

PERMIT Under the Environmental Conservation Law (ECL)

IDENTIFICATION INFORMATION

Permit Type: Air State Facility Permit ID: 2-6007-00025/02005

Mod 0 Effective Date: 06/26/2017 Expiration Date: 06/25/2027

Mod 1 Effective Date: 01/10/2022 Expiration Date: 06/25/2027

Permit Issued To:NYC DEPT OF ENVIRONMENTAL PROTECTION

96-05 HORACE HARDING EXPY FL 5

CORONA, NY 11368

Contact: PAMELA ELARDO

NYCDEP BWT

96-05 HORACE HARDING EXPY FL 2

CORONA, NY 11368 (718) 595-6924

Facility: HUNTS POINT WASTEWATER RESOURCE RECOVERY FACILITY

COSTER ST & RYAWA AVE

BRONX, NY 10474

Contact: PAMELA ELARDO

NYCDEP BWT

96-05 HORACE HARDING EXPY FL 2

CORONA, NY 11368 (718) 595-6924

Description:

This Air State Facility Permit modification application consists of the following equipment and processes updated from the current Air State Facility Permit Renewal 1, issued on 6/26/2017:

- 1. replace three (3) Varec 244W 6" waste gas burners with four (4) Varec 244E 12" waste gas burners to flare excessive sludge digester gas under emission unit 1-COMBU, process FLA.
- 2. add one 500 cfm activated carbon adsorber for odor control at the new sludge feedwell under emission unit 2-WWTRE, process SLU.

The Hunts Point Wastewater Resource Recovery Facility (WRRF) is a publicly owned secondary wastewater treatment plant capable of providing treatment for 200 million gallons of primarily residential wastewater per day in dry weather. The standard industrial classification code is 4952-Sewerage Systems.

This facility is categorized into two (2) Emission Units: 1-COMBU for combustion processes and 2-WWTRE for non-combustion wastewater treatment processes.

Emission Unit 1-COMBU includes the following combustion sources and their associated equipment:

• five (5) Cleaver-Brooks CBI 700-750-125HW 750Bhp (31.4 mmBtu/hr) main building boilers (MBLR1, MBLR2, MBLR3, MBLR4 and MBLR5), which exhaust through three emission points (MBLRA, MBLRB, and MBLRC). These boilers burn natural gas or digester gas;



- two (2) Cleaver-Brooks CB 200-400 400Bhp (16.7 mmBtu/hr) dewatering building boilers (DBLR1 and DBLR2), which exhaust through two emission points (DBLRA and DBLRB). These boilers burn natural gas or digester gas, and use #2 fuel oil as backup;
- six (6) Cummins 2000KW emergency engine generators (EGEN1, EGEN2, EGEN3, EGEN4, EGEN5, and EGEN6), which exhaust through one emission point (EGENA). These emergency engine generators are operated with ultra-low sulfur diesel fuel; and
- three (3) Varec 244W 6" waste gas burners to flare excessive sludge digester gas (FLAR1, FLAR2, and FLAR3), which exhaust through three emission points (FLARA, FLARB and FLARC).

The Emission Unit 2-WWTRE non-combustion wastewater treatment processes include:

Headworks bar screening process (HWK), Central residual process (CRP), Primary settling tanks process (PST), Activated sludge aeration process (AER), Final settling tanks process (FST), Chlorine contact tanks process (CCT), non-exempt chemical storage (CMS), Sludge degritting (SDT), Sludge gravity thickening process (SGT), Sludge anaerobic digestion process (SAD), Sludge dewatering process (SDW), Sludge storage tank (SST), Digester gas holding tank process (DGH).

The above wastewater treatment processes are associated with the WWTP's extensive odor control system comprising of:

- seven (7) 5,000 cfm carbon adsorbers (CRBC1, CRBC2, CRBC3, CRBC4, CRBC5, CRBC6 and CRBC7) to treat air from the central residual building and headworks, which exhaust through five emission points (CRBCA, CRBCB, CRBCC, CRBCD and CRBCE);
- four (4) 1,500 cfm carbon adsorbers (PRIC1, PRIC2, PRIC3 and PRIC4) for the primary clarifier influent channel, which exhaust through four emission points (PRICA, PRICB, PRICC and PRICD);
- one (1) 1,500 cfm carbon adsorber (SGTC1) to treat air from the sludge gravity thickeners, which exhaust through the emission point SGTCA;
- one 1,500 cfm carbon adsorber (DOBC1) to treat air from the anaerobic digester overflow box, which exhaust through the emission point DOBCA;
- four 50,000 cfm wet scrubbers (DWBS1, DWBS2, DWBS3, and DWBS4) to treat air from the dewatering building, which exhausts through four emission point (DWBSA, DWBSB, DWBSC, and DWBSD); and
- two 2,875 cfm two-stage odor control systems (DWBC1 and DWBC2) to treat air from the dewatering centrifuge process, which exhaust through emission points (DWBCA and DWBCB).
- one 14,000 cfm carbon adsorber (SSTC1) to treat air from sludge storage tank #10, which exhaust through the emission point SSTCA;

The WRRF's wastewater treatment processes are also associated with the following non-exempt chemical storage tanks:

- five (5) 12,000 gallon sodium hypochlorite tanks (HYPO1, HYPO2, HYPO3, HYPO4 and HYPO5);
- four (4) 16,000 gallon hydroxide tanks (HYDO1, HYDO2, HYDO3 and HYDO4);
- two (2) 25,000 gallon acrylamide tanks (ACRY1 and ACRY2); and
- three 15,000 gallon glycerol storage tanks (GYOL1, GYOL2 and GYOL3) in the fuel cell building for BNR treatment which is introduced in activated sludge aeration process (AER) process.

As part of the plant's upgrade construction plan, the construction of new anaerobic digesters and support facilities for the Hunts Point WRR includes:

• replace three (3) Varec 244W 6" waste gas burners with four (4) Varec 244E 12" waste

Division of Air Resources



Facility DEC ID: 2600700025

gas burners

(FLA01, FLA02, FLA03 and FLA04), which exhaust through four emission points (FLAAA, FLABB, FLACC and FLADD) to flare excessive sludge digester gas under emission unit 1-COMBU, process FLA.

 add one 500 cfm activated carbon adsorber for odor control at the new sludge feedwell under emission unit 2-WWTRE, process SLU.

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

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

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

The owner or operator of the facility shall maintain separate records of the amount of fuel combusted in each engine generator.

