



PERMIT
Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility
Permit ID: 2-6105-00009/02003
Effective Date: 05/02/2016 Expiration Date: 05/01/2026

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

Contact: JOHN G PETITO, JR
NYC DEP
96-05 HORACE HARDING EXPY FL 2
CORONA, NY 11368
(718) 595-5046

Facility: 26TH WARD WASTEWATER TREATMENT PLANT
122-68 FLATLANDS AVE
BROOKLYN, NY 12207

Contact: DIANE HAMMERMAN
NYC DEP BWT
96-05 HORACE HARDING EXPY FL 2
CORONA, NY 11368
(718) 595-4965

Description:
Modification/renewal of Air State Facility permit.

The 26th Ward WWTP is a municipal wastewater treatment plant (WWTP) capable of providing treatment for 85 million gallons per day of primarily residential wastewater. There is a sludge dewatering facility associated with the WWTP.

This permit modification application is submitted for the following changes to the 26th Ward WWTP's existing Air State Facility Permit Modification 1, effective 10/25/2011:

- (1) The current permit includes construction under Emission Unit 1-Combu for the installation of three 2500 KW medium speed diesel emergency generators and one 600 KW black start diesel generator to replace the two old emergency turbine generators and two old black start generators. During the construction period, six interim 1000 KW rental engine generators were installed to provide emergency power to the WWTP if there was an emergency power situation. Construction of the replacement emergency generators has been completed and the six interim units were removed from the WWTP. Therefore, the interim units should be removed from the permit.
- (2) The current permit also includes a pump around operation under Emission Unit 1-Combu to use exempt <200 HP diesel engines. However, the contractor has to change the size of the diesel pumps to accommodate a field situation. The pump around operation design now requires the

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provision of six (6) Godwin Model NC350/CD400M 302 HP Critically Silenced Diesel Pump-sets, three are driven by Caterpillar 2010 Model Year engines, two are driven by Caterpillar 2008 Model Year engines, and one is driven by John Deere 2011 Model Year engine. This pump around operation is anticipated to run for a combined total of 20 days.

After reviewing available emission specifications, the provisions 6NYC RR Part 201, and the facility's operating information, DEP has determined that these activities noted above will not affect the WWTP's qualification for a Part 201 Air State Facility Permit.

The facility's nitrogen oxides (NOx) emissions are limited to 24.9 tons per year.

Records demonstrating compliance with this cap 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.

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.



LIST OF CONDITIONS

DEC GENERAL CONDITIONS

General Provisions

- Facility Inspection by the Department
- Relationship of this Permit to Other Department Orders and Determinations
- Applications for permit renewals, modifications and transfers
- Permit modifications, suspensions or revocations by the Department

Facility Level

- Submission of application for permit modification or renewal -
REGION 2 HEADQUARTERS



DEC GENERAL CONDITIONS
****** General Provisions ******
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 renewal application at least 180 days before expiration of permits for both 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.

Condition 4: Permit modifications, suspensions or revocations by the Department

Applicable State Requirement: 6 NYCRR 621.13

Item 4.1:

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



suspension or revocation include:

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

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

Condition 5: Submission of application for permit modification or renewal - REGION 2 HEADQUARTERS

Applicable State Requirement: 6 NYCRR 621.6 (a)

Item 5.1:

Submission of applications for permit modification or renewal are to be submitted to:

NYSDEC Regional Permit Administrator
Region 2 Headquarters
Division of Environmental Permits
1 Hunters Point Plaza, 4740 21st Street
Long Island City, NY 11101-5407
(718) 482-4997

New York State Department of Environmental Conservation

Permit ID: 2-6105-00009/02003

Facility DEC ID: 2610500009



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: 26TH WARD WASTEWATER TREATMENT PLANT
122-68 FLATLANDS AVE
BROOKLYN, NY 12207

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

Permit Effective Date: 05/02/2016

Permit Expiration Date: 05/01/2026



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 201-7: Capping Monitoring Condition
- *4 6 NYCRR Subpart 201-7: Capping Monitoring Condition
- 5 6 NYCRR 211.1: Air pollution prohibited
- 6 6 NYCRR 225-1.2: Compliance Demonstration
- 7 6 NYCRR 225-1.2 (f): Compliance Demonstration
- 8 6 NYCRR 225-1.2 (g): Compliance Demonstration
- 9 6 NYCRR 225-1.2 (h): Compliance Demonstration
- 10 6 NYCRR 225-1.6 (f): Compliance Demonstration
- 11 6 NYCRR 227-1.3 (a): Compliance Demonstration
- 12 40CFR 60, NSPS Subpart IIII: Compliance and Enforcement
- 13 40CFR 63, Subpart JJJJJ: Compliance and Enforcement
- 14 40CFR 63, Subpart ZZZZ: Compliance and Enforcement

Emission Unit Level

EU=2-WWTRE

- 15 6 NYCRR 212-1.6 (a): Compliance Demonstration

STATE ONLY ENFORCEABLE CONDITIONS

Facility Level

- 16 ECL 19-0301: Contaminant List
- 17 6 NYCRR 201-1.4: Malfunctions and start-up/shutdown activities
- 18 6 NYCRR Subpart 201-5: Emission Unit Definition
- 19 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits
- 20 6 NYCRR 201-5.3 (c): Compliance Demonstration
- 21 6 NYCRR 211.2: Visible Emissions Limited

Emission Unit Level

- 22 6 NYCRR Subpart 201-5: Process Definition By Emission Unit

EU=2-WWTRE

- 23 6 NYCRR 212-2.1 (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: Emergency Defense - 6 NYCRR 201-1.5

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

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

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

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



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

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

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

FEDERAL APPLICABLE REQUIREMENTS
The following conditions are federally enforceable.

Condition 1: Facility Permissible Emissions



Effective between the dates of 05/02/2016 and 05/01/2026

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: 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 2: Capping Monitoring Condition

Effective between the dates of 05/02/2016 and 05/01/2026

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:

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

Item 2.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 TOTAL HAP

Item 2.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

THE HAP EMISSIONS ARE CAPPED AT 19800 LB PER YEAR FOR EACH INDIVIDUAL HAP OR 49800 LB PER YEAR FOR COMBINATION OF HAPs.

ANNUAL HAP EMISSIONS FROM WASTEWATER TREATMENT PROCESS WILL BE ESTIMATED USING THE TOXCHEM+MODEL. THE TARGET COMPOUND LIST OF HAP WILL BE SAMPLED AT THE INFLUENT AT A MINIMUM OF ONCE PER YEAR.

Work Practice Type: PARAMETER OF PROCESS MATERIAL

Process Material: WASTEWATER

Parameter Monitored: TOTAL HAP

Upper Permit Limit: 24.9 tons per year

Reference Test Method: USEPA 600 SERIES

Monitoring Frequency: MINIMUM - ONCE PER CALENDAR YEAR

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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

Condition 3: Capping Monitoring Condition

Effective between the dates of 05/02/2016 and 05/01/2026

Applicable Federal Requirement:6 NYCRR Subpart 201-7

Item 3.1:

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

New York State Department of Environmental Conservation

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Monitoring Frequency: MINIMUM - ONCE PER CALENDAR YEAR

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2017.

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

Condition 4: Capping Monitoring Condition
Effective between the dates of 05/02/2016 and 05/01/2026

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.

Regulated Contaminant(s):

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

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:

The NO_x (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:

$$R(0.075) + D(0.035) + G(100) + E(0.2) + E1(0.29) + P(0.132) + DG(100) + F(54.6) < 49,800 \text{ lbs/yr of Oxides of Nitrogen emissions.}$$

Where:

R = 12-month rolling total of residual oil (#4 or #6) fired (from boilers) in gals/yr

D = 12-month rolling total of distillate oil fired (from boilers) in gals/yr
0.035 lb/gal - emission factor for distillate oil fired from boilers proposed by the applicant (see letter dated Aug. 16, 2005)

G = 12-month rolling total of natural gas fired (from boilers) in MMSCF/yr

E = 12-month rolling total of diesel fuel fired (from Caterpillar 600 kW engine, 2009 Model Year, emission source BSTAT)in gals/yr
-emission factor 0.2 lb/gal for firing diesel fuel is based on the emission standard provided in 40CFR 89.112;

E1 = 12-month rolling total of diesel fuel fired (from three GE2500 engines, Model 2009, emission sources NENG1, NENG2, NENG3) in gals/yr
-emission factor 0.29 lb/gal for firing diesel fuel is based on the emission standard of 9.2 g/kW-hr or 6.9 g/hp-hr provided in 40CFR 60 Subpart III Table 1.

P = 12-month rolling total of diesel fuel fired (from Godwin Diesel Pumps) in gal/yr - emission factor 0.132 lb/gal of NO_x for firing diesel fuel is conservatively based on the worst emission specifications of 4.0 g/kW-hr NMHA+NO_x @ 15.1 g/hr for the Godwin Pumps driven by three 2010 Model Year Caterpillar Diesel Engines, two 2008 Model Year Caterpillar Diesel Engines, and one John Deer 2011 Model Year engine;



DG = 12-month rolling total of digester gas fired (from boilers) in MMSCF/yr

F = 12-month rolling total of digester gas fired (from flares) in MMSCF/yr

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 1/30/2017.
Subsequent reports are due every 12 calendar month(s).

Condition 5: Air pollution prohibited
Effective between the dates of 05/02/2016 and 05/01/2026

Applicable Federal 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.

Condition 6: Compliance Demonstration
Effective between the dates of 05/02/2016 and 05/01/2026

Applicable Federal Requirement:6 NYCRR 225-1.2

Item 6.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 6.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Purchase of fuel oil by all New York City agencies is managed by the New York City Department of Citywide Administrative Services ("DCAS"). All NYC service contracts require suppliers to provide ultralow sulfur fuel oils that meet the regulatory requirements of 0.0015 percent sulfur or less by weight. The DCAS performs monitoring of the sulfur content in the fuel oil on a



random basis at supply terminals instead of conducting monitoring at each batch delivery.

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

Condition 7: Compliance Demonstration
Effective between the dates of 05/02/2016 and 05/01/2026

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 05/02/2016 and 05/01/2026

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

Item 8.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 8.2:

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 9: Compliance Demonstration
Effective between the dates of 05/02/2016 and 05/01/2026

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

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 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 10: Compliance Demonstration
Effective between the dates of 05/02/2016 and 05/01/2026

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

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: 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 exceedance 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 11: Compliance Demonstration
Effective between the dates of 05/02/2016 and 05/01/2026

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

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: 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 6 minute period per hour of not more than 27 percent opacity. The Department reserves the right to perform or require the performance of a Method 9 opacity evaluation at any time during facility operation.

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

The permittee shall investigate the cause, make any necessary corrections, and verify that the excess visible emissions problem has been corrected. If visible emissions with the potential to exceed the standard continue, the permittee will conduct a Method 9 assessment within the next operating day of the sources associated with the potential noncompliance to determine the degree

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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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 12: Compliance and Enforcement
Effective between the dates of 05/02/2016 and 05/01/2026

Applicable Federal Requirement:40CFR 60, NSPS Subpart III

Item 12.1:

The Department has not accepted delegation of 40 CFR Part 60 Subpart III. Any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA Region 2, 290 Broadway, 21st Floor, New York, NY 10007-1866; (212) 637-4080. Should the Department decide to accept delegation of 40 CFR Part 60 Subpart III during the term of this permit, enforcement of this regulation will revert to the Department as of the effective date of delegation.

Condition 13: Compliance and Enforcement
Effective between the dates of 05/02/2016 and 05/01/2026

Applicable Federal Requirement:40CFR 63, Subpart JJJJJJ

Item 13.1:

The Department has not accepted delegation of 40 CFR Part 63 Subpart JJJJJJ. Any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA Region 2, 290 Broadway, 21st Floor, New York, NY 10007-1866; (212) 637-4080. Should the Department decide to accept delegation of 40 CFR Part 63 Subpart JJJJJJ during the term of this permit, enforcement of this regulation will revert to the Department as of the effective date of delegation.

Condition 14: Compliance and Enforcement



Effective between the dates of 05/02/2016 and 05/01/2026

Applicable Federal Requirement:40CFR 63, Subpart ZZZZ

Item 14.1:

The Department has not accepted delegation of 40 CFR Part 63 Subpart ZZZZ. Any questions concerning compliance and/or enforcement of this regulation should be referred to USEPA Region 2, 290 Broadway, 21st Floor, New York, NY 10007-1866; (212) 637-4080. Should the Department decide to accept delegation of 40 CFR Part 63 Subpart ZZZZ during the term of this permit, enforcement of this regulation will revert to the Department as of the effective date of delegation.

**** Emission Unit Level ****

Condition 15: Compliance Demonstration
Effective between the dates of 05/02/2016 and 05/01/2026

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

Item 15.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 2-WWTRE

Item 15.2:

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.

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

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

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

STATE ONLY APPLICABLE REQUIREMENTS

The following conditions are state only enforceable.

Condition 16: Contaminant List
Effective between the dates of 05/02/2016 and 05/01/2026



Applicable State Requirement:ECL 19-0301

Item 16.1:

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 17: Malfunctions and start-up/shutdown activities
Effective between the dates of 05/02/2016 and 05/01/2026**

Applicable State Requirement:6 NYCRR 201-1.4

Item 17.1:

(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 18: Emission Unit Definition
Effective between the dates of 05/02/2016 and 05/01/2026

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 18.1:

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

Emission Unit: 1-COMBU

Emission Unit Description:

The WWTP has three (3) Cleaver Brooks CB350HP package boilers each rated 14.7 mmBtu/hr to meet the WWTP's main building space heating and wastewater treatment's sludge heating demand. One of these three boilers is standby.

The primary fuel for these boilers is the plant's digester gas, with #4 diesel fuel oil as backup. Under the ongoing plant upgrade, these boilers will be modified to burn #2 diesel instead of #4 fuel oil.

The plant's sludge dewatering building has two (2) Cleaver Brooks CB200-400 package boilers each rated 16.7 mmBtu/hr to meet the dewatering building space heating demand. One of these two boilers is standby. The primary fuel for these two boilers is natural gas, with #2 diesel fuel oil as backup.

The WWTP has three 2500 kW medium speed diesel generators and one 600 kW blackstart diesel generator for utility power emergency purposes.

There are three 6" Varel waste gas burners which flare excessive sludge digester gas.

The plant will conduct pump around operations using six (6) Godwin Model NC350/CD400M 302 HP Critically Silenced Diesel Pump-sets, three are driven by Caterpillar 2010 Model Year engines, two are driven by Caterpillar 2008 Model Year engines, and one is driven by John Deere 2011 Model Year engine.

The WWTP has a 1.2 MGD (million gallon day) centrate processing facility with the 26th Ward WWTP cake storage building. The work under this contract for the pilot facility includes installation of two 12 million Btu/hr process boilers (one as standby) for a 1.2 MGD ammonia recovery process (ARP) at the WWTP.



Building(s): CAKESTORAG
DEWATERING
EMERGENCY
FLARE
MAIN
OUTDOOR

Item 18.2:

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

Emission Unit: 2-WWTRE

Emission Unit Description:

Emission unit includes the plant's non-combustion operational processes related to wastewater treatment operation. These processes include the typical wastewater treatment processes of headworks, primary settling tanks, activated sludge aeration tanks, final setting tanks, and chlorination disinfection tanks. Most of these processes are in tanks at plant's outdoor space.

These processes also include the associated processes to handle sludge produced by the wastewater treatment processes, including sludge thickeners, sludge digesters, sludge dewatering, sludge storage and sludge digester gas storage.

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

The existing four gravity thickeners will be reconstructed during the plant upgrade. The plant may install temporary gravity belt thickeners to handle the sludge flow for any existing units that needed to be taken out of service for construction (with no increase in capacity) in accordance with the provisions of 6NYCRR 201-5.4(b) "Operational Flexibility".

Building(s): CAKESTORAG
DEWATERING
MAIN
OUTDOOR

**Condition 19: Renewal deadlines for state facility permits
Effective between the dates of 05/02/2016 and 05/01/2026**

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

Item 19.1:

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 20: Compliance Demonstration
Effective between the dates of 05/02/2016 and 05/01/2026

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

Item 20.1:
The Compliance Demonstration activity will be performed for the Facility.

Item 20.2:
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 21: Visible Emissions Limited
Effective between the dates of 05/02/2016 and 05/01/2026

Applicable State Requirement:6 NYCRR 211.2

Item 21.1:
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.

**** Emission Unit Level ****

Condition 22: Process Definition By Emission Unit
Effective between the dates of 05/02/2016 and 05/01/2026

Applicable State Requirement:6 NYCRR Subpart 201-5

Item 22.1:
This permit authorizes the following regulated processes for the cited Emission Unit:



Emission Unit: 1-COMBU
Process: ARP Source Classification Code: 2-02-004-01

Process Description:
THE WWTP CURRENTLY HAS A BIOLOGICAL NUTRIENT REMOVAL AND AMMONIA STRIPPING PILOT STUDY IN PROGRESS, FOR RESEARCH AND DEVELOPMENT PURPOSES, WHICH IS CONSIDERED AN EXEMPT SOURCE.

DEP IS PROPOSING TO CONSTRUCT A 1.2 MGD (MILLION GALLON DAY) CENTRATE PROCESSING FACILITY WITHIN 26TH WARD WPCP'S CAKE STORAGE BUILDING. THE WORK UNDER THIS CONTRACT, FOR THE PILOT FACILITY, INCLUDES THE INSTALLATION OF A 1.2 MGD AMMONIA RECOVERY PROCESS (ARP) AT THE 26TH WARD WWTP. IMPLEMENTATION OF THE ARP SYSTEM WILL REQUIRE CONTINUOUS OPERATION OF ONE 12 MILLION BTU/HR PROCESS BOILER WITH A SECOND BOILER MAINTAINED AS A STANDBY.

Emission Source/Control: NBLR1 - Combustion
Design Capacity: 12 million BTUs per hour

Emission Source/Control: NBLR2 - Combustion
Design Capacity: 12 million Btu per hour

Item 22.2:

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

Emission Unit: 1-COMBU
Process: DBD Source Classification Code: 1-03-005-02
Process Description: Burning #2 diesel oil.

Emission Source/Control: DWBR1 - Combustion
Design Capacity: 16.7 million Btu per hour

Emission Source/Control: DWBR2 - Combustion
Design Capacity: 16.7 million Btu per hour

Item 22.3:

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

Emission Unit: 1-COMBU
Process: DBG Source Classification Code: 1-03-006-02
Process Description: Burning natural gas.

Emission Source/Control: DWBR1 - Combustion
Design Capacity: 16.7 million Btu per hour

Emission Source/Control: DWBR2 - Combustion



Design Capacity: 16.7 million Btu per hour

Item 22.4:

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

Emission Unit: 1-COMBU
Process: EMG Source Classification Code: 2-02-001-02
Process Description:
Firing diesel fuel in three 2500 kW diesel generators and
one 600 kW blackstart generator.

Emission Source/Control: BSTAT - Combustion
Design Capacity: 600 kilowatts

Emission Source/Control: NENG1 - Combustion
Design Capacity: 2,500 kilowatts

Emission Source/Control: NENG2 - Combustion
Design Capacity: 2,500 kilowatts

Emission Source/Control: NENG3 - Combustion
Design Capacity: 2,500 kilowatts

Item 22.5:

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

Emission Unit: 1-COMBU
Process: FLA Source Classification Code: 5-01-007-89
Process Description: Excess digester gas flared at waste gas burners.

Emission Source/Control: WGBR1 - Combustion
Design Capacity: 24,000 cubic feet per hour

Emission Source/Control: WGBR2 - Combustion
Design Capacity: 24,000 cubic feet per hour

Emission Source/Control: WGBR3 - Combustion
Design Capacity: 24,000 cubic feet per hour

Item 22.6:

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

Emission Unit: 1-COMBU
Process: MBE Source Classification Code: 1-03-005-02
Process Description:
Burning #2 fuel oil in three (3) main building boilers
and one (1) trailer-mounted 10.5 mmBtu/hr boiler.

Emission Source/Control: MBBR1 - Combustion
Design Capacity: 14.7 million Btu per hour

Emission Source/Control: MBBR2 - Combustion



Design Capacity: 14.7 million Btu per hour

Emission Source/Control: MBBR3 - Combustion
Design Capacity: 14.7 million Btu per hour

Item 22.7:

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

Emission Unit: 1-COMBU
Process: MBG Source Classification Code: 1-03-007-01
Process Description: Burning digester gas.

Emission Source/Control: MBBR1 - Combustion
Design Capacity: 14.7 million Btu per hour

Emission Source/Control: MBBR2 - Combustion
Design Capacity: 14.7 million Btu per hour

Emission Source/Control: MBBR3 - Combustion
Design Capacity: 14.7 million Btu per hour

Item 22.8:

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

Emission Unit: 1-COMBU
Process: PAO Source Classification Code: 2-02-001-02
Process Description:
Burning diesel fuel in pump around operation engines.

Emission Source/Control: G3501 - Combustion
Design Capacity: 300 horsepower (mechanical)

Emission Source/Control: G3502 - Combustion
Design Capacity: 300 horsepower (mechanical)

Emission Source/Control: G3503 - Combustion
Design Capacity: 300 horsepower (mechanical)

Emission Source/Control: G4001 - Combustion
Design Capacity: 300 horsepower (mechanical)

Emission Source/Control: G4002 - Combustion
Design Capacity: 302 horsepower (mechanical)

Emission Source/Control: G4003 - Combustion
Design Capacity: 300 horsepower (mechanical)

Item 22.9:

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

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



Process Description:

This process is the plant activated sludge aeration (ART) consisting of two (2) aeration tanks AERTK. In this process, the effluent from the primary settling treatment section is mixed with activated sludge solids and air. These aeration tanks provide the detention time required for the activated sludge to absorb the organic matters in the wastewater. Compressed air is discharged through the tanks to provide mixing and an aerobic environment. After a set mixing period, the mixture flows to the final settling tanks, where the solids are flocculated, settled and collected. Each of these aeration tanks has four "passes".

The total thruput is based on the design average dry weather flow of 85 MGD.

Emission Source/Control: AERTK - Process
Design Capacity: 85,000,000 gallons per day

Item 22.10:

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

Emission Unit: 2-WWTRE
Process: CCT Source Classification Code: 5-01-007-60
Process Description:

This process is the plant chlorine contact tanks (CCT) disinfection process consisting of two (2) chlorination tanks CHLTK and 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 thruput is based on the design average dry weather flow of 85 MGD.

Emission Source/Control: CHLTK - Process
Design Capacity: 85,000,000 gallons per day

Item 22.11:

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

Emission Unit: 2-WWTRE
Process: FST Source Classification Code: 5-01-007-40
Process Description:

This process is the plant final setting tanks (FST) consisting of seven (7) final setting 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 settled activated sludge for conveyance back to the aeration tanks.

The total thruput is based on the design average dry weather flow of 85 MGD.

Emission Source/Control: FINTK - Process
Design Capacity: 85,000,000 gallons per day

Item 22.12:

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 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 consists of upright bars spaced one to three inches apart. The primary purpose of the bar screening is to remove large pieces of trash (rags,sticks, newspapers, cans, etc.) for the protection of the main sewage pumps and other equipment.

The total thruput is based on the design average dry weather flow of 85 MGD.

Emission Source/Control: HLINF - Process
Design Capacity: 85,000,000 gallons per day

Emission Source/Control: SCREN - Process
Design Capacity: 85,000,000 gallons per day

Item 22.13:

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

Emission Unit: 2-WWTRE
Process: PST Source Classification Code: 5-01-007-20
Process Description:

This process is the plant primary settling tanks (PST) consisting of four (4) primary settling tanks PRITK. 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. Solid and grit collected in the tanks are removed as a thin sludge by continuous pumping to cyclone digritters. Each primary settling tank is equipped with sludge collectors, dipping weirs, scum removal equipment, inlet sluice gates overflow weirs.



The total thruput is based on the design average dry weather flow of 85 MGD.

Emission Source/Control: PRITK - Process
Design Capacity: 85,000,000 gallons per day

Item 22.14:

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 plant's Sludge Anaerobic Digester (SAD) process including four (4) sludge digestion tanks DIGTK. Two primary sludge digestion tanks are 191,500 cubic feet each and two (2) secondary digestion tanks are each 186,000 cubic feet each.

After sludge gravity thickening, for making it safe for the environment, the sludge is placed in oxygen-free tanks called digesters. Digesters are heated to at least 95 degrees of F for between 15-20 days stimulating the growth of anaerobic bacteria which consume organic material in the sludge. In the digesters, sludge is converted into water, carbon dioxide and methane gas. The methane gas is often used as an energy source to operate boilers. The digester sludge is pumped from these digestion tanks to the dewatering building.

The process thruput is an estimate based on the highest historical monthly thickened combined sludge 2000-2003.

Emission Source/Control: DIGTK - Process
Design Capacity: 755,000 cubic feet

Item 22.15:

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 CAKESTORAG. In case sludge cakes produced by the sludge dewatering process can not be transported away immediately, the sludge cakes will be stored in this cake storage building. This sludge cake storage building has eight (8) storage silos SILO1 through SILO8 each has its own ventilation stack. There are activated carbon absorption vessels CSBC1 through CSBC8 installed in the sludge cake storage building for odor control purpose and connected to two (2) common exhaust stacks.



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: 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 22.16:

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 plant's Sludge Dewatering (SDW) process for sludge dewatering DEWAT in the DEWATERING Building (DEWATERING). Under this process, sludge will be further concentrated by mechanical means, like centrifuges and presses, to remove water.



Wet scrubbers and activated carbon absorbers are installed for odor control purpose. Four (4) wet scrubber units DWBS1 through DWBS4 connected to stacks are installed for the building ventilation but only two to three of the four units are on-line at a time, one unit is backup. Two (2) double stages systems DWBC1 and DWBC2 comprised with wet scrubbers followed by activated carbon absorbers connected to stacks are installed for ventilation of the centrifuges operation, but only one system is on-line at a time and the other one is backup.

Two (2) methane abatement systems METH1 and METH2 connected to stacks are installed at the Dewatering Building, and one (1) methane abatement system METH3 is installed at the associated Fire and Pump House to limit and control concentration of methane or hydrogen sulfide gas below the slab to 10% of the Lower Explosive Limit (LEL).

Process throughput is based on the maximum quantity of air that the odor control systems can handle.

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: VAPOR RECOVERY SYSTEM (VAPOR ADSORPTION/ABSORPTION UNIT)

Emission Source/Control: METH2 - Control
Control Type: VAPOR RECOVERY SYSTEM (VAPOR ADSORPTION/ABSORPTION UNIT)

Emission Source/Control: METH3 - Control
Control Type: VAPOR RECOVERY SYSTEM (VAPOR ADSORPTION/ABSORPTION UNIT)

Emission Source/Control: DEWAT - Process

Item 22.17:

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 plant's Sludge Gravity Thickening (SGT) process including four (4) sludge gravity thickener tanks SGTTK; each are with 70 feet diameter. The primary and final setting 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 process thruput is an estimate on highest historical monthly thickened combined sludge 2000-2003.

The existing four gravity thickeners will be reconstructed during the plant upgrade. The plant may install temporary gravity belt thickeners to handle the sludge flow for any existing units that needed to be taken out of service for construction (with no increase in capacity) in accordance with the provisions of 6NYCRR 201-5.4(b) "Operational Flexibility".

Emission Source/Control: SGTTK - Process

Item 22.18:

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:

This process is the plant's Sludge Storage Tanks (SST) process including two (2) sludge storage tanks SSTK at 188,000 cubic feet each. Excessive sludge will be stored in these storage tanks.

An activated carbon absorber vessel STK3C with stack SST3C is installed at the sludge storage tank #3 for odor control purpose.

The process thruput is an estimate based on highest historical monthly thickened combined sludge 2000-2003.

Emission Source/Control: SSTK1 - Process

Design Capacity: 376,000 cubic feet

Emission Source/Control: STK3C - Process

Condition 23: Compliance Demonstration
Effective between the dates of 05/02/2016 and 05/01/2026

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

New York State Department of Environmental Conservation

Permit ID: 2-6105-00009/02003

Facility DEC ID: 2610500009



Item 23.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 2-WWTRE

Item 23.2:

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 persistent and bioaccumulative compound less than the PB Trigger, the owner or operator is required to meet the short term and annual guideline concentration at the fence line of the facility.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: ANNUAL TOTAL

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY