Facility DEC ID: 2620300005

PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 2-6203-00005/00049
Effective Date: 12/11/2019 Expiration Date: 12/10/2029

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

Contact: PAMELA ELARDO
NYCDEP BWT
96-05 HORACE HARDING EXPY FL 2
CORONA, NY 11368
(718) 595-6924

Facility: WARDS ISLAND WASTEWATER TREATMENT PLANT
WARDS ISLAND - E SIDE
NEW YORK, NY 10035

Contact: LESLIE LIPTON
NYCDEP
59-17 JUNCTION BLVD
FLUSHING, NY 11373
(718) 595-4730

Description:
The Wards Island WWTP is an existing secondary wastewater treatment plant which treats 275 million gallons per day (mgd) average dry weather flow and 550 mgd wet weather flow. The WWTP has both combustion and non-combustion operational processes.

The WWTP has the following equipment and operations:

-Three (3) 800-HP temporary mobile trailer mounted boilers that combust both digester gas and No. 2 fuel oil (Emission Sources IBLR1, IBLR2, and IBLR3). These boilers are being removed from the WWTP and replaced with the permanent new boiler system consisting of three 800-HP boilers (Emission Sources NBLR1 , NBLR2, and NBLR3) and two 400-HP boilers (Emission Sources NBLR4, and NBLR54). The temporary boilers will continue to operate until the new boiler plant is commissioned.
-One (1) 400-HP trailer mounted hot water boiler supplying heat to offices and sludge vessels docked at Wards Island WWTP (Emission Source SVBLR). This boiler is being removed from the WWTP.
-Two (2) 16.7 mmBtu/hr hot water boilers located at the dewatering building, with one boiler operating and one boiler used as a standby unit (Emission

Sources 0BDW1, 0BDW2).
-Four (4) 3,500 kW emergency turbine generators located adjacent to the Pump and Blower Building utilizing No.2 diesel fuel (Emission Sources EGTG1, EGTG2, EGTG3, and EGTG4).
-One (1) 2,000 kW exempt emergency diesel generator (EPA Certified 2010 Model Year) (No Emission Source ID).
-One (1) 567 scfm capacity John Zink model waste gas burner to flare the excess sludge digester gas (Emission Source 0WDGB).
-One (1) 1,400 scfm capacity John Zink model STF U-U12 waste gas burner to flare the excess sludge digester gas (Emission Source NWDGB).

The WWTP has the following wastewater treatment processes and their associated equipment. The emissions from these processes are remaining unchanged.
• Primary settling tanks
• Aeration tanks
• Final settling tanks
• Chlorine contact disinfection tanks
• Gravity thickeners
• Sludge digesters
• Sludge storage tank
• A dewatering facility
• Wet scrubbers

The proposed project is an in-kind replacement of the temporary boiler system with a new permanent boiler system with associated stand-by units required for redundancy. Total pollutant emissions are expected to be similar or less than the annual average emissions from the existing temporary boiler system, and there are no changes to the existing emission caps.

The facility NOx emissions are capped at 24.9 tons per year.
The facility VOC emissions are capped at 24.9 tons per year.
The facility Total HAPs emissions are capped at 24.9 tons per year.

The annual operating hours for each emergency generator is limited to 500 hours.
The owner or operator of the facility shall maintain separate records of the amount of fuel combusted in each engine generator.

Records demonstrating compliance with these caps will be kept in accordance with the permit specific conditions.

The facility is subject to the provisions of State Facility requirements specified under 6NYCRR 201-7.

Facility DEC ID: 2620300005

The Air State Facility permit contains a listing of the applicable federal, state, and compliance monitoring requirements for the facility.

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, the General Conditions specified and any Special Conditions included as part of this permit.

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

Authorized Signature: _____ Date: ___ / ___ / _____

Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the compliance permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in any compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

PAGE LOCATION OF CONDITIONS

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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, 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.

Item3.2:
The permittee must submit a renewal application at least 180 days before the expiration of permits for Title V and State Facility Permits.

Item 3.3
Permits are transferrable with the approval of the department unless specifically prohibited by the statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

Facility DEC ID: 2620300005

Condition 4: Permit modifications, suspensions or revocations by the Department
Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:
The Department reserves the right to exercise all available authority to modify, suspend, or revoke this permit in accordance with 6NYCRR Part 621. The grounds for modification, suspension or revocation include:

a) materially false or inaccurate statements in the permit application or supporting papers;
b) failure by the permittee to comply with any terms or conditions of the permit;
c) exceeding the scope of the project as described in the permit application;
d) newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
e) noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

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

Condition 5: Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS
Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:
Submission of applications for permit modification or renewal are to be submitted to:
NYSDEC Regional Permit Administrator
Region 2 Headquarters
Division of Environmental Permits
1 Hunters Point Plaza, 4740 21st Street
Long Island City, NY 11101-5407
(718) 482-4997

Permit ID: 2-6203-00005/00049 **Facility DEC ID: 2620300005**

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 EXPY FL 5
CORONA, NY 11368

Facility: WARDS ISLAND WASTEWATER TREATMENT PLANT
WARDS ISLAND - E SIDE
NEW YORK, NY 10035

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

Permit Effective Date: 12/11/2019 Permit Expiration Date: 12/10/2029

PAGE LOCATION OF CONDITIONS

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NOTE: * preceding the condition number indicates capping.

FEDERALLY ENFORCEABLE CONDITIONS

Renewal 1/FINAL ****** 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 - 6 NYCRR 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 - 6 NYCRR 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 - 6 NYCRR 200.7

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.

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

If an existing emission source was subject to the permitting requirements of 6 NYCRR 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: Recycling and Salvage - 6 NYCRR 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 F: Prohibition of Reintroduction of Collected Contaminants to the Air - 6 NYCRR 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 G: Proof of Eligibility for Sources Defined as Exempt Activities - 6 NYCRR 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 H: Proof of Eligibility for Sources Defined as Trivial

Activities - 6 NYCRR 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 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: Required Emission Tests - 6 NYCRR 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 6 NYCRR Subpart 202-1.