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

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

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 11101-540	1			
Authorized Signature:		Date:	/	/	



Notification of Other State Permittee Obligations

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

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

Item B: Permittee's Contractors to Comply with Permit

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

Item C: Permittee Responsible for Obtaining Other Required Permits

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

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

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



PAGE LOCATION OF CONDITIONS

PAGE

6

DEC GENERAL CONDITIONS

General Provisions

- 1 Facility Inspection by the Department
- 6 2 Relationship of this Permit to Other Department Orders and Determinations
- 6 3 Applications for permit renewals, modifications and transfers
- 7 4 Applications for permit renewals, modifications and transfers
- 7 5 Permit modifications, suspensions or revocations by the Department

Facility Level

7 6 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 separate written application to the Department for renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing.

Item3.2:

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

Item 3.3

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

Division of Air Resources



Facility DEC ID: 2600700025

Condition 1-1: Applications for permit renewals, modifications and transfers Applicable State Requirement: 6 NYCRR 621.11

Item 1-1.1:

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.

Item1-1.2:

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

Item 1-1.3

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

Division of Air Resources



Facility DEC ID: 2600700025

(718) 482-4997



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: HUNTS POINT WASTEWATER RESOURCE RECOVERY FACILITY

COSTER ST & RYAWA AVE

BRONX, NY 10474

Authorized Activity By Standard Industrial Classification Code:

4952 - SEWERAGE SYSTEMS

Mod 0 Permit Effective Date: 06/26/2017 Permit Expiration Date: 06/25/2027

Mod 1 Permit Effective Date: 01/10/2022 Permit Expiration Date: 06/25/2027



PAGE LOCATION OF CONDITIONS

PAGE					
	FEDERALLY ENFORCEABLE CONDITIONS				
	Facility Level				
6	1 6 NYCRR 201-3.2 (a): Exempt Sources - Proof of Eligibility				
6	2 6 NYCRR 201-3.2 (a): Compliance Demonstration				
6	3 6 NYCRR 202-1.1: Required Emissions Tests				
7	4 6 NYCRR Subpart 201-7: Facility Permissible Emissions				
7	*1-1 6 NYCRR Subpart 201-7: Capping Monitoring Condition				
10	*6 6 NYCRR Subpart 201-7: Capping Monitoring Condition				
11	*7 6 NYCRR Subpart 201-7: Capping Monitoring Condition				
13	8 6 NYCRR 202-1.2: Notification				
13	9 6 NYCRR 202-1.3: Acceptable procedures				
13	10 6 NYCRR 202-1.3: Acceptable procedures - Stack test report submittal				
13	25 6 NYCRR 211.2: Visible Emissions Limited				
14	1-2 6 NYCRR 222.4 (b): Compliance Demonstration				
15	1-3 6 NYCRR 222.6 (c): Compliance Demonstration				
15	1-4 6 NYCRR 225-1.2 (d): Compliance Demonstration				
16	1-5 6 NYCRR 227-1.3 (c): Compliance Demonstration				
17	1-6 6 NYCRR 227-1.4 (a): Compliance Demonstration				
18	16 40CFR 60, NSPS Subpart IIII: Compliance and Enforcement				
18	17 40CFR 63, Subpart JJJJJJ: Compliance and Enforcement				
19	18 40CFR 63, Subpart ZZZZ: Compliance and Enforcement				
	Emission Unit Level				
	EU=2-WWTRE				
19	19 6 NYCRR 212-1.6 (a): Compliance Demonstration				
	STATE ONLY ENFORCEABLE CONDITIONS				
	Facility Level				
22	20 ECL 19-0301: Contaminant List				
23	1-7 6 NYCRR 201-1.4: Malfunctions and Start-up/Shutdown Activities				
23	22 6 NYCRR Subpart 201-5: Emission Unit Definition				
25	23 6 NYCRR 201-5.2 (c): Renewal deadlines for state facility permits				
25	1-8 6 NYCRR 201-5.3 (c): CLCPA Applicability				
26	1-9 6 NYCRR 201-5.3 (c): Compliance Demonstration				
26	11 6 NYCRR 211.1: Air pollution prohibited				
26	12 6 NYCRR 211.1: Compliance Demonstration				
27	1-10 6 NYCRR 212-2.1 (a): Compliance Demonstration				
	Emission Unit Level				
28	27 6 NYCRR Subpart 201-5: Emission Point Definition By Emission Unit				
30	28 6 NYCRR Subpart 201-5: Process Definition By Emission Unit				
	NOTE: * preceding the condition number indicates capping.				



FEDERALLY ENFORCEABLE CONDITIONS

Renewal 1/Mod 1/FINAL

**** Facility Level ****

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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

Item A: Sealing - 6 NYCRR 200.5

The Commissioner may seal an air contamination source to prevent its operation if compliance with 6 NYCRR Chapter III is not met within the time provided by an order of the Commissioner issued in the case of the violation. Sealing means labeling or tagging a source to notify any person that operation of the source is prohibited, and also includes physical means of preventing the operation of an air contamination source without resulting in destruction of any equipment associated with such source, and includes, but is not limited to, bolting, chaining or wiring shut control panels, apertures or conduits associated with such source.

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

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

Item B: Acceptable Ambient Air Quality - 6 NYCRR 200.6

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

Item C: Maintenance of Equipment - 6 NYCRR 200.7

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



required to operate such device effectively.

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

- (a) Except as otherwise provided by this Part, construction or operation of a new, modified or existing air contamination source without a registration or permit issued pursuant to this Part is prohibited.
- (b) If an existing facility or emission source was subject to the permitting requirements of this Part at the time of construction or modification, and the owner or operator failed to apply for a permit or registration as described in this Part, the owner or operator must apply for a permit or registration in accordance with the provisions of this Part. The facility or emission source is subject to all regulations that were applicable to it at the time of construction or modification and any subsequent requirements applicable to existing emission sources.

Item E: Recycling and Salvage - 6 NYCRR 201-1.7

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

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

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

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

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

Item H: Proof of Eligibility for Sources Defined as Trivial



Activities - 6 NYCRR 201-3.3 (a)

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

Item I: Required Emission Tests - 6 NYCRR 202-1.1

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

Item J: Open Fires Prohibitions - 6 NYCRR 215.2

Except as allowed by section 215.3 of 6 NYCRR Part 215, no person shall burn, cause, suffer, allow or permit the burning of any materials in an open fire.

Item K: Permit Exclusion - ECL 19-0305

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

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



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

FEDERAL APPLICABLE REQUIREMENTS The following conditions are federally enforceable.

Condition 1: Exempt Sources - Proof of Eligibility

Effective between the dates of 06/26/2017 and 06/25/2027

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

Item 1.1:

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

Condition 2: Compliance Demonstration

Effective between the dates of 06/26/2017 and 06/25/2027

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

Item 2.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 2.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES

Monitoring Description:
As proof of exe

As proof of exempt eligibility for the emergency generators, the facility must maintain monthly records which demonstrate that each engine is operated less than 500 hours per year, on a 12-month rolling total basis.

