Phase II engine (Emission Sources PH2E1 & PH2E2), within 60 days of the approval of the test protocol, to determine compliance with the particulate emission limit cited in this condition.
3. Submit an acceptable stack test report, within 60 days of conducting the stack testing, that details the results obtained from the testing done to meet the requirement of # 2 above.

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

The facility shall keep records of all testing done at this stationary combustion installation for a period of five years.

Manufacturer Name/Model Number: 2,332 HP/1,600 KW Cummins QSK60-G6/DQKC Engine-Generator

Upper Permit Limit: 0.10 pounds per million Btus

Reference Test Method: EPA Method 5

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST METHOD INDICATED

Reporting Requirements: SEMI-ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 7/30/2006.

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

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

Condition 8: Emission Unit Permissible Emissions
Effective between the dates of 05/18/2006 and Permit Expiration Date

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012



Applicable Federal Requirement: 6NYCRR 201-7

Item 8.1:

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: P-AROUD

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

PTE(s): 5.137 pounds per hour

45,000 pounds per year

Condition 9: Process Permissible Emissions

Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable Federal Requirement: 6NYCRR 201-7

Item 9.1:

The sum of emissions from the regulated process cited shall not exceed the following Potential to Emit (PTE) rates for each regulated contaminant:

Emission Unit: P-AROUD

Process: P02

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

PTE(s): 5.137 pounds per hour

45,000 pounds per year

Condition 10: Compliance Demonstration

Effective between the dates of 05/18/2006 and Permit Expiration Date

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

Item 10.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: P-AROUD

Process: P02

Emission Source: PH2E1

Item 10.2:

Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

No owner or operator of a combustion installation shall operate the installation in such a way to 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.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: ANNUALLY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2007.
Subsequent reports are due every 12 calendar month(s).

Condition 11: Compliance Demonstration
Effective between the dates of 05/18/2006 and Permit Expiration Date

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

Item 11.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: P-AROUD
Process: P02 Emission Source: PH2E2

Item 11.2:

Compliance Demonstration 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 operate the installation in such a way to 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.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: ANNUALLY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: ANNUALLY (CALENDAR)



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

Reports due 30 days after the reporting period.
The initial report is due 1/30/2007.
Subsequent reports are due every 12 calendar month(s).

Condition 12: Compliance Demonstration
Effective between the dates of 05/18/2006 and Permit Expiration Date

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

Item 12.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: P-AROUND
Process: P02 Emission Source: SCR21

Item 12.2:

Compliance Demonstration 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 operate the installation in such a way to 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.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: ANNUALLY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2007.
Subsequent reports are due every 12 calendar month(s).

Condition 13: Compliance Demonstration
Effective between the dates of 05/18/2006 and Permit Expiration Date

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

Item 13.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: P-AROUND

New York State Department of Environmental Conservation
Permit ID: 2-6302-00012/00020 Facility DEC ID: 2630200012



Process: P02

Emission Source: SCR22

Item 13.2:

Compliance Demonstration 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 operate the installation in such a way to 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.

Parameter Monitored: OPACITY

Upper Permit Limit: 20 percent

Reference Test Method: Method 9

Monitoring Frequency: ANNUALLY

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2007.

Subsequent reports are due every 12 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: Public Access to Recordkeeping for Facilities With State Facility Permits - 6NYCRR Part 201-1.10(a)

Where emission source owners and/or operators keep records pursuant to compliance with the operational flexibility requirements of 6 NYCRR Subpart 201-5.4(b)(1) , and/or the emission capping requirements of 6 NYCRR Subparts 201-7.2(d), 201-7.3(f), 201-7.3(g), 201-7.3(h)(5), 201-7.3(i) and 201-7.3(j), the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records. Emission source owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department of receipt of the request.

Item B: General Provisions for State Enforceable Permit Terms and Condition - 6 NYCRR Part 201-5

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

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

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012



law.

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state only enforceable.

Condition 14: Contaminant List

Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable State Requirement: ECL 19-0301

Item 14.1:

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

CAS No: 0NY210-00-0

Name: OXIDES OF NITROGEN

CAS No: 0NY075-00-0

Name: PARTICULATES

CAS No: 007446-09-5

Name: SULFUR DIOXIDE

Condition 15: Unavoidable noncompliance and violations

Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-1.4

Item 15.1:

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.