Item J: Open Fires Prohibitions - 6 NYCRR 215.2
Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item K: Permit Exclusion - ECL 19-0305
The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

Item L: Federally Enforceable Requirements - 40 CFR 70.6 (b)

All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: Exempt Sources - Proof of Eligibility
Effective between the dates of 12/11/2019 and 12/10/2029

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

Item 1.1:
The owner or operator of an emission source or activity that is listed as being exempt may be required to certify that it is operated within the specific criteria described in this Subpart. The owner or operator of any such emission source or activity must maintain all records necessary for demonstrating compliance with this Subpart on-site for a period of five years, and make them available to representatives of the department upon request.

Condition 2: Compliance Demonstration
Effective between the dates of 12/11/2019 and 12/10/2029

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

Item 2.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 2.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:
AS PROOF OF EXEMPT ELIGIBILITY FOR THE EMERGENCY GENERATORS, THE FACILITY MUST MAINTAIN MONTHLY RECORDS WHICH DEMONSTRATE THAT EACH ENGINE IS OPERATED LESS THAN 500 HOURS PER YEAR, ON A 12-MONTH ROLLING TOTAL BASIS.

Work Practice Type: HOURS PER YEAR OPERATION
Upper Permit Limit: 500.0 hours
Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 3: Facility Permissible Emissions
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 3.1:
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: 0NY100-00-0 PTE: 49,800 pounds per year
Name: TOTAL HAP

CAS No: 0NY210-00-0 PTE: 49,800 pounds per year
Name: OXIDES OF NITROGEN

CAS No: 0NY998-00-0 PTE: 49,800 pounds per year
Name: VOC

Condition 4: Capping Monitoring Condition
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 4.1:
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 201-6

Item 4.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 4.3:
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 4.4:
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 4.5:
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 4.6:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 2-WWTRE

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

Item 4.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Emissions from the wastewater treatment related processes vary based on the constituents of the WWTP influent, over which the WWTP has limited control. The emissions are based on annual wastewater influent sampling results and estimated by 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.

Process Material: WASTEWATER
Parameter Monitored: VOC
Upper Permit Limit: 24.9 tons per year
Reference Test Method: EPA 600 Series
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 12 calendar month(s).

Condition 5: Capping Monitoring Condition
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 5.1:
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 201-6

Item 5.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 5.3:
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 5.4:
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 5.5:
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 5.6:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 2-WWTRE

Regulated Contaminant(s):
CAS No: 0NY100-00-0 TOTAL HAP

Item 5.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
Emissions from the wastewater treatment related processes vary based on the constituents of the WWTP influent, over which the WWTP has limited control. The emissions are based on annual wastewater influent sampling results and

estimated by 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.

Process Material: WASTEWATER
Parameter Monitored: TOTAL HAP
Upper Permit Limit: 24.9 tons per year
Reference Test Method: EPA 600 Series
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 12 calendar month(s).

Condition 6: Capping Monitoring Condition
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 6.1:
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 201-6
6 NYCRR Subpart 231-2

Item 6.2:
Operation of this facility shall take place in accordance with the approved criteria, emission limits, terms, conditions and standards in this permit.

Item 6.3:
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 6.4:
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 6.5:
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 6.6:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 1-COMBU

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

Item 6.7:
Compliance Demonstration shall include the following monitoring:

Capping: Yes
Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
The NOx (oxides of nitrogen) emissions are capped at 24.9 tons per year.

The owner or operator shall maintain a record of the quantity of each fuel fired at the facility. Also, the owner or operator shall calculate (based on the fuel quantity) using the following formula:

D(0.02) + G(50) + E(0.0678) + DG(50) + DG1(19.8) + F(54.6) + EN(0.21) < 49,800 lbs/yr of Oxides of Nitrogen emissions.

Where:
D = 12-month rolling total of distillate oil fired (from existing boilers) in gals/yr
0.02 lb/gal - emission factor base on AP-42
G = 12-month rolling total of natural gas fired (from boilers) in MMSCF/yr
50 lb/mmscf - emission factor base on AP-42 low NOx burner
E = 12-month rolling total of distillate oil fired (from turbine generators) in gals/yr
DG = 12-month rolling total of digester gas fired (from boilers) in MMSCF/yr
50 lb/mmscf - emission factor base on AP-42 low NOx burner
DG1 = 12-month rolling total of digester gas fired (from existing temporary, trailer mounted boilers) in MMSCF/yr
Emission Factor 19.8 lb/mmscft of NOx when firing digester gas, proposed by the manufacturer, should be demonstrated

through the stack test.
F = 12-month rolling total of digester gas fired (from flares) in MMSCF/yr
EN = 12-month rolling total of distillate oil fired (from new 2010 Model Caterpillar 2000 kW engine) in gals/yr
-0.21 lb/gal emission factor is based on the 40CFR 89.112 standard for diesel fired engines

Parameter Monitored: OXIDES OF NITROGEN
Upper Permit Limit: 24.9 tons per year
Monitoring Frequency: MONTHLY
Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 30 days after the reporting period.
The initial report is due 1/30/2020.
Subsequent reports are due every 12 calendar month(s).

Condition 7: Visible Emissions Limited
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:6 NYCRR 211.2

Item 7.1:
Except as permitted by a specific part of this Subchapter and for open fires for which a restricted burning permit has been issued, no person shall cause or allow any air contamination source to emit any material having an opacity equal to or greater than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

Condition 8: Compliance Demonstration
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:6 NYCRR 212-1.6 (a)

Item 8.1:
The Compliance Demonstration activity will be performed for the facility:
The Compliance Demonstration applies to:

Emission Unit: 2-WWTRE

Item 8.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: MONITORING OF PROCESS OR CONTROL DEVICE PARAMETERS AS SURROGATE
Monitoring Description:
No facility owner or operator shall cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water.

Compliance with this requirement shall be determined by the facility owner/operator conducting a daily survey of visible emissions when the process is in operation. If any visible emissions are identified, corrective action is required. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: EPA Method 9
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 9: Compliance Demonstration
Effective between the dates of 12/11/2019 and 12/10/2029

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

Item 9.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 9.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:

Owners and/or operators of commercial, industrial, or residential emission sources that fire number two heating oil on or after July 1, 2012 are limited to the purchase of number two heating oil with 0.0015 percent sulfur by weight or less. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: NUMBER 2 HEATING OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY

Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 10: Compliance Demonstration
Effective between the dates of 12/11/2019 and 12/10/2029

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

Item 10.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 10.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:

Owners and/or operators of a stationary combustion installation that fires distillate oil other than number two heating oil are limited to the purchase of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2014. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 11: Compliance Demonstration
Effective between the dates of 12/11/2019 and 12/10/2029

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

Item 11.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 11.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS
Monitoring Description:
Owners and/or operators of a stationary combustion installations that fire distillate oil are limited to the firing of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DISTILLATES - NUMBER 1 AND NUMBER 2 OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: PER DELIVERY
Averaging Method: MAXIMUM - NOT TO BE EXCEEDED AT ANY TIME (INSTANTANEOUS/DISCRETE OR GRAB)
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 12: Compliance Demonstration
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:6 NYCRR 225-1.6 (f)

Item 12.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 12.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Facility owners subject to this Subpart must submit a written report of the fuel sulfur content exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable sulfur-in-fuel limitation, measured emissions exceeding the applicable equivalent emission rate, and the nature and cause of such exceedances if known, for each calendar quarter, within 30 days after the end of any quarterly period in which an

exceedances takes place.

Data collected pursuant to this Subpart must be tabulated and summarized in a form acceptable to the Department, and must be retained for at least five years. The owner of a Title V facility must furnish to the Department such records and summaries, on a semiannual calendar basis, within 30 days after the end of the semiannual period. All other facility owners or distributors must submit these records and summaries upon request of the Department.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 13: Applicability
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:40CFR 60, NSPS Subpart IIII

Item 13.1:
Facilities that have stationary compression ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart IIII.

Condition 14: Applicability
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:40CFR 63, Subpart JJJJJJ

Item 14.1:
Facilities that are area sources of HAP with industrial, commercial, or institutional boilers must comply with applicable portions of 40 CFR 63 JJJJJJ.

Condition 15: Engines at Area sources of HAP
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 15.1:
Internal combustion engines, constructed or re-constructed on or after June 12, 2006, that meet the requirements of 40 CFR 60 Subpart IIII or Subpart JJJ meet the requirements of 40 CFR 63 Subpart ZZZZ.

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

Condition 16: Compliance Demonstration
Effective between the dates of 12/11/2019 and 12/10/2029

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

Item 16.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-COMBU

Item 16.2:
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: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

STATE ONLY ENFORCEABLE CONDITIONS
****** Facility Level ******

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
This section contains terms and conditions which are not federally enforceable. Permittees may also have other obligations under regulations of general applicability

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined by subpart 201-2, constitutes an affirmative defense to penalties sought in an enforcement action brought by the Department for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

(a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

(1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
(2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;
(3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
(4) The facility owner or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

(b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement.

Item B: **Public Access to Recordkeeping for Facilities With State Facility Permits - 6 NYCRR 201-1.10 (a)**
Where facility owners and/or operators keep records pursuant to compliance with the requirements of 6 NYCRR Subpart 201-5.4, and/or the emission capping requirements of 6 NYCRR Subpart 201-7, the Department will make such records available to the public upon request in accordance with 6 NYCRR Part 616 - Public Access to Records.

Facility owners and/or operators must submit the records required to comply with the request within sixty working days of written notification by the Department.

Item C: **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 only enforceable.

Condition 17: Contaminant List
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable State Requirement:ECL 19-0301

Item 17.1:
Emissions of the following contaminants are subject to contaminant specific requirements in this permit(emission limits, control requirements or compliance monitoring conditions).

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

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

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

Condition 18: Malfunctions and start-up/shutdown activities

Effective between the dates of 12/11/2019 and 12/10/2029

Applicable State Requirement:6 NYCRR 201-1.4

Item 18.1:
(a) The facility owner or operator shall take all necessary and appropriate actions to prevent the emission of air pollutants that result in contravention of any applicable emission standard during periods of start-up, shutdown, or malfunction.

(b) The facility owner or operator shall compile and maintain records of all equipment malfunctions, maintenance, or start-up/shutdown activities when they can be expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when requested to do so, or when so required by a condition of a permit issued for the corresponding air contamination source. Such reports shall state whether any violations occurred and, if so, whether they were unavoidable, include the time, frequency and duration of the maintenance and/or start-up/shutdown activities, and an estimate of the emission rates of any air contaminants released. Such records shall be maintained for a period of at least five years and made available for review to department representatives upon request. Facility owners or operators subject to continuous stack monitoring and quarterly reporting requirements need not submit additional reports for equipment maintenance or start-up/shutdown activities for the facility to the department.

(c) In the event that emissions of air contaminants in excess of any emission standard in this Subchapter occur due to a malfunction, the facility owner or operator shall compile and maintain records of the malfunction and notify the department as soon as possible during normal working hours, but not later than two working days after becoming aware that the malfunction occurred. When requested by the department, the facility owner or operator shall submit a written report to the department describing the malfunction, the corrective action taken, identification of air contaminants, and an estimate of the emission rates.

(d) The department may also require the owner or operator to include, in reports described under Subdivisions (b) and (c) of this Section, an estimate of the maximum ground level concentration of each air contaminant emitted and the effect of such emissions.

(e) A violation of any applicable emission standard resulting from start-up, shutdown, or malfunction conditions at a permitted or registered facility may not be subject to an enforcement action by the department and/or penalty if the department determines, in its sole discretion, that such a violation was unavoidable. The actions and recordkeeping and reporting requirements listed above must be adhered to in such circumstances.

Condition 19: Emission Unit Definition
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 19.1:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 1-COMBU
Emission Unit Description:
This emission unit consists of the WWTP's combustion

equipment sources. There are two boilers at Wards Island WWTP that are fueled by no. 2 fuel oil. The two boilers have a maximum capacity of 16.7 mmBtu/hr each and are manufactured by Cleaver Brooks. The two boilers are hot water boilers used to heat the WWTP's dewatering facility. Only one of these boilers operates at a time and the other is a dedicated standby unit.
There are four emergency turbine generators located adjacent to the Pump and Blower Building utilizing no. 2 diesel fuel. All four generators were manufactured by European Gas Turbines and have a maximum capacity of 3,500 KW. The main purpose of the turbine generators is to supply power to the WWTP in the event of a power failure.

There is one waste gas burner with a maximum design capacity of 567 scfm that is used to flare the excess sludge digester gas. The burner is a candlestick-type and is manufactured by John Zink.

There is one 1,400 cfm John Zink Model STF U-U12 waste sludge digester gas burner to flare excessive sludge digester gas.

The WWTP will install a new permanent independent centralized low pressure steam system consisting of five boilers: three (3) boilers at 800-HP (emission sources NBLR1 , NBLR2, and NBLR3) and two (2) boilers at 400-HP (emission sources NBLR4, and NBLR5) in the Boiler Building. Emission sources NBLR1 and NBLR2 will exhaust through emission point NBLRA, NBLR3 will exhaust through NBLRC, and NBLR4 and NBLR5 will exhaust through NBLRB. The boilers will utilize digester gas as the primary fuel and will have the capability of combusting natural gas as secondary fuel. The maximum peak operating capacity at any time would be 2,400-HP with associated stand-by units required for redundancy.

The new boiler system will replace the existing three (3) 800-HP temporary mobile trailer mounted boilers (emission sources IBLR1, IBLR2, and IBLR3 exhausting through emission points IBLRA, IBLRB, and IBLRC, respectively). The existing one (1) 400-HP trailer mounted hot water boiler (emission source SVBLR exhausting through SVBLS) will also be removed. The three temporary boilers will continue to operate until the new boiler system is fully operational.

Building(s): BOILER
OUTDOOR
PBBLDG
TRAILER

Item 19.2:
The facility is authorized to perform regulated processes under this permit for:
Emission Unit: 2-WWTRE
Emission Unit Description:
This emission unit consists of the plant's non-combustion operational processes. These processes include the plant's wastewater treatment processes, sludge handling processes, residuals handling processes, and miscellaneous sources. The plant's wastewater treatment processes include the primary settling, aeration, final settling and chlorine contact disinfection tanks. The associated processes to handle sludge produced by the wastewater treatment processes include gravity thickening, sludge digesters, sludge storage, a dewatering facility and its auxiliary sludge cake storage building (not in operation). Wet scrubbers and/or activated carbon adsorption systems are installed at the sludge dewatering facility and activated carbon adsorption systems are installed at the interim residual handling facility for H2S odor control purposes.
Biological nitrogen removal (BNR) is an effective way to reduce the total nitrogen load from wastewater facilities. It involves a series of biochemical reactions that transform nitrogen from one form to another. At the Wards Island WPCP, the existing aeration tanks will be modified from the conventional step-feed treatment to step-feed BNR treatment. In the step feed BNR process to be employed at Wards Island WPCP, the aeration tanks are operated in a four pass mode, with return activated sludge (RAS) introduced at the front end of the aeration tank (AT) in Pass A and primary effluent introduced to the tank at 3 feed points (Passes B, C, and D). The AT consists of three zones; anoxic, oxic and pre-anoxic. The oxic zones are aerated and provide nitrification (conversion of ammonia to nitrite to nitrate). The anoxic zones are mixed with mechanical mixers but are not aerated, allowing denitrification to occur (conversion of nitrate produced from the nitrification process to nitrogen gas).
Pre-anoxic zones are included at the end of the oxic zone in Passes A, B, and C to prevent transfer of oxygen to the anoxic zone following it, optimizing its performance.

Building(s): CAKESTORAG
DEWATERING
MAIN
OUTDOOR
RESID
SGGHF
SLUDGE

Condition 20: Renewal deadlines for state facility permits

Effective between the dates of 12/11/2019 and 12/10/2029

Applicable State Requirement:6 NYCRR 201-5.2 (c)

Item 20.1:
The owner or operator of a facility having an issued state facility 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.

Condition 21: Compliance Demonstration
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable State Requirement:6 NYCRR 201-5.3 (c)

Item 21.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 21.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Any reports or submissions required by this permit shall be submitted to the Regional Air Pollution Control Engineer (RAPCE) at the following address:

Division of Air Resources
NYS Dept. of Environmental Conservation
Region 2
47-40 21st St.
Long Island City, NY 11101

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 22: Air pollution prohibited
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable State Requirement:6 NYCRR 211.1

Item 22.1:
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.