Monitoring Frequency: MONTHLY

Averaging Method: ANNUAL MINIMUM ROLLED MONTHLY

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 3: Required Emissions Tests

Effective between the dates of 06/26/2017 and 06/25/2027



Applicable Federal Requirement: 6 NYCRR 202-1.1

Item 3.1:

For the purpose of ascertaining compliance or non-compliance with any air pollution control code, rule or regulation, the commissioner may require the person who owns such air contamination source to submit an acceptable report of measured emissions within a stated time.

Condition 4: Facility Permissible Emissions

Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 4.1:

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:

per year	CAS No: 0NY100-00-0	(From Mod 1)	PTE:	49,800	pounds
	Name: TOTAL HAP				
per year	CAS No: 0NY210-00-0	(From Mod 1)	PTE:	49,800	pounds
	Name: OXIDES OF NITROGEN				
per year	CAS No: 0NY998-00-0	(From Mod 1)	PTE:	49,800	pounds
	Name: VOC				

Condition 1-1: Capping Monitoring Condition

Effective between the dates of 01/10/2022 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 1-1.1:

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

6 NYCRR Subpart 201-6 6 NYCRR Subpart 231-2

Item 1-1.2:

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



Item 1-1.3:

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 1-1.4:

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 1-1.5:

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 1-1.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 1-1.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

The facility owner or operator shall limit emissions of Oxides of Nitrogen (NOx) to less than 49,800 pounds (24.9 tons) per year on a rolling 12-month total basis.

To demonstrate compliance with this limit the facility owner or operator shall maintain a record of the quantity of each fuel fired at the facility monthly.

The facility owner or operator shall calculate monthly and rolling 12-month total NOx emissions (including exempt sources) using the following formula:

MRNG(A) + DRNG(B) + DRDL(C) + BRDG(D) + EGEN(E) + FLAR(F) = monthly NOx emissions (pounds)

Where:

MRNG - Monthly total natural gas fired from main building boilers, emission unit 1-COMBU, emission sources MBLR1, MBLR2, MBLR3, MBLR4 and MBLR5, in mmscf,



A = The latest facility specific emission rate for main building boilers, emission unit 1-COMBU, emission sources MBLR1, MBLR2, MBLR3, MBLR4 and MBLR5 firing natural gas (35 lb/scf, based on the result of October 2008 stack test, 0.035 lb/mmBtu and 1000 Btu/scf heating value of natural gas);

DRNG – Monthly total natural gas fired from dewatering building boilers, emission unit 1-COMBU, emission sources DBLR1 and DBLR2, in mmscf,

B - The latest facility specific emission rate for dewatering building boilers, emission unit 1-COMBU, emission sources DBLR1 and DBLR2, firing natural gas (54 lb/mscf, based on the result of December 2006 stack test, 0.054 lb/mmBtu and 1000 Btu/scf heating value of natural gas);

DRDL- Monthly total distillate oil fired from dewatering building boilers, emission unit 1-COMBU, emission sources DBLR1 and DBLR2, in gal,

C – The latest emission factor for dewatering building boilers, emission unit 1-COMBU, emission sources DBLR1 and DBLR2, firing distillate oil (0.02 lb/gal from 9/7/2016 updated USEPA FIRE for 1-03-005-01, external combustion boiler, distillate oil, Table 1.3-1 of AP-42),

BRDG - Monthly total digester gas fired from all boilers, emission unit 1-COMBU, in mmscf,

D – The latest emission factor for main building boilers firing digester gas, emission unit 1-COMBU (32 lb/mmscf from 9/7/2016 updated US EPA FIRE for 1-01-006-02, Boilers < 100 mmBtu/hr except Tangential, low NOx burner, Table 1.4-1 of AP-42).

EGEN – Monthly total distillate oil fired from emergency engine generators in gal,

E – The latest facility specific emission factor (based on Tier II engine NOx emission limit, 6.9 g/Hp-hr and 12/17/2009 stack test result, 2843 Hp engine output and 14.3 gal/hr fuel consumption), equivalent to 0.31 lb/gal;

FLAR -Monthly total digester gas flared from all four Varec 244E 12" flares in mmscf,

F – The latest emission factor (40 lb/mmscf is from 917/2016 updated USEPA FIRE for Solid Waste Disposal Waste Gas Flare, Uncontrolled).

The facility owner or operator shall maintain a record of each monthly and rolling 12-month total calculation performed pursuant to this condition and all data used when making the calculation.

All records kept pursuant to this condition shall be maintained at the facility for a period of at least five years and must be provided to the Department upon



request.

The facility owner or operator shall prepare and submit an annual capping certification to the Department. Each certification shall contain the monthly and rolling 12-month total NOx emissions calculated pursuant to this condition.

In addition, the report shall contain a summary of the data used to perform the calculations.

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 1/30/2023.

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

Condition 6: Capping Monitoring Condition

Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 6.1:

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

6 NYCRR Subpart 201-6

Item 6.2:

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

Item 6.3:

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

Item 6.4:

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

Division of Air Resources - Air State Facility Permit



Permit ID: 2-6007-00025/02005 Facility DEC ID: 2600700025

Item 6.5:

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

Item 6.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY100-00-0 TOTAL HAP

Item 6.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

Emissions from the wastewater treatment related processes vary based on the constituents of the WWTP influent, over which the WWTP has limited control. The emissions are based on annual wastewater influent sampling results and estimated by computer modeling.

For HAP emissions from wastewater treatment related sources, annual emissions will be estimated using TOXCHEM+ modeling approach and at the least annually influent sampling results.

Process Material: WASTEWATER
Parameter Monitored: TOTAL HAP
Upper Permit Limit: 24.9 tons per year
Reference Test Method: EPA 600 Series

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2018.

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

Condition 7: Capping Monitoring Condition

Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR Subpart 201-7

Item 7.1:

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 7.2:

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

Item 7.3:

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 7.4:

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 7.5:

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 7.6:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

CAS No: 0NY998-00-0 VOC

Item 7.7:

Compliance Demonstration shall include the following monitoring:

Capping: Yes

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

Monitoring Description:

Emissions from the wastewater treatment related processes vary based on the constituents of the WWTP influent, over which the WWTP has limited control. The emissions are based on annual wastewater influent sampling results and estimated by computer modeling.

For VOC emissions from wastewater treatment related sources, annual emissions will be estimated using TOXCHEM+ modeling approach and at the least annually influent sampling results.

Process Material: WASTEWATER

Parameter Monitored: VOC

Division of Air Resources - Air State Facility Permit



Permit ID: 2-6007-00025/02005 Facility DEC ID: 2600700025

Upper Permit Limit: 24.9 tons per year Reference Test Method: EPA 600 Series

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: ANNUAL MAXIMUM ROLLED MONTHLY

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2018.

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

Condition 8: Notification

Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR 202-1.2

Item 8.1:

A person who is required by the commissioner to submit a stack test report shall notify the commissioner, in writing, not less than 30 days prior to the test, of the time and date of the test. Such notification shall also include the acceptable procedures to be used to stack test including sampling and analytical procedures. Such person shall allow the commissioner, or his representative, free access to observe stack testing being conducted by such person.

Condition 9: Acceptable procedures

Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR 202-1.3

Item 9.1:

Emission testing, sampling, and analytical determinations to ascertain compliance with this Subpart shall be conducted in accordance with test methods acceptable to the commissioner.

Condition 10: Acceptable procedures - Stack test report submittal Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR 202-1.3

Item 10.1:

Emission test reports must be submitted in triplicate to the commissioner within 60 days after the completion of the tests, unless additional time is requested in writing.

Condition 25: Visible Emissions Limited

Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR 211.2

Item 25.1:

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 1-2: Compliance Demonstration Effective between the dates of 01/10/2022 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR 222.4 (b)

Item 1-2.1:

The Compliance Demonstration activity will be performed for the Facility.

Regulated Contaminant(s):

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

Item 1-2.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: INTERMITTENT EMISSION TESTING Monitoring Description:

The owner or operator of a compression ignition engine greater than or equal to 750 bhp power output used as an economic dispatch source must meet a NOx emission limit of 0.50 g/bhp-hr.

The owner or operator must conduct an initial compliance test for NOx prior to the May 1, 2025 compliance date (unless a compliance time extension, as allowed under 222.4(c), has been granted). At least 15 days prior to the test, the owner or operator of the source must notify the Regional Air Pollution Control Engineer in writing the scheduled date of the emissions test. Written test protocols are required only if the test method listed in 222.5(b)(2) will not be used during the emissions testing. In such case, the emissions test may not commence until 15 calendar days following the Department's approval of the protocols.

Each emissions test must be conducted at the maximum load relief of the economic dispatch source. Also, the span of the monitoring system used to conduct the test must be selected such that the pollutant gas concentration equivalent to the emission limit is not less than 30 percent of the span.

The owner or operator must submit an electronic copy of the emission test report to the Department within 60 calendar days after the completion of the test(s). In addition, the data collected during the test must be available to the Department in an electronic format acceptable to the Department. The emission test results must be maintained at a facility or at a Department approved alternate location for five years from the date of the emission test.

Parameter Monitored: OXIDES OF NITROGEN

Division of Air Resources - Air State Facility Permit



Permit ID: 2-6007-00025/02005 Facility DEC ID: 2600700025

Upper Permit Limit: 0.50 grams per brake horsepower-hour

Reference Test Method: Method 7E

Monitoring Frequency: SINGLE OCCURRENCE

Averaging Method: AVERAGING METHOD AS PER REFERENCE TEST

METHOD INDICATED

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 1-3: Compliance Demonstration Effective between the dates of 01/10/2022 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR 222.6 (c)

Item 1-3.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 1-3.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The owner or operator of an economic dispatch source must maintain on site or at an alternative location, as approved by the Department, records of operational data in a format acceptable to the Department. The following data must be recorded monthly and maintained for five years from the date the data were recorded:

- (1) hours of operation;
- (2) type and quantity of fuel(s) used or purchased;and
- (3) electricity generated by economic dispatch source in kilowatt-hours.

Monitoring Frequency: MONTHLY

Averaging Method: AVERAGING METHOD - SEE MONITORING

DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

Condition 1-4: Compliance Demonstration Effective between the dates of 01/10/2022 and 06/25/2027

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

Item 1-4.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 1-4.2:



Compliance Demonstration shall include the following monitoring:

Monitoring Type: WORK PRACTICE INVOLVING SPECIFIC OPERATIONS

Monitoring Description:

Owners or operators of emission sources that fire distillate oil are limited to a 0.0015 percent sulfur content by weight of the fuel. Compliance with the sulfur-in-fuel limitation is based on fuel vendor receipts. All fuel vendor receipts must be maintained on site or at a Department approved alternative location for a minimum of five years.

Note - Process sources and incinerators must comply with the above requirements on or after July 1, 2023.

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: UPON REQUEST BY REGULATORY AGENCY

Condition 1-5: Compliance Demonstration Effective between the dates of 01/10/2022 and 06/25/2027

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

Item 1-5.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 1-5.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The owner or operator of a stationary combustion installation must perform an annual tune-up on each emission source subject to 6 NYCRR Subpart 227-1. Records of the tune-up shall be maintained at the facility or at a Department approved alternative location for a minimum of five years. The records shall, at a minimum, include the date the tune-up(s) occurred and the details of the tune-up procedures for each emission source.

Monitoring Frequency: ANNUALLY

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY



Condition 1-6: Compliance Demonstration Effective between the dates of 01/10/2022 and 06/25/2027

Applicable Federal Requirement: 6 NYCRR 227-1.4 (a)

Item 1-6.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 1-6.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

Operators of oil firing emission sources subject to 6 NYCRR Subpart 227-1 which do not employ a continuous opacity monitor for measuring smoke emissions, shall be required to perform the following:

- 1) Observe the stack for each emission source which is operating on oil once per day for visible emissions. This observation(s) must be conducted during daylight hours except during adverse weather conditions (fog, rain, or snow).
- 2) The results of each observation must be recorded in a bound logbook or other format acceptable to the Department. The following data must be recorded for each stack:
 - date and time of day
 - observer's name
 - identity of the emission point
 - weather conditions
 - was a plume observed?

Inclement weather conditions shall be recorded for those days when observations are prohibited. This logbook must be retained at the facility for five (5) years after the date of the last entry.

3) If the operator observes any visible emissions (other than steam - see below) for two consecutive days while firing oil (the firing of other fuels in between days of firing oil does not count as an interruption in the consecutive days of firing oil), then a Method 9 analysis (based upon a 6-minute mean) of the affected emission point(s) must be conducted within two (2) business days of such occurrence. The results of the Method 9 analysis must be recorded in the logbook. The operator must contact the Regional Air Pollution Control Engineer within one (1) business day of performing the Method 9 analysis if the opacity standard is contravened. Upon notification, any corrective actions or future compliance



schedules shall be presented to the Department for acceptance.

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

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Averaging Method: AVERAGING METHOD - SEE MONITORING DESCRIPTION

Reporting Requirements: AS REQUIRED - SEE MONITORING DESCRIPTION

Condition 16: Compliance and Enforcement Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 40CFR 60, NSPS Subpart IIII

Item 16.1:

The Department has not accepted delegation of 40 CFR Part 60 Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. 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 IIII during the term of this permit, enforcement of this regulation will revert to the Department as of the effective date of delegation.

Condition 17: Compliance and Enforcement Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 40CFR 63, Subpart JJJJJJ

Item 17.1:

The Department has not accepted delegation of 40 CFR Part 63 Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources. 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 18: Compliance and Enforcement Effective between the dates of 06/26/2017 and 06/25/2027

Applicable Federal Requirement: 40CFR 63, Subpart ZZZZ

Item 18.1:

The Department has not accepted delegation of 40 CFR Part 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. 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 19: Compliance Demonstration

Effective between the dates of 06/26/2017 and 06/25/2027

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

Item 19.1:

The Compliance Demonstration activity will be performed for:

Emission Unit: 2-WWTRE

Item 19.2:

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

Division of Air Resources - Air State Facility Permit



Permit ID: 2-6007-00025/02005 Facility DEC ID: 2600700025

Upper Permit Limit: 20 percent Reference Test Method: Method 9

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING

DESCRIPTION

Averaging Method: 6-MINUTE AVERAGE (METHOD 9)

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY



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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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

Item A: Emergency Defense - 6 NYCRR 201-1.5

An emergency, as defined in 6 NYCRR 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 demonstrate, 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 facility was being properly operated and maintained;
- (3) during the period of the emergency the facility owner or operator took all reasonable steps to minimize the 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 any 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 malfunction 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 20: Contaminant List

Effective between the dates of 06/26/2017 and 06/25/2027

Applicable State Requirement: ECL 19-0301

Item 20.1:

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 1-7: Malfunctions and Start-up/Shutdown Activities Effective between the dates of 01/10/2022 and 06/25/2027

Applicable State Requirement: 6 NYCRR 201-1.4

Item 1-7.1:

- (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 maintenance and start-up/shutdown activities when they are expected to result in an exceedance of any applicable emission standard, and shall submit a report of such activities to the department when required by a permit condition or upon request by the department. Such reports shall state whether an exceedance occurred and if it was unavoidable, include the time, frequency and duration of the exceedance, 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 monitoring and quarterly reporting requirements need not submit additional reports of exceedances to the department.
- (c) In the event that air contaminant emissions exceed any applicable emission standard due to a malfunction, the facility owner or operator shall 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. In addition, the facility owner or operator shall compile and maintain a record of all malfunctions. Such records shall be maintained at the facility for a period of at least five years and must be made available to the department upon request. 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, the air contaminants emitted, and the resulting emission rates and/or opacity.
- (d) The department may also require the facility 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 22: Emission Unit Definition
Effective between the dates of 06/26/2017 and 06/25/2027

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 22.1(From Mod 1):



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

Emission Unit: 1-COMBU Emission Unit Description:

This emission unit consists of the WWTP's combustion equipment sources, includes the following combustion sources and their associated equipment: • five (5) Cleaver-Brooks CBI 700-750-125HW 750Bhp (31.4 mmBtu/hr) main building boilers (MBLR1, MBLR2, MBLR3, MBLR4 and MBLR5), which exhaust through three emission points (MBLRA, MBLRB, and MBLRC). These boilers burn natural gas or digester gas;

- two (2) Cleaver-Brooks CB 200-400 400Bhp (16.7 mmBtu/hr) dewatering building boilers (DBLR1 and DBLR2), which exhaust through two emission points (DBLRA and DBLRB). These boilers burn natural gas or digester gas, and use #2 fuel oil as backup;
- six (6) Cummins 2000KW emergency engine generators (EGEN1, EGEN2, EGEN3, EGEN4, EGEN5, and EGEN6), which exhaust through one emission point (EGENA). These emergency engine generators are operated with ultra-low sulfur diesel fuel; and
- three (3) existing Varec 244W 6" waste gas burners (FLAR1, FLAR2, and FLAR3), which exhaust through three emission points (FLARA, FLARB and FLARC), will be replaced with four (4) Varec 244E 12" waste gas burners (FLA01, FLA02, FLA03 and FLA04), which exhaust through four emission points (FLAAA, FLABB, FLACC and FLADD) to flare excessive sludge digester gas under emission unit 1-COMBU, process FLA.

Building(s): DEWATER

Item 22.2(From Mod 1):

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), central residual process (CRP), primary settling process (PST), activated sludge aeration process (AER), final settling process (FST), chlorine contact tanks process (CCT), and non-exempt chemical storage(CMS). The as sociated processes to handle sludge produced by the wastewater treatment processes include sludge degritting process (SDT), sludge gravity thickening process (SGR), sludge anaerobic digestion process (SLU), sludge dewatering process (SLD), sludge storage tank (SLS), and digester gas holding tank (DGH).

The above wastewater treatment processes are associated with the WWTP's extensive odor control system comprising of:



- seven (7) 5,000 cfm carbon adsorbers (CRBC1, CRBC2, CRBC3, CRBC4, CRBC5, CRBC6 and CRBC7) to treat air from the central residual building and headworks, which exhaust through five emission points (CRBCA, CRBCB, CRBCC, CRBCD and CRBCE);
- four (4) 1,500 cfm carbon adsorbers (PRIC1, PRIC2, PRIC3 and PRIC4) for the primary clarifier influent channel, which exhaust through four emission points (PRICA, PRICB, PRICC and PRICD);
- one (1) 1,500 cfm carbon adsorber (SGTC1) to treat air from the sludge gravity thickeners, which exhaust through the emission point SGTCA;
- one 1,500 cfm carbon adsorber (DOBC1) to treat air from the anaerobic digester overflow box, which exhaust through the emission point DOBCA;
- four 50,000 cfm wet scrubbers (DWBS1, DWBS2, DWBS3, and DWBS4) to treat air from the dewatering building, which exhaust through four emission points (DWBSA, DWBSB, DWBSC, and DWBSD);
- two 2,875 cfm two-stage odor control systems (DWBC1 and DWBC2) to treat air from the dewatering centrifuge process, which exhaust through emission points (DWBCA and DWBCB); and
- one 14,000 cfm carbon adsorber (SSTC1) to treat air from the sludge storage tank #10, which exhaust through the emission point SSTCA.
- one 500 cfm carbon adsorber (DOBC2) to be installed for treating air from new sludge feedwell, which exhaust through the emission point DOBCB.

Building(s): OUTDOOR

Condition 23: Renewal deadlines for state facility permits Effective between the dates of 06/26/2017 and 06/25/2027

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

Item 23.1:

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 1-8: CLCPA Applicability Effective between the dates of 01/10/2022 and 06/25/2027

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

Item 1-8.1:

Pursuant to The New York State Climate Leadership and Community Protection Act (CLCPA) and Article 75 of the Environmental Conservation Law, emission sources shall comply with



regulations to be promulgated by the Department to ensure that by 2030 statewide greenhouse gas emissions are reduced by 40% of 1990 levels, and by 2050 statewide greenhouse gas emissions are reduced by 85% of 1990 levels.

Condition 1-9: Compliance Demonstration Effective between the dates of 01/10/2022 and 06/25/2027

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

Item 1-9.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 1-9.2:

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 11: Air pollution prohibited Effective between the dates of 06/26/2017 and 06/25/2027

Applicable State Requirement: 6 NYCRR 211.1

Item 11.1:

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 12: Compliance Demonstration

Effective between the dates of 06/26/2017 and 06/25/2027

Applicable State Requirement: 6 NYCRR 211.1



Item 12.1:

The Compliance Demonstration activity will be performed for the Facility.

Item 12.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

The WWTP should follow the Good Engineering Practice and take precautions to minimize odors. The WWTP shall evaluate the operations and maintenance of odor control systems and keep the system in compliance. The WWTP must maintain a log on site to record the presence of odors and corrective actions taken for these odor complaints and report it to the Department annually.

Monitoring Frequency: AS REQUIRED - SEE PERMIT MONITORING DESCRIPTION

Reporting Requirements: ANNUALLY (CALENDAR)

Reports due 30 days after the reporting period.

The initial report is due 1/30/2018.

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

Condition 1-10: Compliance Demonstration Effective between the dates of 01/10/2022 and 06/25/2027

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

Item 1-10.1:

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

Emission Unit: 2-WWTRE

Item 1-10.2:

Compliance Demonstration shall include the following monitoring:

Monitoring Type: RECORD KEEPING/MAINTENANCE PROCEDURES Monitoring Description:

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

For an HTAC assigned an Environmental Rating of A and has an Emission Rate Potential (ERP) of less than 0.1 pound per hour and annual mass emissions of a perisistant and bioaccumulative compound less than the PB Trigger, the

Division of Air Resources - Air State Facility Permit



Permit ID: 2-6007-00025/02005 Facility DEC ID: 2600700025

owner or operator is requiried to meet the short term and annual guideline concentration at the fenceline of the facility. Using air dispersion modeling demonstrate that the maximum offsite air concentration is less than the applicable AGC/SGC.

Monitoring Frequency: ONCE DURING THE TERM OF THE PERMIT

Averaging Method: ANNUAL TOTAL

Reporting Requirements: UPON REQUEST BY REGULATORY AGENCY

**** Emission Unit Level ****

Condition 27: Emission Point Definition By Emission Unit Effective between the dates of 06/26/2017 and 06/25/2027

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 27.1(From Mod 1):

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

Emission Unit: 1-COMBU

Emission Point: FLAAA

Height (ft.): 30 Diameter (in.): 109

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: FLABB

Height (ft.): 30 Diameter (in.): 109

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: FLACC

Height (ft.): 30 Diameter (in.): 109

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: FLADD

Height (ft.): 30 Diameter (in.): 109

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: DBLRA

Height (ft.): 87 Diameter (in.): 24

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: DBLRB

Height (ft.): 87 Diameter (in.): 24

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: EGENA

Height (ft.): 50 Diameter (in.): 84

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: EMERGENCY



Emission Point: MBLRA

Height (ft.): 76 Diameter (in.): 42

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: MAIN

Emission Point: MBLRB

Height (ft.): 76 Diameter (in.): 42

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: MAIN

Emission Point: MBLRC

Height (ft.): 76 Diameter (in.): 42

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: MAIN

Item 27.2(From Mod 0):

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

Emission Unit: 2-WWTRE

Emission Point: CRBCA

Height (ft.): 95 Diameter (in.): 30

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: CENTRES

Emission Point: CRBCB

Height (ft.): 95 Diameter (in.): 30

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: CENTRES

Emission Point: CRBCC

Height (ft.): 95 Diameter (in.): 30

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: CENTRES

Emission Point: CRBCD

Height (ft.): 95 Diameter (in.): 30

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: CENTRES

Emission Point: CRBCE

Height (ft.): 95 Diameter (in.): 30

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: CENTRES

Emission Point: DOBCA

Height (ft.): 12 Diameter (in.): 12

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: OUTDOOR

Emission Point: DWBCA

Height (ft.): 70 Diameter (in.): 44

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: DWBCB

Height (ft.): 70 Diameter (in.): 44

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: DWBSA

Height (ft.): 70 Diameter (in.): 44



NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: DWBSB

Height (ft.): 70 Diameter (in.): 44

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: DWBSC

Height (ft.): 70 Diameter (in.): 44

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: DWBSD

Height (ft.): 70 Diameter (in.): 44

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: DEWATER

Emission Point: PRICA

Height (ft.): 10 Diameter (in.): 12

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: OUTDOOR

Emission Point: PRICB

Height (ft.): 10 Diameter (in.): 12

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: OUTDOOR

Emission Point: PRICC

Height (ft.): 10 Diameter (in.): 12

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: OUTDOOR

Emission Point: PRICD

Height (ft.): 10 Diameter (in.): 12

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: OUTDOOR

Emission Point: SGTCA

Height (ft.): 12 Diameter (in.): 12

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: OUTDOOR

Emission Point: SSTCA

Height (ft.): 31 Diameter (in.): 24

NYTMN (km.): 4517.573 NYTME (km.): 594.342 Building: OUTDOOR

Condition 28: Process Definition By Emission Unit

Effective between the dates of 06/26/2017 and 06/25/2027

Applicable State Requirement: 6 NYCRR Subpart 201-5

Item 28.1(From Mod 1):

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:

Waste gas burners to flare excessive sludge digester

gas.



Permit ID: 2-6007-00025/02005 Facility DEC ID: 2600700025

Emission Source/Control: FLA01 - Combustion Design Capacity: 37 million Btu per hour

Emission Source/Control: FLA02 - Combustion Design Capacity: 37 million Btu per hour

Emission Source/Control: FLA03 - Combustion Design Capacity: 37 million Btu per hour

Emission Source/Control: FLA04 - Combustion Design Capacity: 37 million Btu per hour

Item 28.2(From Mod 1):

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

Emission Unit: 2-WWTRE

Process: SLU Source Classification Code: 5-01-007-81

Process Description:

This process is the WWTP's Sludge Anaerobic Digestion (SLU) process including four (4) sludge digestion tanks (DIGTK) each 369,000 cu ft.

After sludge gravity thickening, in order to make it safe for the environment, the sludge is placed in oxygen-free tanks called digesters. Excessive sludge will be 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 often used as an energy source to operate boilers.

A single bed activated carbon adsorber (DOBC1) is utilized at the anaerobic digester distribution box for odor control purposes. One 500 cfm carbon absrber (DOBC2) will be istalled for treating air from new sldge feedwell.

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

Emission Source/Control: DOBC2 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: SSTC1 - Process Design Capacity: 14,000 cubic feet per minute

Item 28.3(From Mod 0):

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

Emission Unit: 1-COMBU



Permit ID: 2-6007-00025/02005 Facility DEC ID: 2600700025

Process: BDG Source Classification Code: 1-03-007-01

Process Description: Firing digester gas in boilers.

Emission Source/Control: DBLR1 - Combustion Design Capacity: 16.7 million Btu per hour

Emission Source/Control: DBLR2 - Combustion Design Capacity: 16.7 million Btu per hour

Emission Source/Control: MBLR1 - Combustion Design Capacity: 31.4 million Btu per hour

Emission Source/Control: MBLR2 - Combustion Design Capacity: 31.4 million Btu per hour

Emission Source/Control: MBLR3 - Combustion Design Capacity: 31.4 million Btu per hour

Emission Source/Control: MLRB4 - Combustion Design Capacity: 31.4 million Btu per hour

Emission Source/Control: MLRB5 - Combustion Design Capacity: 31.4 million Btu per hour

Item 28.4(From Mod 0):

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

Emission Unit: 1-COMBU

Process: BNG Source Classification Code: 1-03-006-02

Process Description: Firing natural gas in boilers.

Emission Source/Control: DBLR1 - Combustion Design Capacity: 16.7 million Btu per hour

Emission Source/Control: DBLR2 - Combustion Design Capacity: 16.7 million Btu per hour

Emission Source/Control: MBLR1 - Combustion Design Capacity: 31.4 million Btu per hour

Emission Source/Control: MBLR2 - Combustion Design Capacity: 31.4 million Btu per hour

Emission Source/Control: MBLR3 - Combustion Design Capacity: 31.4 million Btu per hour

Emission Source/Control: MLRB4 - Combustion Design Capacity: 31.4 million Btu per hour

Emission Source/Control: MLRB5 - Combustion Design Capacity: 31.4 million Btu per hour



Item 28.5(From Mod 0):

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

Emission Unit: 1-COMBU

Process: BOI Source Classification Code: 1-03-005-02

Process Description: Firing #2 fuel oil in boilers.

Emission Source/Control: DBLR1 - Combustion Design Capacity: 16.7 million Btu per hour

Emission Source/Control: DBLR2 - Combustion Design Capacity: 16.7 million Btu per hour

Item 28.6(From Mod 0):

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

Emission Unit: 1-COMBU

Process: GEN Source Classification Code: 2-01-001-02

Process Description: Firing diesel fuel in generators.

Emission Source/Control: EGEN1 - Combustion

Design Capacity: 2,000 kilowatts

Emission Source/Control: EGEN2 - Combustion

Design Capacity: 2,000 kilowatts

Emission Source/Control: EGEN3 - Combustion

Design Capacity: 2,000 kilowatts

Emission Source/Control: EGEN4 - Combustion

Design Capacity: 2,000 kilowatts

Emission Source/Control: EGEN5 - Combustion

Design Capacity: 2,000 kilowatts

Emission Source/Control: EGEN6 - Combustion

Design Capacity: 2,000 kilowatts

Item 28.7(From Mod 0):

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

Emission Unit: 2-WWTRE

Process: AER Source Classification Code: 5-01-007-31

Process Description:

This process is the WWTP's secondary treatment activated sludge aeration process (AER). This process includes two (2) 355' x 30' x 15' (east battery), and four (4) 438' x 25' x 15' (west battery) activated diffused aeration tanks. During the WWTP's upgrade construction, the aeration tanks were modified to introduce 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 thruput is based on the design average dry weather flow of 200 MGD.

Emission Source/Control: AERTE - Process Design Capacity: 67,000,000 gallons per day

Emission Source/Control: AERTW - Process Design Capacity: 133,000,000 gallons per day

Item 28.8(From Mod 0):

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 WWTP's chlorine contact wastewater disinfection process consisting of two (2) 472' x 26' x 12' chlorine contact tanks (CCT).

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

The total thruput is based on the design average dry weather flow of 200 MGD.

Emission Source/Control: CCTNK - Process Design Capacity: 200,000,000 gallons per day

Item 28.9(From Mod 0):

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

Emission Unit: 2-WWTRE

Process: CMS Source Classification Code: 5-01-007-99

Process Description:

This process includes operation of the WWTP's non-exempt chemical storage tanks, five (5) 12,000 gallon sodium hypochlorite tanks (HYPO1, HYPO2, HYPO3, HYPO4 and HYPO5),



four (4) 16,000 gallon hydroxide tanks (HYDO1, HYDO2, HYDO3 and HYDO4), and two (2) 25,000 gallon acrylamide tanks (ACRY1 and ACRY2).

Currently, DEP is in process of installing three 15,000 gallon glycerol storage tanks (GYOL1, GYOL2 and GYOL3) in the fuel cell building for BNR treatment which is introduced in activated sludge aeration process (AER) process.

Emission Source/Control: ACRY1 - Process

Design Capacity: 25,000 gallons

Emission Source/Control: ACRY2 - Process

Design Capacity: 25,000 gallons

Emission Source/Control: GYOL1 - Process

Design Capacity: 15,000 gallons

Emission Source/Control: GYOL2 - Process

Design Capacity: 15,000 gallons

Emission Source/Control: GYOL3 - Process

Design Capacity: 15,000 gallons

Emission Source/Control: HYDO1 - Process

Design Capacity: 16,000 gallons

Emission Source/Control: HYDO2 - Process Design Capacity: 1,233,000 cubic feet

Emission Source/Control: HYDO3 - Process

Design Capacity: 16,000 gallons

Emission Source/Control: HYDO4 - Process

Design Capacity: 16,000 gallons

Emission Source/Control: HYPO1 - Process

Design Capacity: 12,000 gallons

Emission Source/Control: HYPO2 - Process

Design Capacity: 12,000 gallons

Emission Source/Control: HYPO3 - Process

Design Capacity: 12,000 gallons

Emission Source/Control: HYPO4 - Process

Design Capacity: 12,000 gallons

Emission Source/Control: HYPO5 - Process

Design Capacity: 12,000 gallons



Item 28.10(From Mod 0):

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

Emission Unit: 2-WWTRE

Process: CRP Source Classification Code: 5-01-007-99

Process Description:

The process is the Central Residual Process (CRP), which takes place in the Central Residual Building. The process includes the following areas: screening room, channels, compactor, the sludge screening areas, the grit cyclones, the classifier areas, the skimmings concentrator areas and the disposal areas. The odor control system consists of seven (7) carbon adsorbers (CRBC1, CRBC2, CRBC3, CRBC4, CRBC5, CRBC6 and CRBC7) that discharge through five exhaust stacks (CRBCA, CRBCB, CRBCC, CRBCD, and CRBCE).

The total throughput is based on the designed ventilation air flow capacity of the activated carbon adsorption vessels.

Emission Source/Control: CRBC1 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC2 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC3 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC4 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC5 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC6 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC7 - Process Design Capacity: 5,000 cubic feet per minute

Item 28.11(From Mod 0):

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 (DGH). Digester gas produced in the digester tanks will be stored in one (1) 240,000 cu ft 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: DGHTK - Process

Design Capacity: 240,000 cubic feet

Item 28.12(From Mod 0):

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

Emission Unit: 2-WWTRE

Process: FST Source Classification Code: 5-01-007-40

Process Description:

This is the WWTP's wastewater treatment final settling (FST) process. This process includes four (4) groups of four (4) final settling tanks, North, South, East and West, for a total of sixteen (16) 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 thruput is based on the design average dry weather flow of 200 MGD.

Emission Source/Control: FSTCE - Process Design Capacity: 46,000,000 gallons per day

Emission Source/Control: FSTCN - Process Design Capacity: 16,000,000 gallons per day

Emission Source/Control: FSTCS - Process Design Capacity: 16,000,000 gallons per day

Emission Source/Control: FSTCW - Process Design Capacity: 122,000,000 gallons per day

Item 28.13(From Mod 0):

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 forebay (FBAY), four (4) bar screens (BSCRN) and the primary influent channel 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 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 exhaust from the screening room is treated with seven carbon adsorbers (CRBC1, CRBC2, CRBC3, CRBC4, CRBC5, CRBC6 and CRBC7) in the central residual building (CENTRES). The primary influent channels are covered and the exhaust is treated with four carbon adsorbers (PRIC1, PRIC2, PRIC3 and PRIC4).

The total thruput is based on the design average dry weather flow of 200 MGD.

Emission Source/Control: CRBC1 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC2 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC3 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC4 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC5 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: CRBC6 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: PRIC1 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: PRIC2 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: PRIC3 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: PRIC4 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: BSCRN - Process Design Capacity: 200,000,000 gallons per day

Emission Source/Control: CRBC7 - Process Design Capacity: 5,000 cubic feet per minute

Emission Source/Control: FOBAY - Process Design Capacity: 200,000,000 gallons per day



Item 28.14(From Mod 0):

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 WWTP's primary clarifier complex process consisting of six (6) primary settling tanks (PST). There are two (2) 168' x 103.8' x 12' east battery primary settling tanks and four (4) 168' x 103.8' x 12' west battery primary settling tanks.

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

The total thruput is based on the design average dry weather flow of 200 MGD.

Emission Source/Control: PCLAE - Process Design Capacity: 67,000,000 gallons per day

Emission Source/Control: PCLAW - Process Design Capacity: 133,000,000 gallons per day

Item 28.15(From Mod 0):

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

Emission Unit: 2-WWTRE

Process: SDT Source Classification Code: 5-01-007-31

Process Description:

This sludge degritting process includes eight (8) sludge

cyclone degritters (500 GPM).

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

Item 28.16(From Mod 0):

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

Emission Unit: 2-WWTRE

Process: SGR Source Classification Code: 5-01-007-71

Process Description:

This process is the WWTP's sludge gravity thickening (SGR) process, including four (4) 280,000 gallon sludge



gravity thickeners. The sludge from primary and final settling tanks (approximately 99% water) is concentrated in these thickening tanks. The water is sent back to the head of the WWTP or aeration tanks for additional treatment.

The total thruput is based on sludge design capacity of 230,000 lbs/day.

Emission Source/Control: GTTK1 - Process

Design Capacity: 280,000 gallons

Item 28.17(From Mod 0):

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

Emission Unit: 2-WWTRE

Process: SLD Source Classification Code: 5-01-007-92

Process Description:

This process is the WWTP's sludge dewatering (SLD) process in the dewatering facility.

Under this process, sludge is further concentrated by mechanical means, via centrifuge and presses, to remove water. Wet scrubber and activated carbon adsorbers are utilized for odor control purposes. The wet scrubbers use chemicals to achieve design H2S removal efficient at high H2S concentrations but could achieve adequate H2S removal efficiency by using less or no chemicals at normal low H2S inlet concentrations. Four (4) 50,000 cfm wet scrubbers (DWBS1, DWBS2, DWBS3, and DWBS4) are utilized for the building's ventilation odor control but only three of the four units are online at a time, one unit is backup. Two (2) double stage odor control systems (DWBC1 and DWBC2) comprised of wet scrubbers and activated carbon adsorbers are used for ventilation of the centrifuges operation, but only one system is online at a time and the other one is used for backup.

Emission Source/Control: DWBC1 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: DWBC2 - Control

Control Type: ACTIVATED CARBON ADSORPTION

Emission Source/Control: DWBS1 - Control

Control Type: WET SCRUBBER

Emission Source/Control: DWBS2 - Control

Control Type: WET SCRUBBER

Emission Source/Control: DWBS3 - Control

Control Type: WET SCRUBBER



Permit ID: 2-6007-00025/02005 Facility DEC ID: 2600700025

Emission Source/Control: DWBS4 - Process Design Capacity: 50,000 cubic feet per minute

Item 28.18(From Mod 0):

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

Emission Unit: 2-WWTRE

Process: SLS Source Classification Code: 5-01-007-95

Process Description:

This process is the WWTP's sludge storage (SLS) process, including four (4) sludge storage tanks in the dewatering building. Excessive sludge will be stored in these storage tanks. A dual bed carbon adsorber (SSTC1) is utilized near the sludge storage tanks for odor control purpose.

The total thruput is based on sludge design capacity of 230,000 lbs/day.

Emission Source/Control: SSTC1 - Process Design Capacity: 14,000 cubic feet per minute



Permit ID: 2-6007-00025/02005 Facility DEC ID: 2600700025