New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012

(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 superseded 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 16: Emission Unit Definition
Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 16.1:

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

Emission Unit: P-AROUND

Emission Unit Description:

Emission Unit P-AROUND consists of eight (8) additional sewage pumps (totaling 15 sewage pumps, of which 11 online and 4 standby), and two (2) 1600 KW/2,332 HP each engine-generators (one standby) firing diesel fuel (Process P02) and are to be installed under the Phase II for emergency pumping of also wet weather flow in case of failure of the existing pump engines. NYC-DEP Tallman Island WPCP has chosen Selective Catalytic Reduction (SCR) as the method of controlling and reducing the NOx emissions from the two back-up Cummins engine-generators in Phase II (Emission Sources PH2E1 &

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012



PH2E2). The SCR operation is required for reducing the NO_x emissions from the two back-up engine-generators. Whenever any of the two back-up Cummins engine-generators in Phase II (Emission Sources PH2E1 & PH2E2) are operating, the SCR control units (Emission Controls SCR21 & SCR22; respectively) must also be operating. The facility is required to keep records of the fuel consumption and the hours of operation for each of these back-up engine-generators for five years.

The two (2) Phase II back-up engine-generators (Emission Sources PH2E1 and PH2E2) are trailer mounted and exhausting through its own exhaust stacks (Emission Points 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 to reduce NO_x emissions from these two engine-generators in order to meet the Part 227 NO_x RACT requirement. Therefore, the exhaust from each engine will pass through its own SCR.

The Phase II construction will provide power to include wet-weather flow pumping during engines overhaul. These two back-up engine-generators (Emission Sources PH2E1 & PH2E2) under Phase II are scheduled to be installed and ready to operate by May 1, 2006).

The Total Throughput is determined to meet NO_x emissions of 22.5 tons per year at NO_x RACT maximum allowed 2.3 g/bhp. Allowed fuel consumption may be increased for lower NO_x emission.

Building(s): PHASEIGEN
PHASEIIGEN

Condition 17: Air pollution prohibited
Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 211.2

Item 17.1:

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.

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012



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

Condition 18: Emission Point Definition By Emission Unit
Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 18.1:

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

Emission Unit: P-AROUD

Emission Point: PH2G1

Height (ft.): 15

Diameter (in.): 24

NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: PHASEIIGEN

Emission Point: PH2G2

Height (ft.): 15

Diameter (in.): 24

NYTMN (km.): 4516.623 NYTME (km.): 598.033 Building: PHASEIIGEN

Condition 19: Process Definition By Emission Unit
Effective between the dates of 05/18/2006 and Permit Expiration Date

Applicable State Requirement: 6NYCRR 201-5

Item 19.1:

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

Emission Unit: P-AROUD

Process: P02

Source Classification Code: 2-02-004-01

Process Description:

Process P02 in Emission Unit P-AROUD consists of eight (8) additional sewage pumps (totaling 15 sewage pumps, of which 11 online and 4 standby), and two (2) 1600 KW/2,332 HP each engine-generators (one standby) fire diesel fuel and are to be installed under the Phase II for emergency pumping of also wet weather flow in case of failure of the existing pump engines.

The Phase II construction will provide power to include wet-weather flow pumping during engines overhaul. These two back-up engine-generators (Emission Sources PH2E1 & PH2E2) under Phase II are scheduled to be installed and ready to operate by May 1, 2006).

New York State Department of Environmental Conservation

Permit ID: 2-6302-00012/00020

Facility DEC ID: 2630200012



The two (2) Phase II back-up engine-generators (Emission Sources PH2E1 and PH2E2) are trailer mounted and exhausting through its own exhaust stacks (Emission Points 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 to reduce NO_x emissions from these two engine-generators in order to meet the Part 227 NO_x RACT requirement. Therefore, the exhaust from each engine will pass through its own SCR.

The Total Throughput is determined to meet NO_x emissions of 22.5 tons per year at NO_x RACT maximum allowed 2.3 g/bhp. Allowed fuel consumption may be increased for lower NO_x 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)