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

Condition 23: Emission Point Definition By Emission Unit
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 23.1:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 1-COMBU

Emission Point: BLRDW
Height (ft.): 80 Diameter (in.): 32
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: DEWATERING

Emission Point: EMGG1
Height (ft.): 45 Diameter (in.): 50
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: PBBLDG

Emission Point: EMGG2
Height (ft.): 45 Diameter (in.): 50
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: PBBLDG

Emission Point: EMGG3
Height (ft.): 45 Diameter (in.): 50
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: PBBLDG

Emission Point: EMGG4
Height (ft.): 45 Diameter (in.): 50
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: PBBLDG

Emission Point: FLARE
Height (ft.): 30 Diameter (in.): 15
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: OUTDOOR

Emission Point: IBLRA Removal Date: 01/01/2019
Height (ft.): 48 Diameter (in.): 24
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: TRAILER

Emission Point: IBLRB Removal Date: 01/01/2019
Height (ft.): 48 Diameter (in.): 24
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: TRAILER

Emission Point: IBLRC Removal Date: 01/01/2019
Height (ft.): 48 Diameter (in.): 24
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: TRAILER

Emission Point: NBLRA
Height (ft.): 60 Diameter (in.): 60
NYTMN (km.): 4515.9 NYTME (km.): 590.7 Building: BOILER

Emission Point: NBLRB
Height (ft.): 60 Diameter (in.): 54
NYTMN (km.): 4515.9 NYTME (km.): 590.7 Building: BOILER

Emission Point: NBLRC
Height (ft.): 60 Diameter (in.): 36
NYTMN (km.): 4515.9 NYTME (km.): 590.7 Building: BOILER

Emission Point: NFLAR
Height (ft.): 30 Diameter (in.): 18
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: OUTDOOR

Emission Point: SVBLS
Height (ft.): 117 Diameter (in.): 30
NYTMN (km.): 4516. NYTME (km.): 590.1 Building: DOCK

Item 23.2:
The following emission points are included in this permit for the cited Emission Unit:

Emission Unit: 2-WWTRE

Emission Point: CSBC1
Height (ft.): 103 Diameter (in.): 60
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: CSBC2
Height (ft.): 103 Diameter (in.): 60
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: CSBS1
Height (ft.): 10 Diameter (in.): 18
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: CSBS2
Height (ft.): 10 Diameter (in.): 18
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: CSBS3
Height (ft.): 10 Diameter (in.): 18
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: CSBS4

Height (ft.): 10 Diameter (in.): 18
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: CSBS5
Height (ft.): 10 Diameter (in.): 18
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: CSBS6
Height (ft.): 10 Diameter (in.): 18
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: CSBS7
Height (ft.): 10 Diameter (in.): 18
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: CSBS8
Height (ft.): 10 Diameter (in.): 18
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: CAKESTORAG

Emission Point: DEWB1
Height (ft.): 70 Diameter (in.): 44
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: DEWATERING

Emission Point: DEWB2
Height (ft.): 70 Diameter (in.): 44
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: DEWATERING

Emission Point: DEWB3
Height (ft.): 70 Diameter (in.): 44
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: DEWATERING

Emission Point: DEWB4
Height (ft.): 70 Diameter (in.): 44
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: DEWATERING

Emission Point: DEWC1
Height (ft.): 54 Diameter (in.): 11
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building: DEWATERING

Emission Point: DEWC2
Height (ft.): 54 Diameter (in.): 11
NYTMN (km.): 4515.7 NYTME (km.): 590.9 Building:

DEWATERING

Emission Point: DEWM1
Height (ft.): 57 Diameter (in.): 12
NYTMN (km.): 4515.6 NYTME (km.): 590.9 Building: DEWATERING

Emission Point: DEWM2
Height (ft.): 57 Diameter (in.): 12
NYTMN (km.): 4515.6 NYTME (km.): 590.9 Building: DEWATERING

Emission Point: DEWM3
Height (ft.): 30 Diameter (in.): 6
NYTMN (km.): 4515.6 NYTME (km.): 590.9 Building: DEWATERING

Emission Point: OPIT1
Height (ft.): 68 Diameter (in.): 60
NYTMN (km.): 4515.7 NYTME (km.): 590.9

Condition 24: Process Definition By Emission Unit
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 24.1:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-COMBU
Process: BDF Source Classification Code: 1-03-005-01
Process Description:
Firing #2 fuel oil in the boilers: three (3) existing temporary, trailer mounted boilers (being removed), two (2) existing dewatering building boilers, and one (1) trailer mounted hot water boiler (being removed).

Emission Source/Control: 0BDW1 - Combustion
Design Capacity: 16.7 million Btu per hour

Emission Source/Control: 0BDW2 - Combustion
Design Capacity: 16.7 million Btu per hour

Item 24.2:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-COMBU
Process: BDG Source Classification Code: 1-03-007-01
Process Description:
This process is for five (5) new permanent boilers and three (3) existing temporary, trailer mounted boilers (being removed) to fire digester gas.

Emission Source/Control: NBLR1 - Combustion
Design Capacity: 33.375 million Btu per hour

Emission Source/Control: NBLR2 - Combustion
Design Capacity: 33.375 million Btu per hour

Emission Source/Control: NBLR3 - Combustion
Design Capacity: 33.375 million Btu per hour

Emission Source/Control: NBLR4 - Combustion
Design Capacity: 16.867 million Btu per hour

Emission Source/Control: NBLR5 - Combustion
Design Capacity: 16.867 million Btu per hour

Item 24.3:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-COMBU
Process: BNG Source Classification Code: 1-03-006-02
Process Description:
This process is for five (5) new permanent boilers to fire natural gas as back up fuel when digester gas is not available.

Emission Source/Control: NBLR1 - Combustion
Design Capacity: 33.375 million Btu per hour

Emission Source/Control: NBLR2 - Combustion
Design Capacity: 33.375 million Btu per hour

Emission Source/Control: NBLR3 - Combustion
Design Capacity: 33.375 million Btu per hour

Emission Source/Control: NBLR4 - Combustion
Design Capacity: 16.867 million Btu per hour

Emission Source/Control: NBLR5 - Combustion
Design Capacity: 16.867 million Btu per hour

Item 24.4:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-COMBU
Process: EMG Source Classification Code: 2-02-001-01
Process Description:
Firing diesel fuel in four emergency power generators. These sources will be used for routine testing and emergency electrical power. Emergency generators EGTG1, EGTG2, EGTG3 and EGTG4 exhaust thru EMGG1, EMGG2, EMGG3 and EMGG4, respectively.

Emission Source/Control: EGTG1 - Combustion
Design Capacity: 3,500 kilowatt hours

Emission Source/Control: EGTG2 - Combustion
Design Capacity: 3,500 kilowatt hours

Emission Source/Control: EGTG3 - Combustion
Design Capacity: 3,500 kilowatt hours

Emission Source/Control: EGTG4 - Combustion
Design Capacity: 3,500 kilowatt hours

Item 24.5:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 1-COMBU
Process: FLR Source Classification Code: 5-01-007-89
Process Description:
This process includes one waste gas burner that is used to flare the excess sludge digester gas. The burner is a candlestick-type and is made by John Zink. It has a maximum capacity of 567 scfm.

The Plant's non-working old waste digester gas burner was scheduled to be replaced. However, the replacement of this waste digester gas burner has been delayed because of the overall delay in the plant's interim upgrading project.

The plant will install and operate a 1,400 cfm John Zink Model STF U-U12 waste sludge digester gas burner to flare excessive sludge digester gas.

Emission Source/Control: 0WDGB - Combustion
Design Capacity: 567 cubic feet per minute (standard conditions)

Emission Source/Control: NWDGB - Combustion
Design Capacity: 1,400 cubic feet per minute (standard conditions)

Item 24.6:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: 0AS Source Classification Code: 5-01-007-31
Process Description:
THIS PROCESS IS THE PLANT'S WASTEWATER ACTIVATED SLUDGE (AS) SECONDARY TREATMENT PROCESS. THIS PROCESS INCLUDES THIRTEEN (13) ACTIVATED SLUDGE DIFFUSED AERATION TANKS - TWELVE ORIGINAL AND ONE INSTALLED RECENTLY UNDER THE INTERIM UPGRADING. THE

TOTAL THRUPUT IS BASED ON DRY WEATHER FLOW.

Emission Source/Control: 000AT - Process
Design Capacity: 250,000,000 gallons per day

Item 24.7:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: 0CC Source Classification Code: 5-01-007-60
Process Description:
THIS IS THE PLANT'S CHLORINE CONTACT (CC) DISINFECTION PROCESS. THIS PROCESS INCLUDES FOUR (4) CHLORINE CONTACT TANKS. THE TOTAL THRUPUT IS BASED ON DRY WEATHER FLOW.

Emission Source/Control: 00CCT - Process
Design Capacity: 250,000,000 gallons per day

Item 24.8:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: 0FS Source Classification Code: 5-01-007-40
Process Description:
THIS IS THE PLANT'S WASTEWATER FINAL SETTLING (FS) PROCESS. THIS PROCESS INCLUDES THIRTY-NINE (39) FINAL SETTLING TANKS - THIRTY-SIX ORIGINAL AND THREE INSTALLED RECENTLY UNDER THE INTERIM UPGRADING. THE TOTAL THRUPUT IS BASED ON DRY WEATHER FLOW.

Emission Source/Control: 00FST - Process
Design Capacity: 250,000,000 gallons per day

Item 24.9:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: 0PS Source Classification Code: 5-01-007-20
Process Description:
THIS PROCESS IS THE PLANT'S WASTEWATER PRIMARY SETTLING (PS) PROCESS. THIS PROCESS INCLUDES TEN (10) PRIMARY SETTLING TANKS AND ONE (1) PRIMARY SETTLING TANK INFLUENT CHANNEL. THE TOTAL THRUPUT IS BASED ON DRY WEATHER FLOW.

Emission Source/Control: 00PST - Process

Design Capacity: 250,000,000 gallons per day

Emission Source/Control: PSTIC - Process
Design Capacity: 275,000,000 gallons per day

Item 24.10:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: ART Source Classification Code: 5-01-007-31
Process Description:
THIS PROCESS IS THE PLANT'S WASTEWATER ACTIVATED SLUDGE (ART) SECONDARY TREATMENT PROCESS. THIS PROCESS INCLUDES THIRTEEN (13) ACTIVATED SLUDGE DIFFUSED AERATION TANKS (AERTK). THE TOTAL THROUGHPUT IS BASED ON DRY WEATHER FLOW AFTER THE PLANT UPGRADE. THE EXISTING AERATION TANKS WILL BE MODIFIED FROM THE CONVENTIONAL STEP-FEED TREATMENT TO STEP-FEED BNR TREATMENT. IN THE STEP FEED BNR, THE AERATION TANKS ARE OPERATED IN A FOUR PASS MODE, WITH RETURN ACTIVATED SLUDGE (RAS) INTRODUCED AT THE FRONT END OF THE AERATION TANK IN PASS A AND PRIMARY EFFLUENT INTRODUCED TO THE TANK AT 3 FEED POINTS (PASSES B,C, AND D). THE AT CONSISTS OF THREE ZONES; ANOXIC, OXIC AND PRE-ANOXIC. THE OXIC ZONES ARE AERATED AND PROVIDE NITRIFICATION (CONVERSION OF AMMONIA TO NITRITE TO NITRATE). THE ANOXIC ZONES ARE MIXED WITH MECHANICAL MIXERS BUT ARE NOT AERATED, ALLOWING DENITRIFICATION TO OCCUR (CONVERSION OF NITRATE PRODUCED FROM THE NITRIFICATION PROCESS TO NITROGEN GAS). PRE-ANOXIC ZONES ARE INTRODUCED AT THE END OF THE OXIC ZONE IN PASSES A,B, AND C TO PREVENT TRANSFER OF OXYGEN TO THE ANOXIC ZONE FOLLOWING IT, OPTIMIZING ITS PERFORMANCE.

The upgrading construction to implement the Biological Nutrient Removal (nitrogen reduction) treatment is scheduled to begin in 2006 and is expected to be completed in December 2009.

Emission Source/Control: AERTK - Process
Design Capacity: 275,000,000 gallons per day

Item 24.11:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: CCT Source Classification Code: 5-01-007-60
Process Description:
THIS IS THE PLANT'S CHLORINE CONTACT (CCT) DISINFECTION PROCESS. THIS PROCESS CONSISTS OF FOUR (4) CHLORINE CONTACT TANKS (CHLTK) FOR REQUIRED DISINFECTION OF THE PLANT EFFLUENT. THE WASTEWATER FROM THE FINAL SETTLING TANKS FLOWS TO THE CHLORINE CONTACT TANKS WHERE SODIUM HYPOCHLORITE IS ADDED INTO THE WASTEWATER TO DESTROY AND KILL THE HARMFUL DISEASE-CAUSING ORGANISMS AND THEREBY TO PROTECT THE RECEIVING WATER. THE TOTAL THROUGHPUT IS BASED ON DRY WEATHER FLOW AFTER THE PLANT UPGRADE.

Emission Source/Control: CHLTK - Process
Design Capacity: 275,000,000 gallons per day

Item 24.12:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: DEG Source Classification Code: 5-01-007-99
Process Description:
THIS PROCESS IS THE PLANT'S DEGRITTER PROCESS (DEG) CONSISTING OF FOUR (4) CYCLONE DEGRITTERS (DGRIT) TO REMOVE GRIT FROM WASTEWATER. THIS PROCESS IS IN THE NEW RESIDUALS HANDLING FACILITY. THE TOTAL THROUGHPUT IS ESTIMATED BASED ON OPERATIONAL DATA 7/2 002-6/2004.

Emission Source/Control: DGRIT - Process

Item 24.13:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: FST Source Classification Code: 5-01-007-40
Process Description:
THIS IS THE PLANT'S WASTEWATER FINAL SETTLING (FST) PROCESS. THIS PROCESS INCLUDES THIRTY-NINE (3() FINAL SETTLING TANKS (FINTK). 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 ACTIVATED SLUDGE FOR CONVEYANCE BACK TO THE AERATION TANKS. THE TOTAL THROUGHPUT IS BASED ON DRY WEATHER FLOW

AFTER THE PLANT UPGRADE.

Emission Source/Control: FINTK - Process
Design Capacity: 275,000,000 gallons per day

Item 24.14:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: PHW Source Classification Code: 5-01-007-07
Process Description:
THIS PROCESS IS THE PLANT'S HEADWORKS (PHW) INCLUDING THE PLANT'S HIGH AND LOW INFLUENT CHANNELS (HLINF) AND SIX (6) BAR SCREENS (SCREN) IN THE MAIN BUILDING (MAIN). THE BAR SCREENS CONSIST OF UPRIGHT BARS SPACED ONE TO THREE INCHES APART. THE PRIMARY P URPOSE 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 THROUGHPUT IS BASED ON THE DESIGN AVERAGE DRY WEATHER FLOW OF 275 MILLION GAL LONS PER DAY (MGD).

Emission Source/Control: HLINF - Process
Design Capacity: 275,000,000 gallons per day

Emission Source/Control: SCREN - Process
Design Capacity: 275,000,000 gallons per day

Item 24.15:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: PST Source Classification Code: 5-01-007-20
Process Description:
THIS PROCESS IS THE PLANT'S WASTEWATER PRIMARY SETTLING (PST) PROCESS. THIS PROCESS INCLUDES TEN (10) PRIMARY SETTLING TANKS (PRITK) AND ONE (1) PRIMARY SETTLING TANK INFLUENT CHANNEL (PSTIC). 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 DEGRITTERS. EACH PRIMARY SETTLING TANK IS EQUIPPED WITH

SLUDGE COLLECTORS, DIPPING WEIRS, SCUM REMOVAL EQUIPMENT, AND INLET SLUICE GATES OVERFLOW WEIRS. THE TOTAL THROUGHPUT IS BASED ON DRY WEATHER FLOW AFTER THE PLANT UPGRADE.

Emission Source/Control: PRITK - Process
Design Capacity: 275,000,000 gallons per day

Emission Source/Control: PSTIC - Process
Design Capacity: 275,000,000 gallons per day

Item 24.16:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: SAD Source Classification Code: 5-01-007-81
Process Description:
THIS PROCESS IS THE SLUDGE ANAEROBIC DIGESTION (SAD) PROCESS CONSISTING OF EIGHT DIGESTION TANKS (DIGTK). AFTER SLUDGE GRAVITY THICKENING, FOR MAKING IT SAFER FOR THE ENVIRONMENT, THE SLUDGE IS PLACED IN OXYGEN-FREE TANKS CALLED DIGESTERS. DIGESTERS ARE HEATED TO AT LEAST 95 DEGREE OF F 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 DIGESTED SLUDGE IS PUMPED FROM THESE DIGESTION TANKS TO THE DEWATERING BUILDING. THE TOTAL THROUGHPUT IS ESTIMATED BASED ON OPERATIONAL DATA 7/2002-6/2004.

Emission Source/Control: DIGTK - Process
Design Capacity: 2.024 million cubic feet

Item 24.17:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: SCS Source Classification Code: 5-01-007-99
Process Description:
THIS PROCESS IS THE PLANT'S SLUDGE CAKE STORAGE (SCS) PROCESS IN THE SLUDGE CAKE STORAGE BUILDING (SCAKE). IN CASES WHERE THE SLUDGE CAKES PRODUCED BY THE SLUDGE DEWATERING PROCESS CANNOT BE TRANSPORTED AWAY IMMEDIATELY, THE SLUDGE CAKES WILL BE STORED.

Emission Source/Control: CSBC1 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CSBC2 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CSBC3 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CSBC4 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CSBC5 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CSBC6 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CSBC7 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CSBC8 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: SCAKE - Process
Design Capacity: 43,174 tons per year

Emission Source/Control: SILO1 - Process

Emission Source/Control: SILO2 - Process

Emission Source/Control: SILO3 - Process

Emission Source/Control: SILO4 - Process

Emission Source/Control: SILO5 - Process

Emission Source/Control: SILO6 - Process

Emission Source/Control: SILO7 - Process

Emission Source/Control: SILO8 - Process

Item 24.18:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: SDW Source Classification Code: 5-01-007-92
Process Description:
THIS PROCESS IS THE SLUDGE DEWATERING (SDW) PROCESS AT THE SLUDGE DEWATERING FACILITY (DEWAT). FOUR WET SCRUBBERS ARE

INSTALLED AT THE FACILITY FOR BUILDING VENTILATION H2S ODOR CONTROL. THERE ARE FOUR (4) STACKS. TWO WET SCRUBBERS FOLLOWED BY ACTIVATED CARBON ADSORPTION SYSTEMS WERE INSTALLED AT THE FACILITY FOR CENTRATE PROCESS H2S ODOR CONTROL. THERE ARE TWO (2) STACKS. THIS PROCESS ALSO INCLUDES A METHANE ABATEMENT SYSTEM FOR THE SLUDGE DEWATERING FACILITY. THE METHANE ABATEMENT SYSTEM CONSTANTLY CIRCULATES AIR BELOW GRADE, ASSURING THAT ANY METHANE RISING FROM THE SITE IS REMOVED. THE DEWATERING BUILDING HAS THREE (3) VENTS THAT CONTROL METHANE. THE TOTAL THROUGHPUT IS ESTIMATED BASED ON OPERATIONAL DATA 7/2002-6-2004.

Emission Source/Control: DWBC1 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: DWBC2 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: DWBS1 - Control
Control Type: WET SCRUBBER

Emission Source/Control: DWBS2 - Control
Control Type: WET SCRUBBER

Emission Source/Control: DWBS3 - Control
Control Type: WET SCRUBBER

Emission Source/Control: DWBS4 - Control
Control Type: WET SCRUBBER

Emission Source/Control: METH1 - Control
Control Type: WET SCRUBBER

Emission Source/Control: METH2 - Control
Control Type: WET SCRUBBER

Emission Source/Control: METH3 - Control
Control Type: WET SCRUBBER

Emission Source/Control: DEWAT - Process
Design Capacity: 43,174 tons per year

Item 24.19:
This permit authorizes the following regulated processes for the cited Emission Unit:

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

Process Description:
THIS PROCESS IS THE PLANT'S CENTRAL SCREENING, GRIT AND GREASE HANDLING OPERATION (SGG) IN THE INTERIM RESIDUALS HANDLING FACILITY. THIS OPERATION CONSISTS OF RECEIVING, BLENDING, PLACING IN CONTAINERS AND HAULING AWAY THE PLANT'S RESIDUAL AS WELL AS MATERIAL COLLECTED FROM REMOTE MANHOLES AND STORMWATER CATCH BASINS. A FACILITY (PIT) TO ENCLOSE THIS OPERATION BEGAN CONSTRUCTION IN 11/1998 AND WAS IN OPERATION IN BY EARLY 2000. AN ODOR CONTROL SYSTEM CONSISTING OF FIVE (5) ACTIVATED CARBON ADSORPTION VESSELS WAS INSTALLED AT THE FACILITY FOR H2S ODOR CONTROL PURPOSE. DURING THIS OPERATION, AIR IS EVACUATED FROM THE FACILITY, PASSED THROUGH 5 CARBON ADSORBERS AND SUBSEQUENTLY THROUGH ONE (1) STACK.

Emission Source/Control: PITC1 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: PITC2 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: PITC3 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: PITC4 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: PITC5 - Control
Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: 00PIT - Process
Design Capacity: 109,500 cubic yards

Item 24.20:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: SGT Source Classification Code: 5-01-007-71
Process Description:
THIS PROCESS IS THE SLUDGE GRAVITY THICKENING (SGT) PROCESS CONSISTING OF TWELVE THICKENING TANKS (SGTTK). THE PRIMARY AND FINAL SETTLING TANKS' SLUDGE (APPROXIMATELY 99% WATER) IS CONCENTRATED IN THESE GRAVITY THICKENING TANKS. THE WATER IS SENT BACK TO THE HEAD OF THE PLANT OR AERATION TANKS FOR ADDITIONAL TREATMENT.

THE TOTAL THROUGHPUT IS ESTIMATED BASED ON OPERATIONAL DATA 7/2002-6/2004.

Emission Source/Control: SGTTK - Process
Design Capacity: 0.5676 million cubic feet

Item 24.21:
This permit authorizes the following regulated processes for the cited Emission Unit:

Emission Unit: 2-WWTRE
Process: SST Source Classification Code: 5-01-007-99
Process Description:
Sludge Storage Tanks (SST) process including two (2) sludge storage tanks (SSTK) at 261,000 cubic feet each. Excessive sludge will be stored in these storage tanks. The total throughput is estimated base on the operational data 7/2002 - 6/2004.

Emission Source/Control: 0SSTK - Process
Design Capacity: 522,000 cubic feet

Condition 25: Compliance Demonstration
Effective between the dates of 12/11/2019 and 12/10/2029

Applicable State Requirement:6 NYCRR 212-2.1 (a)

Item 25.1:
The Compliance Demonstration activity will be performed for:

Emission Unit: 2-WWTRE

Item 25.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
For an air contaminant listed in Section 212-2.2 Table 2 – High Toxicity Air Contaminant List, of this Part, the facility owner or operator shall demonstrate compliance with the air cleaning requirements for the HTAC as specified in Subdivision 212-2.3(b), Table 4 – Degree of Air Cleaning Required for Non-Criteria Air Contaminants.

For an HTAC assigned an Environmental Rating of A and has an Emission Rate Potential (ERP) of less than 0.1 pound per hour and annual mass emissions of a perisistant and bioaccumulative compound less than the PB Trigger, the owner or operator is requiried to meet the short term and annual guideline concentration at the fenceline of the facility.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Averaging Method: ANNUAL TOTAL
Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY