PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 2-6302-00012/00044
Effective Date: 12/12/2018 Expiration Date: 12/11/2028

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

Contact: DOUGLAS S GREELEY
NYC DEP BWT
96-05 HORACE HARDING EXPY FL 2
CORONA, NY 11368
(718) 595-5050

Facility: TALLMAN ISLAND WASTEWATER TREATMENT PLANT
127-01 POWELLS COVE BLVD
COLLEGE POINT, NY 11356

Contact: VINCENT SAPIENZA
NYCDEP / BWPC
96-05 HORACE HARDING EXPY FL 2
FLUSHING, NY 11368
(718) 595-4906

Description:

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

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

Authorized Signature: _____________________________ Date: ___ / ___ / _____
Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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

DEC GENERAL CONDITIONS

General Provisions
Facility Inspection by the Department
Relationship of this Permit to Other Department Orders and
D determinations
Applications for permit renewals, modifications and transfers
Permit modifications, suspensions or revocations by the Department

Facility Level
Submission of application for permit modification or
renewal-REGION 3 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, modifications and transfers
Applicable State Requirement: 6 NYCRR 621.11

Item 3.1:
The permittee must submit a separate written application to the Department for renewal,
modification or transfer of this permit. Such application must include any forms or
supplemental information the Department requires. Any renewal, modification or transfer
granted by the Department must be in writing.

Item 3.2:
The permittee must submit a renewal application at least 180 days before the expiration of
permits for Title V and State Facility Permits.

Item 3.3
Permits are transferrable with the approval of the department unless specifically prohibited by
the statute, regulation or another permit condition. Applications for permit transfer should be
submitted prior to actual transfer of ownership.
Facility DEC ID: 2630200012

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 3
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 3 Headquarters
Division of Environmental Permits
21 South Putt Corners Road
New Paltz, NY 12561-1696
(845) 256-3054
Permit Under the Environmental Conservation Law (ECL)

ARTICLE 19: AIR POLLUTION CONTROL - AIR STATE FACILITY

IDENTIFICATION INFORMATION

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

Facility: TALLMAN ISLAND WASTEWATER TREATMENT PLANT
127-01 POWELLS COVE BLVD
COLLEGE POINT, NY 11356

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

Permit Effective Date: 12/12/2018
Permit Expiration Date: 12/11/2028
LIST OF CONDITIONS

FEDERALLY ENFORCEABLE CONDITIONS

Facility Level
1 6 NYCRR Subpart 201-7: Facility Permissible Emissions
*2 6 NYCRR Subpart 201-7: Capping Monitoring Condition
3 6 NYCRR Subpart 202-1: Compliance Demonstration
4 6 NYCRR Subpart 202-1: Compliance Demonstration
22 6 NYCRR 211.2: Visible Emissions Limited
6 6 NYCRR Subpart 225-1: Compliance Demonstration
7 6 NYCRR 225-1.2 (f): Compliance Demonstration
8 6 NYCRR 227-2.4 (d): Compliance Demonstration
9 40CFR 60, NSPS Subpart III: Applicability
10 40CFR 60.4208, NSPS Subpart III: Stationary CI-IC Engines - Installation and importing deadlines for engines produced in the previous model year
11 40CFR 63, Subpart JJJJI: Applicability
12 40CFR 63, Subpart ZZZZ: Applicability

Emission Unit Level

EU=1-COMBU
16 6 NYCRR 227-1.3 (a): Compliance Demonstration
13 6 NYCRR 227.2 (b) (1): Compliance Demonstration
14 40CFR 60.4205(b), NSPS Subpart III: Compliance Demonstration

EU=1-COMBU,Proc=BLR
15 40CFR 60.48c(a), NSPS Subpart Dc: Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level
17 ECL 19-0301: Contaminant List
18 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
19 6 NYCRR Subpart 201-5: Emission Unit Definition
20 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
21 6 NYCRR 201-5.3 (c): Compliance Demonstration
5 6 NYCRR 211.1: Air pollution prohibited

Emission Unit Level
23 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit
24 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

EU=1-COMBU
25 6 NYCRR 201-5.1 (a): Compliance Demonstration

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 - 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:** Facility Permissible Emissions

**Effective between the dates of 12/12/2018 and 12/11/2028**

**Applicable Federal Requirement:** 6 NYCRR Subpart 201-7

**Item 1.1:**
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:** 0NY210-00-0
- **PTE:** 49,800 pounds per year
- **Name:** OXIDES OF NITROGEN

**Condition 2:** Capping Monitoring Condition

**Effective between the dates of 12/12/2018 and 12/11/2028**

**Applicable Federal Requirement:** 6 NYCRR Subpart 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:

- 6 NYCRR Subpart 201-6

**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.

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:
  - Plant-wide NOx emission is limited to below 24.9 tons per year.
  
  The owner or operator shall calculate NOx emission (based on the fuel usage) using the following formula:

\[
\text{MBLR}(0.035)+\text{EBLR}(0.095)+\text{SEGS}(4.314)+\text{ENGS}(1.476)+\text{FLAR}(0.067) < 49,800 \text{ lbs}
\]

Where:
- MBLR – Total main boilers (includes two 14.7 mmBtu/hr boiler in Pump & Blower building) gas fuel operation heat input, mmBtu/yr
  (Emission factor provided by manufacturer, Cleave-Brooks)
- EBLR – Total exempt boilers (includes two 5.23 mmBtu/hr boilers in the Storage Building, one 0.54 mmBtu/hr water heater in the Pump & Blower Building, one 1.5 mmBtu/hr boiler and one exempt 0.42 mmBtu/hr water heater in the adjacent DEP Collection Facility North) gas fuel operation heat input, mmBtu/yr
  (Emission factor from 3/16/2014 updated USEPA FIRE for 1-03-006-02 External Combustion Boiler Uncontrolled)
SEGS – Total stand-by engine generators (includes three portable engine generators) diesel heat input, mmBtu/yr

(Emission factor from USEPA FIRE 6.25 for 2-04-004-02 Internal Combustion Engine Testing)

ENGS – Total emergency engine generators diesel heat input, mmBtu/yr

(Emission factor based on Tier II engine NOx emission limit, 6.4 g/KW-hr)

FLAR – Total digester gas flare heat input, mmBtu/yr

(Emission factor from 3/16/2014 updated USEPA FIRE for 5-03-006-01 Solid Waste Disposal Waste Gas Flare Uncontrolled)

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: FUEL
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 45 days after the reporting period.
The initial report is due 11/14/2019.
Subsequent reports are due every 12 calendar month(s).

Condition 3: Compliance Demonstration
Effective between the dates of 12/12/2018 and 12/11/2028

Applicable Federal Requirement: 6 NYCRR Subpart 202-1

Item 3.1:
The Compliance Demonstration activity will be performed for the Facility.

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

Item 3.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Emissions from the wastewater treatment related processes vary based on the constituents of the WWTP influent, over which the WWTP has only limited control. The emissions are based on annual wastewater influent sampling results and computer modeling of the processes.

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

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 45 days after the reporting period.
The initial report is due 11/14/2019.
Subsequent reports are due every 12 calendar month(s).

Condition 4: Compliance Demonstration
Effective between the dates of 12/12/2018 and 12/11/2028

Applicable Federal Requirement: 6 NYCRR Subpart 202-1

Item 4.1:
The Compliance Demonstration activity will be performed for the Facility.

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

Item 4.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Emissions from the wastewater treatment related processes vary based on the constituents of the WWTP influent, over which the WWTP has limited control. The emissions are based on annual wastewater influent sampling results and computer modeling of the processes.

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

Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 45 days after the reporting period.
The initial report is due 11/14/2019.
Subsequent reports are due every 12 calendar month(s).

Condition 22: Visible Emissions Limited
Effective between the dates of 12/12/2018 and 12/11/2028

Applicable Federal Requirement: 6 NYCRR 211.2

Item 22.1:
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 6: Compliance Demonstration
Effective between the dates of 12/12/2018 and 12/11/2028

Applicable Federal Requirement: 6 NYCRR Subpart 225-1

Item 6.1:
The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):
CAS No: 007704-34-9 SULFUR

Item 6.2:
Compliance Demonstration shall include the following monitoring:

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

Monitoring Description:
NYC service contracts require suppliers to provide fuel oils that meet the ultra low sulfur content requirements of .0015% by weight for distillate fuel. NYCDCAS performs monitoring of the sulfur content in the fuel oil citywide on a random basis at fuel supply terminals instead of conducting monitoring at each batch delivery.

Work Practice Type: PARAMETER OF PROCESS MATERIAL
Process Material: DIESEL OIL
Parameter Monitored: SULFUR CONTENT
Upper Permit Limit: 0.0015 percent by weight
Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION
Averaging Method: MAXIMUM - NOT TO EXCEED STATED VALUE - SEE MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 45 days after the reporting period.
The initial report is due 11/14/2019.
Subsequent reports are due every 12 calendar month(s).

Condition 7: Compliance Demonstration
Effective between the dates of 12/12/2018 and 12/11/2028

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

Item 7.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 7.2:
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 8: Compliance Demonstration
Effective between the dates of 12/12/2018 and 12/11/2028

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

Item 8.1:
The Compliance Demonstration activity will be performed for the Facility.

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

Item 8.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
The owner or operator of a small boiler, small combustion turbine, or small internal combustion engine must perform an annual tune-up of their equipment. This tune-up should be performed in accordance with the requirements of the DAR-5 guidance document. Records of each tune-up must be kept on-site for a minimum of five years.
Monitoring Frequency: ANNUALLY
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 45 days after the reporting period.
The initial report is due 11/14/2019.
Subsequent reports are due every 12 calendar month(s).

**Condition 9: Applicability**
Effective between the dates of 12/12/2018 and 12/11/2028

Applicable Federal Requirement: 40 CFR 60, NSPS Subpart III

**Item 9.1:**
Facilities that have stationary compression ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart III.

**Condition 10: Stationary CI-IC Engines - Installation and importing deadlines for engines produced in the previous model year**
Effective between the dates of 12/12/2018 and 12/11/2028

Applicable Federal Requirement: 40 CFR 60.4208, NSPS Subpart III

**Item 10.1:**
Owners or operators are subject to the following deadlines for importing or installing stationary compression ignition internal combustion engines (CI-ICE) produced in the previous model year:

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

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

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

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

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

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

(g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.

(h) In addition to the requirements specified in 40 CFR 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import a stationary CI ICE with a displacement of less than 30 liters per cylinder that does not meet the applicable requirements specified in paragraphs (a) through (g) above after the dates specified in those paragraphs.

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

**Condition 11: Applicability**

Effective between the dates of 12/12/2018 and 12/11/2028

Applicable Federal Requirement: 40 CFR 63, Subpart JJJJJJ

**Item 11.1:**
Facilities that are area sources of HAP with industrial, commercial, or institutional boilers must comply with applicable portions of 40 CFR 63 JJJJJJ.

**Condition 12: Applicability**

Effective between the dates of 12/12/2018 and 12/11/2028

Applicable Federal Requirement: 40 CFR 63, Subpart ZZZZ

**Item 12.1:**
Facilities that have reciprocating internal combustion engines must comply with applicable portions of 40 CFR 63 subpart ZZZZ.

**** Emission Unit Level ****

**Condition 16: Compliance Demonstration**

Effective between the dates of 12/12/2018 and 12/11/2028

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 person shall operate a stationary combustion installation which exhibits greater than 20 percent opacity (six minute average), except for one-six-minute period per hour of not more than 27 percent opacity. In addition, the Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

The permittee will conduct observations of visible emissions from the emission unit, process, etc. to which this condition applies at the monitoring frequency stated below while the process is in operation. The permittee will investigate, in a timely manner, any instance where there is cause to believe that visible emissions have the potential to exceed the opacity standard.

The permittee shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continue, the permittee will conduct a Method 9 assessment within the next operating day of the sources associated with the potential noncompliance to determine the degree of opacity and will notify the NYSDEC if the method 9 test indicates that the opacity standard is not met.

Records of visible emissions observations (or any follow-up method 9 tests), investigations and corrective actions will be kept on-site. Should the Department determine that permittee's record keeping format is inadequate to demonstrate compliance with this condition, it shall provide written notice to the permittee stating the inadequacies, and permittee shall have 90 days to revise its prospective record keeping format in a manner acceptable to the Department.

Parameter Monitored: OPACITY
Upper Permit Limit: 20 percent
Reference Test Method: Method 9
Monitoring Frequency: DAILY
Averaging Method: 6-MINUTE AVERAGE (METHOD 9)
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 45 days after the reporting period.
The initial report is due 11/14/2019.
Subsequent reports are due every 12 calendar month(s).
Condition 13: Compliance Demonstration  
Effective between the dates of 12/12/2018 and 12/11/2028  

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

Item 13.1: 
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-COMBU

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

Item 13.2: 
Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING
Monitoring Description:
The two hour average emission of particulates from this stationary combustion installation shall not exceed 0.10 pounds per million Btu of heat input.

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

1) Submit to the Department an acceptable protocol for the testing of particulate emissions in a manner that will determine compliance with the limit cited in this condition.

2) Perform a stack test, based upon the approved test protocol, to determine compliance with the particulate emission limit cited in this condition.

3) Submit an acceptable stack test report that outlines the results obtained from the testing done to meet the requirement of #2 above.

4) Facility shall keep records of all testing done at this stationary combustion installation for a period of 5 years.

Parameter Monitored: PARTICULATES
Upper Permit Limit: 0.10 pounds per million Btus
Reference Test Method: EPA RM 5
Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 45 days after the reporting period.
The initial report is due 11/14/2019.
Subsequent reports are due every 12 calendar month(s).
Condition 14: Compliance Demonstration  
Effective between the dates of 12/12/2018 and 12/11/2028  

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

Item 14.1:  
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-COMBU

Item 14.2:  
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)  
Reports due 45 days after the reporting period.  
The initial report is due 11/14/2019.  
Subsequent reports are due every 12 calendar month(s).

Condition 15: Compliance Demonstration  
Effective between the dates of 12/12/2018 and 12/11/2028  

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

Item 15.1:  
The Compliance Demonstration activity will be performed for:

Emission Unit: 1-COMBU  
Process: BLR

Item 15.2:  
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
    The owner and operator of each affected facility shall submit notification of the date of construction or
    reconstruction, anticipated startup, and actual startup, as provided by 40 CFR 60.7 of this part. This
    notification shall include:

    (1) The design heat input capacity of the affected
    facility and identification of fuels to be combusted in
    the affected facility.

    (2) If applicable, a copy of any Federally enforceable
    requirement that limits the annual capacity factor for any
    fuel or mixture of fuels under 40 CFR 60.42c., or 40 CFR
    60.43c.

    (3) The annual capacity factor at which the owner or
    operator anticipates operating the affected facility based
    on all fuels fired and based on each individual fuel
    fired.

Monitoring Frequency: SINGLE OCCURRENCE
Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION
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 12/12/2018 and 12/11/2028

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: 007704-34-9
Name: SULFUR

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

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

CAS No: 0NY210-00-0

Air Pollution Control Permit Conditions
Page 19 FINAL
Name: OXIDES OF NITROGEN
CAS No: 0NY998-00-0
Name: VOC

Condition 18: Malfunctions and start-up/shutdown activities
Effective between the dates of 12/12/2018 and 12/11/2028

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 12/12/2018 and 12/11/2028

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 includes the following combustion sources and their associated equipment:
• two (2) new 350 Bhp (14.7 mmBtu/hr) boilers to be installed in the Pump & Blower Building. These boilers burn natural gas and digester gas.
• two (2) 5.23 mmBtu/hr boilers in the Storage Building. These boilers burn natural gas.
• one (1) exempt 0.54 mmBtu/hr water heater in the Pump & Blower Building. This water heater burns natural gas.
• one (1) exempt 1.5 mmBtu/hr boiler and one (1) exempt 0.42 mmBtu/hr water heater in the adjacent DEP Collection Facility North. The boiler and water heater burn natural gas.
• two (2) 2000KW emergency engine generators in new 27kv substation. These emergency engine generators are operated with ultra-low sulfur #2 fuel oil.
• one (1) newly installed waste gas burner to flare excessive sludge digester gas.

Building(s): MAIN
OUTDOOR

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 WWTP's wastewater treatment processes. These processes include the existing bar-screen headworks (HWK), primary settling process (PST), activated sludge aeration process (AER), final settling tanks process (FST), sludge anaerobic digestion (SAD) process, sludge degritting process (SDG), digester gas holding tank (DGH), and chlorine contact tanks process (CCP).
Under the WWTP’s ongoing upgrade construction, the WWTP’s former dewatering facility ceased operation in July 2009 and was converted to a storage building. The WWTP’s sludge is diverted to DEP’s other dewatering facilities for processing. Currently, DEP is in process of installing three 7,000 gallons glycerol storage tanks in the storage building for BNR process.

Building(s): AERATION
CHLORINE
FINAL
GHOLDING
Item 19.3:
The facility is authorized to perform regulated processes under this permit for:
   Emission Unit: 3-MISCE
   Emission Unit Description:
   This unit consists of two fuel dispensing units (1 gasoline and 1 diesel) at Collection Facility North, adjacent to the WWTP, and the WWTP's non exempt fuel storage tanks, 3x25000 gallon diesel tanks (DFS01, DFS02 and DFS03).
   Building(s): NCOLLECTIO
   OUTDOOR PRIMARY

Condition 20: Renewal deadlines for state facility permits
   Effective between the dates of 12/12/2018 and 12/11/2028
   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 12/12/2018 and 12/11/2028
   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
   Reporting Requirements: ANNUALLY (CALENDAR)
   Reports due 45 days after the reporting period.
The initial report is due 11/14/2019.
Subsequent reports are due every 12 calendar month(s).

**Condition 5:**  
Air pollution prohibited  
Effective between the dates of 12/12/2018 and 12/11/2028  

Applicable State Requirement: 6 NYCRR 211.1

**Item 5.1:**  
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 12/12/2018 and 12/11/2028  

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:

<table>
<thead>
<tr>
<th>Emission Unit:</th>
<th>1-COMBU</th>
</tr>
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<tbody>
<tr>
<td>Emission Point:</td>
<td>FLARA</td>
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<tr>
<td>Height (ft.):</td>
<td>30</td>
</tr>
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<td>Diameter (in.):</td>
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<tr>
<td>NYTMN (km):</td>
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<tr>
<td>NYTME (km):</td>
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<tr>
<td>Emission Point:</td>
<td>MBLRA</td>
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<td>Height (ft.):</td>
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<tr>
<td>Diameter (in.):</td>
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<tr>
<td>NYTMN (km):</td>
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<tr>
<td>NYTME (km):</td>
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<td>Emission Point:</td>
<td>NGENA</td>
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<tr>
<td>Height (ft.):</td>
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</tr>
<tr>
<td>Diameter (in.):</td>
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</tr>
<tr>
<td>NYTMN (km):</td>
<td>4516.71</td>
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<tr>
<td>NYTME (km):</td>
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<tr>
<td>Emission Point:</td>
<td>NGENB</td>
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<tr>
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<tr>
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<tr>
<td>NYTMN (km):</td>
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<tr>
<td>NYTME (km):</td>
<td>597.916</td>
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<tr>
<td>Emission Point:</td>
<td>SBLRA</td>
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<tr>
<td>Height (ft.):</td>
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<tr>
<td>NYTMN (km):</td>
<td>4516.71</td>
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<tr>
<td>NYTME (km):</td>
<td>597.916</td>
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</table>
Emission Point: SBLRB
Height (ft.): 120 Diameter (in.): 24
NYTMN (km.): 4516.71 NYTME (km.): 597.916

Condition 24: Process Definition By Emission Unit
Effective between the dates of 12/12/2018 and 12/11/2028

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: BLR Source Classification Code: 1-03-007-01

Process Description:
This process is for the following boilers and water heaters to meet the facility heat demand:
- two new 350 bhp (14.7 mmbtu/hr) boilers (MBLR1, MBLR2) exhausted thru stack MBLRA, to be installed in the Pump and Blower building. These boilers burn natural and digester gas.
- 2x5.23 mmbtu/hr boilers (SBL11, SBL22) exhausted thru stacks SBLRA and SBLRB, respectively in the storage building. These boilers burn natural gas.
- 1 exempt, 54 mmbtu/hr water heater MWHR1, burns natural gas.
- 1 exempt 1.5 mmBtu/hr boiler CFBR1 and exempt .42 mmBtu/hr water heater CFHR1, in the adjacent North collection building. Both burns natural gas.

Emission Source/Control: CFBR1 - Combustion
Design Capacity: 1.5 million Btu per hour

Emission Source/Control: CFHR1 - Combustion
Design Capacity: 1 million Btu per hour

Emission Source/Control: MBLR1 - Combustion
Design Capacity: 14.7 million Btu per hour

Emission Source/Control: MBLR2 - Combustion
Design Capacity: 14.7 million Btu per hour

Emission Source/Control: MWHR1 - Combustion
Design Capacity: 1 million Btu per hour

Emission Source/Control: SBL11 - Combustion
Design Capacity: 5.23 million Btu per hour

Emission Source/Control: SBL22 - Combustion
Design Capacity: 5.23 million Btu per hour

Item 24.2:
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 is for 1 enclosed waste gas burner FLA11, exhaust through stack FLAR1, to burn excessive sludge digestor gas produced at the WWTP.

**Emission Source/Control:** FLA11 - Combustion  
**Design Capacity:** 23,440 cubic feet per hour (standard conditions)

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

**Emission Unit:** 1-COMBU  
**Process:** GNR  
**Source Classification Code:** 1-03-007-01  
**Process Description:**  
This process includes 2 new cummins 2000 kw emergency engine generators NGEN1 and NGEN2 exhaust thru stacks NGENA and NGENB, to be used in event of power emergency such as utility power disruption or a black out, which may threaten public safety and health. These emergency engine generators would provide back up power to WWTP, will be operated less than 500 hrs per year. Also includes, if needed, the temporary installation of 3x500 kw portable engine generators PGENA, PGENB, PGENC, to exhaust through stacks, PGEN1, PGEN2, PGEN3, for direct or indirect WWTP operation. These is for construction period only, not a permanent installation. These will be removed, once construction is complete.

**Emission Source/Control:** NGEN1 - Combustion  
**Design Capacity:** 2,000 kilowatts

**Emission Source/Control:** NGEN2 - Combustion  
**Design Capacity:** 2,000 kilowatts

**Emission Source/Control:** PGENA - Combustion  
**Design Capacity:** 500 kilowatts

**Emission Source/Control:** PGENB - Combustion  
**Design Capacity:** 500 kilowatts

**Emission Source/Control:** PGENC - Combustion  
**Design Capacity:** 500 kilowatts

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

**Emission Unit:** 2-WWTRE  
**Process:** AER  
**Source Classification Code:** 5-01-007-99
Process Description:
This process is the WWTP’s wastewater secondary treatment activated sludge aeration process (AER). This process includes two (2) 373’ x 102’ x 15’ (east battery), and two (2) 373’ x 93’ x 15’ (west battery) activated diffused aeration tanks. During the WWTP’s upgrade construction, the aeration tanks were modified to introduce a step-fed Biological Nutrient Removal (BNR) treatment to this process.

In this process, the effluent from the primary treatment section containing mainly colloidal and dissolved solids (both inorganic and organic) are treated biologically by utilizing many different types of microorganisms in a controlled environment. These beneficial microorganisms consume most of the remaining organic pollutants producing heavier particles which settle out later in the final settling tanks. Large amounts of air are pumped into aeration tanks mixing the wastewater and sludge returned from the WWTP’s final settling tanks.

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

Emission Source/Control: AT000 - Process
Design Capacity: 80,000,000 gallons per day

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

Emission Unit: 2-WWTRE
Process: CCP Source Classification Code: 5-01-007-99
Process Description:
This process is the WWTP’s chlorine contact wastewater disinfection process (CCP) consisting of two chlorine contact tanks (CCT), one 143’ x 100’ - 10’ - 5” and one 130’ - 4” x 102’ - 4” x 10’ - 5”.

In this process, wastewater from the final settling tanks flows to the chlorine contact tanks where sodium hypochlorite is added into the wastewater to destroy and kill the harmful organisms to protect the receiving waters.

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

Emission Source/Control: CCT00 - Process
Design Capacity: 80,000,000 gallons per day

Item 24.6:
This permit authorizes the following regulated processes for the cited Emission Unit:
Emission Unit: 2-WWTRE
Process: DGH Source Classification Code: 5-01-007-99
Process Description:

The process consists of the WWTP’s sludge digester gas holding tank storage process (GHT). Digester gas produced in the digester tanks will be stored in one 100,000 CF digester gas holding tank (DGHTK) for later use at the combustion units.

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

Emission Source/Control: DGHT1 - Process
Design Capacity: 100,000 cubic feet

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

Emission Unit: 2-WWTRE
Process: FST Source Classification Code: 5-01-007-31
Process Description:

This is the WWTP's wastewater treatment final settling process (FST). This process includes two 189' x 74’ - 8” x 12' final settling tanks.

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

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

Emission Source/Control: FST00 - Process
Design Capacity: 80,000,000 gallons per day

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

Emission Unit: 2-WWTRE
Process: HWK Source Classification Code: 5-01-007-07
Process Description:

This process is the WWTP’s headworks (HWK) process prior to primary settling. This process includes the WWTP’s four (4) influent head work bar screens (HWS) in the WWTP’s Main Building (MAIN). The bar screens consist of upright bars spaced one to three inches apart. The primary purpose of the bar screens 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 80 MGD.

Emission Source/Control: HWS00 - Process
Design Capacity: 80,000,000 gallons per day

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

Emission Unit: 2-WWTRE
Process: PST          Source Classification Code: 5-01-007-31
Process Description:
This process is the WWTP’s primary settling (PST) process consisting of seven (7) primary settling tanks (PST). There are three (3) 124’ x 50’ x 12’ (east battery), two (2) 96’ x 50’ x 12’ (west battery), and two (2) 96’ x 54’ x 12’ (also west battery) primary settling tanks.

Primary settling is a process in which the solid particles carried in raw sewage are removed by gravity under quiescent conditions in the primary settling tanks. In addition, the primary settling tanks are used to separate and remove floating materials and scum. Solids and grit collected in the tanks are removed as a thin sludge by continuous pumping to cyclone degritting. Each primary settling tank is equipped with sludge collectors, dipping weirs, scum removal equipment, inlet sluice gate overflow weirs.

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

Emission Source/Control: PST00 - Process
Design Capacity: 80,000,000 gallons per day

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

Emission Unit: 2-WWTRE
Process: SDA          Source Classification Code: 5-01-007-99
Process Description:
This process is the WWTP’s Sludge Anaerobic Digestion (SAD) process including: eight (8) sludge gravity thickener tanks (SLTHK) (four tanks having 50’ diameter and 21,293 cubic feet (ft³), and four tanks having 60’ diameter and 32,228 ft³); three (3) sludge storage tanks (SSTK) (two sludge storage tanks have a diameter of 35’ and are 28,000 ft³ each and one sludge storage tank has a diameter of 75’ and is 115,000 ft³); and four (4) sludge
digestion tanks (DIGTK) each 194,900 ft³.

The primary and final settling tanks’ sludge (approximately 99% water) is concentrated in gravity thickening tanks. The water is sent back to the head of the WWTP or aeration tanks for additional treatment. After the sludge is gravity thickened, to make it safe for the environment, the sludge is placed in oxygen-free tanks called digesters. Excessive sludge is temporarily stored in storage tanks. Digesters are heated to at least 95°F for between 15 - 20 days stimulating the growth of anaerobic bacteria which consume organic material in the sludge. In the digesters, sludge is converted into water, carbon dioxide and methane gas. The methane gas is used as an energy source to operate boilers at the WWTP.

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

Emission Source/Control:   DIGT1 - Process
Design Capacity:  779,600   cubic feet

Emission Source/Control:   SLTH1 - Process
Design Capacity:  132,700   pounds per day

Emission Source/Control:   SSTK1 - Process
Design Capacity:  212,000   cubic feet

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

Emission Unit:   2-WWTRE
Process: SGD                     Source Classification Code: 5-01-007-31
Process Description:
This sludge degritting process includes four (4) sludge degritters (720 GPM), four grit classifiers (18’-4”x3’-0) and six (6) grit containers.

Emission Source/Control:   CYCD1 - Process
Design Capacity:  720   gallons per minute

Emission Source/Control:   GRCL1 - Process
Design Capacity:  1.5   horsepower (mechanical)

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

Emission Unit:   3-MISCE
Process: DPS                     Source Classification Code: 4-06-006-51
Process Description:
Operation of the diesel dispensing pump station located at Collection Facility North, adjacent to the WWTP. This
diesel dispensing station has a 550 gallon tank which provides diesel fuel to the WWTP and other DEP vehicles.

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

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

Emission Unit: 3-MISCE
Process: DST
Source Classification Code: 4-06-006-51
Process Description:
this process includes operation of the WWTP's non exempt fuel storage tanks, 3x25000 gallon diesel tanks (DFS01, DFS02 and DFS03)

Emission Source/Control: DFS03 - Combustion
Design Capacity: 25,000 gallons

Emission Source/Control: DFS01 - Process
Design Capacity: 25,000 gallons

Emission Source/Control: DFS02 - Process
Design Capacity: 25,000 gallons

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

Emission Unit: 3-MISCE
Process: GPS
Source Classification Code: 4-06-006-51
Process Description:
Operation of the gasoline dispensing pump station located at Collection Facility North, adjacent to the WWTP. This gasoline dispensing station has a 550 gallon tank which provides diesel fuel to the WWTP and other DEP vehicles.

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

**Condition 25:** Compliance Demonstration
Effective between the dates of 12/12/2018 and 12/11/2028

Applicable State Requirement: 6 NYCRR 201-5.1 (a)

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

Emission Unit: 1-COMBU

Regulated Contaminant(s):
CAS No: 0NY210-00-0 OXIDES OF NITROGEN
Item 25.2:
Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES
Monitoring Description:
Within 180 days of the permit issuance, the facility shall conduct the stack emission test for the combustion units (All Boilers, Generators and Flares, except non-significant source such as water heaters) mentioned in the 201-7 NOx capping condition, to verify the emission factor to determine compliance with the 201-7 capping condition.

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

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

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT
Reporting Requirements: ANNUALLY (CALENDAR)
Reports due 45 days after the reporting period.
The initial report is due 11/14/2019.
Subsequent reports are due every 12 calendar month(s).