Division of Air Resources

Permit Review Report

Permit ID: 2-6202-00007/00015
Renewal Number: 2
12/23/2019

Facility Identification Data
Name: NORTH RIVER WASTEWATER TREATMENT PLANT
Address: 725 W 135TH ST
NEW YORK, NY 10031

Owner/Firm
Name: NYC DEPT OF ENVIRONMENTAL PROTECTION
Address: 96-05 HORACE HARDING EXPY FL 5
CORONA, NY 11368, USA
Owner Classification: Municipal

Permit Contacts
Division of Environmental Permits:
Name: DENISE L GRATTAN
Address: 1 HUNTERS POINT PLAZA
47-40 21ST ST
LONG ISLAND CITY, NY 11101
Phone:7184824997

Division of Air Resources:
Name: PARESH SHAH
Address: NYSDEC - REGION 2
47-40 21ST ST
LONG ISLAND CITY, NY 11101

Air Permitting Contact:
Name: NYC-DEP NORTH RIVER WPCP
Address: 725 W 135TH ST
NEW YORK, NY 10031
Phone:7185955050

Permit Description

Introduction

The Title V operating air permit is intended to be a document containing only enforceable terms and conditions as well as any additional information, such as the identification of emission units, emission points, emission sources and processes, that makes the terms meaningful. 40 CFR Part 70.7(a)(5) requires that each Title V permit have an accompanying "...statement that sets forth the legal and factual basis for the draft permit conditions". The purpose for this permit review report is to satisfy the above requirement by providing pertinent details regarding the permit/application data and permit conditions in a more easily understandable format. This report will also include background narrative and explanations of regulatory decisions made by the reviewer. It should be emphasized that this permit review report, while based on information contained in the permit, is a separate document and is not itself an enforceable term and condition of the permit.

Summary Description of Proposed Project
Please note the follwing in this renewal:

1. All fuel combusted blowers are removed from the facility and facility has electric blowers now.

2. Facility is removing all pump and blower engines and installation of new cogen engines are in process.

This is being done as a part of the Nox RACT Plan mentioned in the permit.

3. Having satisfied the requirements of condition no. 55of the Air Title V permit issued on October 17, 2014, the Department approved removal of the H2S monitoring network in the community.

4. In the emission formula, E is the emission factor (by EPA Fire, published 9/7/2016) for the digestor gas burner 17.11 lb/mmCF, for PM 10 and PM 2.5.

Attainment Status
NORTH RIVER WASTEWATER TREATMENT PLANT is located in the town of MANHATTAN in the county of NEW YORK.
The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10µ in diameter (PM10)	MODERATE NON-ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	SEVERE NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.
** NOx has a separate ambient air quality standard in addition to being an ozone precursor.

Facility Description:
The North River WWTP is a municipal wastewater treatment plant owned and operated by the New York City Department of Environmental Protection (DEP) and serves approximately 550,000 people on the west side of Manhattan. The WWTP is a secondary treatment plant with a design dry weather flow of 170 million gallons per day (MGD), and a peak wet weather flow of 340 MGD.

The WWTP has the following equipment and operations:

• Five (5) existing 1,700 bhp tri- fuel internal combustion engines (*Delaval Transamerican R-46 engines, installed in late 1980s,compression ignition engines)* mechanically coupled to five sewage pumps which pump sewage to the WWTP (Emission Sources PENG1, PENG2, PENG3, PENG4, PENG5). These engines are capable of firing digester gas and natural gas with #2 ultra-low sulfur distillate (ULSD) fuel oil pilot, or ULSD fuel oil alone. These engines are to be replaced with new cogeneration engines, currently under construction.

• Three (3) existing 940 bhp tri-fuel internal combustion engines mechanically coupled to five blowers which feed air to the WWTP's aeration tanks (Emission Sources BENG1, BENG2, BENG5). These engines are capable of firing digester gas and natural gas with ULSD fuel oil pilot, or ULSD fuel oil alone. These engines are to be replaced with new cogeneration engines, currently under construction. All blower engines removed as of Jan 2018.

• One (1) 2000 HP electrical blower. This 2000 HP electrical blower is powered by utility power and does not have any emissions.

• Three (3) 31.4 mmBtu/hr and one (1) 8.4 mmBtu/hr York-Shipley boilers (Emission Sources BLER1, BLER2, BLER3, BLER4) provide heat and hot water to the WWTP. These boilers are capable of firing digester gas, natural gas and ULSD fuel oil. However, per the DEP's NOx RACT Compliance Plan (dated December 30, 2011), these boilers are limited to operation on natural gas or digester gas during normal operation. ULSD fuel oil will only be used during emergency conditions when there is no digester gas or natural gas available or for intermittent maintenance testing.

• one existing waste sludge digester gas burner (Emission Sources WGBR1) for emergency flaring of excessive sludge digester gas.

• Two (2) 2,800 KW emergency turbine generators (Emission Sources TURG1, TURG2), which are planned to cease operation and be removed from the WWTP once the cogeneration project is completed.

• Two (2) emergency engine generators; one (1) 2,000 KW trailer-mounted emergency engine generator (Emission Source EGEN1), and one (1) 200 KW Blackstart engine generator (Emission Source BENG1). These emergency generators provide emergency power to achieve the State Pollutant Discharge Elimination System (SPDES) permit required wastewater treatment and disinfection in the event the WWTP loses utility power.

Ongoing Upgrade:

• Five (5) new 3.37 megawatt (MW) spark ignition reciprocating internal combustion engine generators are being installed that will be interconnected with the Con Edison electrical supply (Emission Sources COGN1, COGN2, COGN3, COGN4 and COGN5). Up to four of the five cogeneration engines will operate at any one time (13.5 MW maximum) with the fifth as a standby unit. The new cogeneration engines will operate on both anaerobic digester gas and natural gas and will be equipped with oxidation catalyst for carbon monoxide (CO), volatile organic compound (VOC), and non-criteria pollutant emissions control. The new cogeneration engines will be housed in the existing engine room and will exhaust through the existing pump engine stacks, with physical stack parameters such as location, height, and diameter remaining unchanged.

. one additional waste digester gas burner to be installed (Emission Source WGBR2) for emergency flaring of excessive sludge digester gas (minor mod 3)

. Four (4) 2 MW interim diesel emergency generators (emission sources IGEN1, IGEN2, IGEN3, IGEN4)may be installed during the construction period to provide back up power to the WTP during emergencies and will exhaust through the existing turbine generator stacks (CGTG1, CGTG2). Once the cogen engines are in operation, these 4 generators will be removed, if installed.

The WWTP has the following wastewater treatment processes and their associated equipment. Emissions

from these processes depend on the concentrations of pollutants of concern in the WWTP's influent of which the plant has limited control. The emissions from these processes are remaining unchanged.

- Headworks
- Influent Channels
- Primary settling tanks
- Activated sludge aeration tanks
- Activated sludge aeration tanks effluent mixed liquor channels
- Final settling tanks
- Chlorination contact tanks
- Sludge thickeners
- Sludge digesters
- Sludge storage tank
- Wiggins sludge digester gas holder
- Mixed liquor channels

Improvements are being made to the equipment associated with the sludge thickeners, sludge digesters, and Wiggins sludge digester gas holder. All the processes are covered except a small portion of the final settling tanks, and the air from these processes is collected & vented to the WWTP's odor control systems prior to being exhausted to the atmosphere. The WWTP has three (3) 2-stage odor control systems by location, North, West and South, consisting of nineteen (19) wet chemical scrubbers, and fifty six (56) activated carbon absorbers. The wet scrubbers use chemicals to achieve design H2S removal efficiency at high H2S concentrations but could achieve adequate H2S removal efficiency by using less or no chemicals at normal or low H2S inlet concentration.

Permit Structure and Description of Operations

The Title V permit for NORTH RIVER WASTEWATER TREATMENT PLANT is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

combustion - devices which burn fuel to generate heat, steam or power
incinerator - devices which burn waste material for disposal
control - emission control devices
process - any device or contrivance which may emit air contaminants that is not included in the above categories.

NORTH RIVER WASTEWATER TREATMENT PLANT is defined by the following emission unit(s):

Emission unit 1-COMB - This Unit includes the following combustion sources and their associated

equipment:

Five (5) Delaval Transamerican 1700 HP dual fuel internal combustion engines mechanically coupled to five sewage pumps which pump sewage to the plant. These engines fire primarily a mixture of digester gas and natural gas with #2 fuel oil pilot fuel in normal operation and exhaust to the atmosphere via individual stacks through the roof into the rooftop NYS Riverbank State Park.

Five (5) Mirrlees Blackstone 940 HP dual fuel internal combustion engines mechanically coupled to five blowers which feed air to the plant's aeration tanks. These engines fire primarily a mixture of digester gas and natural gas with #2 fuel oil pilot fuel in normal operation and exhaust to the atmosphere via individual stacks through the roof into the rooftop NYS Riverbank State Park. NYCDEP informed NYSDEC that all the 5 blower engines have been removed now.

The facility has recently installed (year 2011) a 2000HP electrical blower to the pool of blowers. This 2000HP electrical blower is powered by utility power and does not have any emission.

Three (3) 31.4 mmBtu/hr and one (1) 8.4 mmBtu/hr York-Shipley boilers to provide heat and hot water to the facility. These boilers primarily fire natural gas or sludge digester gas in normal operation and exhaust to atmosphere via three (3) stacks through the roof into the rooftop NYS Riverbank State Park. Only during curtailment period and for exercise, these boilers may fire fuel oil.

One (1) waste sludge digester gas burner to flare excessive sludge digester gas.

Four (4) emergency generators: two (2) 2,800 KW emergency turbine generator, one (1) 2,000 KW trailer-mounted emergency engine generator, and one (1) 200 KW blackstart engine generator. These emergency generators, each to operate no more than 500 hrs., provide critical emergency power support to achieve the State Pollutant Discharge Elimination System (SPDES) permit required minimum wastewater treatment and disinfection in the event the plant loses utility power. The two turbine generators exhaust to the atmosphere via individual stacks through the roof. These two turbine generators will be removed upon operation of the new cogen engines. The trailer-mounted 2000 KW emergency engine generator is also located on the plant's east roadway and exhaust from this emergency engine generator is piped to the main building exterior 70 feet away. The 200 kw black start engine enerator has a six inch diameter exhaust pipe routed across service road A to the outside of the bldg. through the center of the open archway.

Emission unit 1-COMB is associated with the following emission points (EP):
EMBG1, EMEG1, EMTG1, EMTG2, ENGB1, ENGB2, ENGB3, ENGB4, ENGB5, ENGP1, ENGP2, ENGP3, ENGP4, ENGP5, FLARE, MBLR1, MBLR2, MBLR3
Process: BLR is located at Building MAIN - This process includes operation of the plant's three (3) York-Shipley boilers with input capacity of 31.4 mmBtu/hr and one (1) York-Shipley boiler with input capacity of 8.4 mmBtu/hr, all of them capable of firing natural gas, digester gas or #2 fuel oil. These boilers are to meet the plant's space heating and wastewater treatment's sludge heating demand.

Natural gas is the main fuel and oil is used only in emergency purpose. Per DEP's NOx RACT plan of December 2011, these boilers are limited to operate on natural or digester gas during normal operation. Number 2 fuel oil will only be used during emergency conditions when there is no gas is available or for intermittent maintenance testing.

The exhaust from the four (4) boilers is vented to atmosphere via three (3) stacks, MBLR1, MBLR2 and MBLR3, through the roof into the rooftop NYS Riverbank State Park. Restricted with three (3) stacks, so

BLER2 and BLER3 share MBLR2, BLER1 and BLER4 have their own stacks, MBLR1 and MBLR3.

Process: FLA is located at Building MAIN - This process includes operation of the waste gas burners in the Waste Gas Flare Tower. At times digester gas produced by the plant is more than the demand of the plant's combustion processes, particularly in the summer. The excess sludge digester gas will be flared at the waste gas burner.

The plant has one John Zink waste digester gas burners WGBR and has its own exhaust FLARE rated at 1160 scfm. The operating temperature range for the most efficient flare operation is 1400 to 1800 degrees F. The flare temperature must be maintained within this temperature range. The thruput quantity of 248,400 MMBTU/Yr heat input is based on 414.3 MMCF total digester gas produced for fiscal year 2005.

Process: GNR is located at Building MAIN - This process includes operation of the plant's emergency generator(s).

The plant's existing emergency turbine generator TURG1 and TURG2 are each rated 2800 KW and fires #2 fuel oil. These existing emergency generators are located in the Main Building (MAIN) and exhausts via their own stacks EMTG1 and EMTG2 through the roof into the rooftop NYS Riverbank State Park. These emergency turbine generators provide power in the event of a commercial power supply outage and will be operated less than 500 hrs per year, and will not participate in any load sharing program CDRP/PLM. Under severe circumstances, if operation of these units are necessary to avoid potential black outs which may threaten public safety and health, these units will be limited to operate at loads that are in compliance with 40 cfr 60, subpart GG limits. These emergency generators are being removed. This process will continue to operate until the cogen plant is fully operational. Once emergency generators are shut down and removed, this will be removed.

There is an additional 2000 KW trailer-mounted emergency engine generator for backup, in case the failure of the two (2) existing emergency turbine generators. The emergency engine generator is located at the corner of east roadway and service road B. The exhaust from this emergency engine generator would be piped to the main building exterior 70 feet away, below the level of the rooftop NYS Riverbank State Park.

There is a 200 KW black-start engine generator used to kick start the emergency turbine generators. The 200 kW black-start engine generator has a six (6) inch diameter exhaust pipe routed across service road A to the outside of the building through the center of the open archway.

This process will continue to operate until the cogen plant is fully operational. Once emergency generators are shut down and removed, they will no longer be part of this process.

Process: PED is located at Building MAIN - This process includes operation of the five (5) pump engines in the Main Building (MAIN) on backup #2 fuel oil. These pump engines are directly connected to sewage pumps.

These five (5) Delaval Transamerican R-46 engines, PENG1 and PENG2 PENG3, PENG4 and PENG5 are each rated 1700 HP, exhaust through their own exhaust stacks ENGP1, ENGP2, ENGP3, ENGP4 and ENGP5, respectively.

The plant is removing existing equipment and replacing with new equipment, with the construction sequence as follows: remove the first engine, electrify the pump, install the new engine generator and make

operational. This sequence will continue til all the existing engines are removed. The replacement and resulting increase and decrease in emissions all occur within the 5 year contemporaneous period for compliance with NSR/PSD.

This process will continue to operate till the cogen plant is fully operational and pump engines are shut down and removed.

Process: PEG is located at Building MAIN - This process includes operation of the five (5) pump engines in the Main Building (MAIN) on primarily gaseous fuel (sludge digester gas or natural gas, or blend) with #2 fuel oil pilot. These pump engines are directly connected to sewage pumps.

These five (5) Delaval Transamerican R-46 engines, PENG1 and PENG2 PENG3, PENG4 and PENG5 are each rated 1700 HP, exhaust through their own exhaust stacks ENGP1, ENGP2, ENGP3, ENGP4 and ENGP5, respectively.

The plant is removing existing equipment and replacing with new equipment , with the construction sequence as follows: remove the first engine, electrify the pump, install the new engine generator and make operational. This sequence will continue til all the existing engines are removed. The replacement and resulting increase and decrease in emissions all occur within the 5 year contemporaneous period for compliance with NSR/PSD.

This process will continue to operate till the cogen plant is fully operational and pump engines are shut down and removed.

Emission unit 1COGEN -
This emission unit is comprised of five (5) new 3.03 megawatt (MW) spark ignition reciprocating internal combustion engine generators (Emission Sources COGN1,COGN2,COGN3,COGN4, and COGN5) that will be interconnected with the Con Edison electrical supply. Up to four of the five engines will operate at any one given time (12.12 MW maximum), with the fifth as a standby unit. The engines will operate on both digester gas and natural gas. The new cogeneration engines will be housed in the existing engine room and will exhaust through the existing pump engine stacks, with physical stack parameters such as location, height and diameter remaining unchanged.

In addition, this unit includes four (4) 2 MW interim diesel emergency generators (IGEN1, IGEN2, IGEN3, IGEN4) to be installed during the construction period to provide back up power to the plant during emergencies and will exhaust through the existing turbine generator stacks. Once the cogeneration plant is in operation, these four emergency generators will be removed.

This unit also includes a new completely enclosed waste digester gas burner (capasity of 1510 scfm) (Emission Source WGBR2) to flare the additional digester gas produced at the WTP in the extreme event that digester gas can not be used by the new cogen engines or boilers.

Existing emission points ENGP1, ENGP2, ENGP3, ENGP4, and ENGP5 are the existing pump engine stacks which will be used to exhaust the new cogeneration engines. A new emission point for the new waste gas burner (WGBR2) will be used for emergency flaring of excessive sludge digester gas. Existing emission points EMTG1 and EMTG2 are the existing emergency turbine generator stacks which will be used to exhaust the interim emergency generators during the construction period.

Emission unit 1COGEN is associated with the following emission points (EP):
CGNP1, CGNP2, CGNP3, CGNP4, CGNP5, CGTG1, CGTG2, FLARB
Process: COD is located at Building MAIN - cogen engines on either digester gas or blend of digester gas and natural gas.

Process: CON is located at Building MAIN - new cogen engines solely on natural gas.

Process: INT is located at Building MAIN - this process includes operation of the four diesel interim emergency generators used during the construction period to provide back up power to the plant during power emergencies. the process will be removed once the cogeneration plant is in operation.

Process: WGB This process includes operation of the new waste gas burner (WGBR2) to handle digester gas under emergency conditions when the cogeneration engines are not in operation. The operating temperature range for the most efficient flare operation is 1400 to 1800 degrees F. The flare temperature must be maintained within this temperature range.

The new flare will operate at the following design parameters:
- Design capacity: 1,510 SCFM
- Throughput quantity: 500,003 MMBTU/yr (based on 8760 hrs/yr)
- Heat input: 57.1 MMBTU/hr

* Throughput and heat input calculations are based on average gross heating value (HHV) of 630 MMBTU/cu. ft. from 03/31/2015 North River WWTP digester gas analysis data and waste gas burner design capacity.

Emission unit 2WWTRE - This Unit includes the following wastewater treatment processes and their associated equipment. Emissions from these processes depend on the concentrations of pollutants of concern in the plant's influent of which the plant does not have complete control.

Headworks
Influent channels
Primary settling tanks
Activated sludge aeration tanks
Activated sludge aeration tanks effluent mixed liquor channels
Final settling tanks
Chlorination contact tanks with dechlorination
Sludge thickeners
Sludge mechanical centrifuge thickeners
Sludge digesters
Sludge storage tank
Wiggins sludge digester gas holder

All the processes are covered except small portion of the final settling tank, and the air from these processes is collected & vented to the plant's odor control systems prior to being exhausted to atmosphere.

The plant has three (3) 2-stage odor control systems by location, North, West and South consisting of wet scrubbers and activated carbon adsorbers. For the North River WWTP odor control system, the chemicals used by the wet scrubbers are sodium hypochlorite and caustic, in order to achieve 90% removal of H2S at

the design's H2S concentration specifications, as high as 10 ppm. Chemical consumption is controlled automatically by setting pH and ORP (Oxidation Reduction Potential). The manufacturer recommends maintaining the scrubbers' pH at approximately 10.5 and ORP at about +400 to +600 millivolts. For daily operation at the WWTP with H2S levels normally at ppb not ppm, the actual operation differs from the manufacturer's recommendations by using less or no chemicals, in order to avoid chemical waste and excessive chemicals be released with the scrubbers' discharge water flow.

The North Odor Control System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers exhausting through two(2) identical large stacks. The West Odor Control System consists of four (4) wet scrubbers and twelve (12) activated carbon adsorbers and the treated air of this system is sent to the North Odor Control System plenum and exits through the North Odor Control System's two identical exhaust stacks. The South North Odor Control System consists of seven (7) wet scrubbers and eighteen (18) activated carbon adsorbers to exhaust through one(1) large stack.

Emission unit 2WWTRE is associated with the following emission points (EP):
NRTH1, NRTH2, SUTH1
Process: ART is located at Building AERATION - This process is the plant activated sludge aeration (ART) consisting of five (5) aeration tanks (AERTK) (330'X74.6'X29.2') and the waste sludge wet well. 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 matter 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. Emissions from this process are controlled by the North Odor Control (NTHOC) System consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration. The NTHOC System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers, that will discharge to a common plenum that conveys the treated air to two (2) large exhaust stacks (NRTH1 and NRTH2). The maximum exhaust flow rates from NRTH1 and NRTH2 are 222,000 acfm (per stack).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: CCT This process is the plant chlorine contact tanks (CCT) disinfection process consisting of four (4) chlorination tanks CHLTK (639'X28.5'X8') and required disinfection of the plant effluent. This process also includes de-chlorination using sodium bisulfite, with four (4) new 6,000 gallon bulk storage tanks and two (2) new 2,000 gallon day tanks for sodium bisulfite. Off gas from each storage tank will go through a carbon drum before conveyed to the plant's South Odor Control System. Off gas from each day tank will go through a carbon drum before conveyed to the plant's North Odor Control System.

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 waters. Emissions from this process are controlled by the South Odor Control (STHOC) System which consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration. The STHOC System consist of seven (7) wet scrubbers and eighteen (18) carbon adsorbers that will discharge to one (1) large exhaust stack (SUTH1).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: FST is located at Building MAIN - This process is the plant final settling tanks (FST) consisting of sixteen (16) final settling tanks (FINTK) (4 Bays, 250'X74'X10.9') and the two (2) mixed liquor channels which feed the 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 two mixed liquor channels are covered and the air is vented to the North Odor Control System (NTHOC).

Emissions from this process are controlled by the South Odor Control (STHOC) System, consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration. The STHOC System consist of seven (7) wet scrubbers and eighteen (18) carbon adsorbers that will discharge to one (1) large exhaust stack (SUTH1).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: GHT The process consists of the plant's sludge digester gas storage process (GHT). Digester gas produced in the digester tanks will be stored in the 135,000 ft3 Wiggins Gas Holder (WGHTK) for later use at combustion units. Fugitive emissions from this tank are controlled by the South Odor Control (STHOC) System which consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration. The STHOC System consist of seven (7) wet scrubbers and eighteen (18) carbon adsorbers that will discharge to one (1) large exhaust stack (SUTH1).”

Process: MXL is located at Building MAIN - The process consists of the plant's mixed liquor channel process (MXL). Odors identified emitting from the mixed liquor channels are primarily caused by the aeration of the channels used to keep the mixed liquor in suspension. Emission from this process is controlled by the South Odor Control System (STHOC).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: PHW is located at Building MAIN - This process is the plant's headworks (PHW) including the plant's six (6) influent bar screens and influent channels in the plant'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. Emissions from this process are controlled by the North Odor Control (NTHOC) System which consists of wet scrubbers and activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration. The North Odor Control System consist of eight (8) wet scrubbers and twenty-four (24) carbon adsorbers, that will discharge to a common plenum that conveys the treated air to two (2) large exhaust stacks (NRTH1 and NRTH2). The maximum exhaust flow rates from NRTH1 and NRTH2 are 222,000 acfm (per stack).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: PST is located at Building MAIN - This process is the plant primary settling tanks (PST) consisting of eight (8) primary settling tanks PRITK (6 Bays, 187.5'X85.8'X11.5').

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. Each primary settling tank is equipped with sludge collectors, dipping weirs, scum removal equipment, inlet sluice gate overflow weirs. The PTS process is covered and the emissions are controlled by the West Odor Control (WSTOC) 2-stage odor control system consists of four (4) wet scrubbers and twelve(12) activated carbon adsorbers. The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration.

The treated air of this system is sent to the NTHOC exhaust plenum to two (2) large exhaust stacks (NRTHI and NRTH2).

The total thruput is based on the design average dry weather flow of 170 MGD.

Process: SDA is located at Building SLUDGE - This process is the plant's Sludge Anaerobic Digester (SAD) process including eight (8) sludge digestion tanks (DIGTK) each is 200,000 ft3.

After sludge gravity thickening, for making it safer for the environment, the sludge is placed in oxygen-free tanks called digesters. Digesters are heated to at least 95 deg 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 or engines. Fugitive emissions from the digester relief valve are controlled by the South Odor Control (STHOC) System which currently consists of seven (7) wet scrubbers and eighteen (18) activated carbon adsorbers to exhaust through one (1) large exhaust stack SUTH1.
The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration.

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

Process: SST is located at Building SLUDGE - This process is the plant's Sludge Storage Tanks overflow boxes & wells. Emissions from this process are controlled by the South Odor Control (STHOC) System consists of seven (7) scrubbers and eighteen (18) activated carbon adsorbers.
The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet concentration.

Process: STG is located at Building SLUDGE - This process is the plant's Sludge Gravity Thickening (SGT) process including ten (10) 40,000 cu. ft sludge gravity thickener tanks SGTTK. The primary and final settling tank's 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. Emissions from this process are controlled by the South Odor Control (STHOC) System consists of seven (7) scrubbers and eighteen (18) activated carbon adsorbers.
The wet scrubbers will use chemical to achieve design H2S removal efficient at high H2S concentration but could achieve adequate H2S removal efficiency by using less or no chemical at normal low H2S inlet

concentration.

Title V/Major Source Status
NORTH RIVER WASTEWATER TREATMENT PLANT is subject to Title V requirements. This determination is based on the following information:
Facility has potential to emit NO2 of a major facility (TV catagory).
Facility is also major for HAP

Program Applicability
The following chart summarizes the applicability of NORTH RIVER WASTEWATER TREATMENT PLANT with regards to the principal air pollution
regulatory programs:

Regulatory Program	Applicability
PSD	NO
NSR (non-attainment)	YES
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	YES
NSPS	YES
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	YES
SIP	YES

NOTES:
PSD Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR 231-5, 231-6) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61, 6 NYCRR 200.10) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

MACT Maximum Achievable Control Technology (40 CFR 63, 6 NYCRR 200.10) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources.

The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

NSPS New Source Performance Standards (40 CFR 60, 6 NYCRR 200.10) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212-3, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH, 6 NYCRR 200.10) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

Compliance Status
Facility is in compliance with all requirements.

SIC Codes
SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

SIC Code	Description
4952	SEWERAGE SYSTEMS

SCC Codes
SCC or Source Classification Code is a code developed and used" by the USEPA to categorize processes

which result in air emissions for the purpose of assessing emission factor information.Each SCC represents a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

SCC Code	Description
1-03-005-02	EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - DISTILLATE OIL 10-100MMBTU/HR **
2-02-002-04	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - NATURAL GAS Reciprocating: Cogeneration
2-02-004-01	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION LARGE BORE ENGINE Diesel
2-02-004-02	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION LARGE BORE ENGINE Dual Fuel (Oil/Gas)
2-03-007-02	INTERNAL COMBUSTION ENGINES - COMMERCIAL/INSTITUTIONAL COMMERCIAL/INSTITUTIONAL IC ENGINE - DIGESTER GAS RECIPROCATING IC ENGINE: POTW DIGESTER GAS
2-04-003-02	INTERNAL COMBUSTION ENGINES - ENGINE TESTING INTERNAL COMBUSTION ENGINE: ENGINE TESTING - TURBINE Diesel/Kerosene
2-04-004-02	INTERNAL COMBUSTION ENGINES - ENGINE TESTING INTERNAL COMBUSTION ENGINE: ENGINE TESTING - RECIPROCATING ENGINE Diesel/Kerosene
5-01-007-07	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: HEADWORKS SCREENING
5-01-007-20	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: PRIMARY SETTLING TANK
5-01-007-31	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: DIFFUSED AIR ACT SLUDGE
5-01-007-40	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: SECONDARY CLARIFIER
5-01-007-60	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: CHLORINE CONTACT TANK
5-01-007-71	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: GRAVITY SLUDGE THICKENER
5-01-007-81	SOLID WASTE DISPOSAL - GOVERNMENT

	SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT POTW: ANAEROBIC DIGESTER
5-01-007-89	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT SLUDGE DIGESTER GAS FLARE
5-01-007-99	SOLID WASTE DISPOSAL - GOVERNMENT SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE TREATMENT OTHER NOT CLASSIFIED
5-03-007-89	SOLID WASTE DISPOSAL - INDUSTRIAL SOLID WASTE DISPOSAL: INDUSTRIAL - LIQUID WASTE SLUDGE DIGESTER GAS FLARE

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Service code is an identifier assigned to every chemical compound. [NOTE: Certain CAS No.'s contain a 'NY' designation within them. These are not true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant , including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
000124-38-9	CARBON DIOXIDE	193517999			
0NY750-00-0	CARBON DIOXIDE EQUIVALENTS	258049641			
000630-08-0	CARBON MONOXIDE	278862			
000050-00-0	FORMALDEHYDE	5553			
000074-82-8	METHANE	7720			
010102-43-9	NITRIC OXIDE	2056			
0NY210-00-0	OXIDES OF NITROGEN	297577			
0NY075-00-0	PARTICULATES	35856			
0NY075-02-5	PM 2.5	25855			
0NY075-00-5	PM-10	35856			
007446-09-5	SULFUR DIOXIDE	24256			
0NY100-00-0	TOTAL HAP	31142			
0NY998-00-0	VOC	67140			

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)
The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

Item B: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(a)(4)

Owners and/or operators of facilities having an issued Title V 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.

Item C: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official.This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item D: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Item F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)
It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

Item G: Property Rights - 6 NYCRR 201-6.4(a)(6)
This permit does not convey any property rights of any sort or any exclusive privilege.

Item H: Severability - 6 NYCRR Part 201-6.4(a)(9)
If any provisions, parts or conditions of this permit are found to be invalid or are the subject

of a challenge, the remainder of this permit shall continue to be valid.

Item I: Permit Shield - 6 NYCRR Part 201-6.4(g)

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;

ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;

iii. The applicable requirements of Title IV of the Act;

iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

Item J: Reopening for Cause - 6 NYCRR Part 201-6.4(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 2 01-6.7 and Part 621.

ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.

iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

Proceedings to reopen and issue Title V facility permits shall follow the same procedures as apply to initial permit issuance but shall affect only those parts of the permit for which cause to reopen exists.

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

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.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5

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

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

(1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
(2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;
(3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions

that exceeded the emission standards, or other requirements in the permit; and
(4) The facility owner or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

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

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement. item_02

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.

Regulatory Analysis

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
FACILITY	ECL 19-0301	102	Powers and Duties of the Department with respect to air pollution control
1--COMB/-/BLR	40CFR 60-A.4	92	General provisions - Address
1--COMB/-/BLR	40CFR 60-Dc.48c(a)	93	Reporting and Recordkeeping Requirements.
1--COMB/-/BLR	40CFR 60-Dc.48c(g)	94	Reporting and Recordkeeping Requirements.
1--COMB/-/GNR	40CFR 60-GG	99	Stationary gas turbines over 10 million Btu per hour
FACILITY	40CFR 60-IIII	45	Standards of Performance for Stationary Compression Ignition

			Internal Combustion Engines
1-COGEN/-/INT	40CFR 60-IIII.4205(b)	76, 77	Emission Standards - 2007 or later Emergency Non Fire Pump Stationary CI-IC Engines Displacing < 30 liters/cylinder
FACILITY	40CFR 60-IIII.4206	46	Stationary Compression Ignition IC Engines - Duration of Emission Standards
1-COGEN/-/INT	40CFR 60-IIII.4207(b)	78, 79	Stationary Compression Ignition IC Engines - Fuel Requirements beginning October 1, 2010
1-COGEN/-/INT	40CFR 60-IIII.4211(a)	80	Stationary Compression Ignition Engines - Compliance Requirements
FACILITY	40CFR 60-IIII.4211(c)	47	Stationary Compression Ignition Engines - Compliance Demonstration
1-COGEN/-/INT	40CFR 60-IIII.4211(f)	81	Stationary Compression Ignition IC Engines - Emergency Engine Operation
FACILITY	40CFR 60-IIII.4214(b)	48	Notification, Recordkeeping Requirements - Emergency stationary CI-IC engines
1-COGEN	40CFR 60-JJJJ	59	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
1-COGEN/-/COD	40CFR 60-JJJJ.4230(a)(4	67	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines - Applicability
1-COGEN/-/CON	40CFR 60-JJJJ.4230(a)(4	74	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines - Applicability
1-COGEN/-/INT	40CFR 63-ZZZZ.6590(c)	82	Reciprocating Internal Combustion Engine (RICE) NESHAP - Stationary RICE subject to Regulations under 40 CFR Part 60
1-COGEN/-/INT	40CFR 63-ZZZZ.6645(f)	83	Reciprocating Internal Combustion Engine (RICE) NESHAP - Notification of complinace status

FACILITY	40CFR 68	19	Chemical accident prevention provisions
FACILITY	40CFR 82-F	20	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of equipment.
1-COGEN/-/WGB/WGBR2	6NYCRR 200.7	85	Maintenance of equipment.
1--COMB/-/FLA/WGBR1	6NYCRR 200.7	97	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	103	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	11	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	12	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2(a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	21, 22, 49, 50	Title V Permits and the Associated Permit Conditions
1-COGEN/-/COD	6NYCRR 201-6	60, 61, 62, 63, 64	Title V Permits and the Associated Permit Conditions
1-COGEN/-/CON	6NYCRR 201-6	68, 69, 70, 71	Title V Permits and the Associated Permit Conditions
1-COGEN	6NYCRR 201-6.1(a)	52, 53	Requirement for a Title V facility permit
1--COMB	6NYCRR 201-6.1(a)	86	Requirement for a Title V facility permit
FACILITY	6NYCRR 201-6.4(a)(4)	15	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	16	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4(c)(3)(ii	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	23	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)(6)	17	Off Permit Changes
FACILITY	6NYCRR 201-7	51	Federally Enforceable

			Emissions Caps
FACILITY	6NYCRR 202-1	24, 25	Emission Testing, Sampling and Analytical Determinations
FACILITY	6NYCRR 202-1.1	18	Required emissions tests.
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	104	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 212-1.5(e)(2)	39	Demonstrating compliance for Part 212 through the federal NESHAP program
FACILITY	6NYCRR 215.2	9	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2(h)	40	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 227.2(b)(1)	44	Particulate emissions.
FACILITY	6NYCRR 227-1.3(a)	41	Smoke Emission Limitations.
1-COGEN/-/INT	6NYCRR 227-1.3(a)	75	Smoke Emission Limitations.
1-COGEN/-/COD	6NYCRR 227-2	65	Reasonably available control technology for NOx
1-COGEN/-/CON	6NYCRR 227-2	72	Reasonably available control technology for NOx
1--COMB	6NYCRR 227-2.3(b)	87	Application requirements.
1--COMB	6NYCRR 227-2.4(c)	88	Mid-size boilers.
1--COMB/-/BLR/BLER1	6NYCRR 227-2.4(c)(1)(ii	95	2010 NOx RACT presumptive limit.
1--COMB/-/BLR/BLER2	6NYCRR 227-2.4(d)	96	Small boilers, small combustion turbines, and small stationary internal combustion engines.
FACILITY	6NYCRR 227-2.4(f)	42, 43	Stationary internal combustion engines.
1--COMB/-/GNR	6NYCRR 227-2.4(f)	98	Stationary internal combustion engines.
1--COMB/-/PED	6NYCRR 227-2.4(f)	100	Stationary internal combustion engines.
1--COMB/-/PEG	6NYCRR 227-2.4(f)	101	Stationary internal combustion engines.
1--COMB	6NYCRR 227-2.5(c)	89, 90	Alternative RACT option.
1--COMB	6NYCRR 231-10	91	Emission Reduction Credits (ERCs)
1-COGEN/-/COD	6NYCRR 231-6	66	Mods to Existing Major Facilities in Nonattainment and Attainment Areas of

1-COGEN/-/CON	6NYCRR 231-6	73	the State in the OTR Mods to Existing Major Facilities in Nonattainment and Attainment Areas of the State in the OTR
1-COGEN/-/WGB	6NYCRR 231-6	84	the State in the OTR Mods to Existing Major Facilities in Nonattainment and Attainment Areas of the State in the OTR

Applicability Discussion:
Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

ECL 19-0301
This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6 NYCRR 200.6
Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6 NYCRR 200.7
Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer's specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

6 NYCRR 201-1.4
This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

6 NYCRR 201-1.7
Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8
Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)
An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, 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.

6 NYCRR 201-3.3 (a)
The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units

subject to 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.

6 NYCRR Subpart 201-6
This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6 NYCRR 201-6.4 (a) (4)
This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.4 (a) (7)
This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.4 (a) (8)
This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

6 NYCRR 201-6.4 (c)
This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.4 (c) (2)
This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

6 NYCRR 201-6.4 (c) (3) (ii)
This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6 NYCRR 201-6.4 (d) (4)

This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6 NYCRR 201-6.4 (e)
Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 201-6.4 (f) (6)
This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

6 NYCRR 202-1.1
This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

6 NYCRR 202-2.1
Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calENDar year.

6 NYCRR 202-2.5
This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.

6 NYCRR 211.2
This regulation limits opacity from sources to less than or equal to 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent opacity.

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.

40 CFR Part 68
This Part lists the regulated substances and there applicability thresholds and sets the requirements for stationary sources concerning the prevention of accidental releases of these substances.

40 CFR Part 82, Subpart F
Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act AmENDments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and manufacturers of appliances and recycling and recovery equipment. Those individuals, operations, or activities affected by this rule, may be required to comply with specified disposal, recycling, or recovery practices, leak repair practices, recordkeeping and/or technician certification requirements.

Facility Specific Requirements
In addition to Title V, NORTH RIVER WASTEWATER TREATMENT PLANT has been determined to be subject to the following regulations:

40 CFR 60.4
This condition lists the USEPA Region 2 address for the submittal of all communications to the "Administrator". In addition, all such communications must be copied to NYSDEC Bureau of Quality Assurance (BQA).

40 CFR 60.4205 (b)
This requirement applies to owners and operators of 2007 model year and later emergency stationary CI IC engines with a displacement less than 30 liters/cylinder that are not fire pump engines. An applicable source must comply with the emission standards for new nonroad CI engines for all pollutants (HC, PM, NOx, NMHC + NOx and CO) for the same model year and maximum engine power as per 40 CFR 60.4202.

40 CFR 60.4206
This requirement mandates that owners or operators of stationary compression ignition IC engines that achieve the emission standards as required in 40 CFR 60.4204 and 4205 maintain the engines according to the manufacturer's written instructions or procedures developed by the owner or operator that are approved by the engine manufacturer, over the entire life of the engine.

40 CFR 60.4207 (b)
These conditions states the fuel requirements for compression ignition stationary engines with a displacement of less than 30 liters per cylinder

40 CFR 60.4211 (a)
This regulation states that the owner or operator and must comply with the emission standards specified in 40 CFR 60 Subpart IIII and must operate and maintain the stationary compression ignition internal combustion engine and control device according to the manufacturer's written instructions.

40 CFR 60.4211 (c)
The facility must comply with relavant condition of this regulations

40 CFR 60.4211 (f)
These conditions state the hour limits for emergency engines operating in nonemergency engine situations

40 CFR 60.4214 (b)

Initial notification, reporting, and recordkeeping requirements for owners or operators of a stationary CI internal combustion engine.

40 CFR 60.4230 (a) (4) (i)

Owners and operators of stationary spark igintied internal combustion engines (SI ICE), that commence construction after June 12, 2006, where the stationary SI ICE are manufactured on or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP) are subject to the requirements of 40 CFR 60 Subpart JJJJ.

40 CFR 60.48c (a)

This regulation requires the owner and operator of each affected facility to submit notification of the date of construction or reconstruction, anticipated startup, and actual startup of the facility. The notification must include the following information:

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

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

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

40 CFR 60.48c (g)

The owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each day.

40 CFR 63.6590 (c)

This regulation states that an affected source that is a new or reconstructed stationary RICE located at an area source must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR Part 60 Subpart JJJJ, for spark ignition engines.

40 CFR 63.6645 (f)

This regulation requires the facility to submit its initial notification in the format

specified in 40 CFR 63 Subpart A.

40 CFR Part 60, Subpart GG
Facility should comply with this regulation.

40 CFR Part 60, Subpart IIII

Facility should comply with this regulation.

40 CFR Part 60, Subpart JJJJ

Facility should comply with this regulation.

6 NYCRR 201-6.1 (a)
This regulation requires the following stationary sources to obtain a Title V permit:
1. Any major stationary source;
2. Any stationary source subject to a New Source Performance Standard (NSPS) in 40 CFR 60;
3. Any stationary source regulating hazardous air pollutants (HAP's);
4. Any affected source (subject to the Acid Rain requirements under Title IV of the Act);
5. Any stationary source in a category designated by the EPA or the department as per rulemaking.

6 NYCRR 211.1
This regulation requires that 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.

6 NYCRR 212-1.5 (e) (2)
A process emission source subject to the Federal National Emission Standards for Hazardous Air Pollutants (NESHAP) satisfies the requirements of Part 212 for the respective air contaminant regulated by the Federal standard.

However, NESHAPs regulating High Toxicity Air Contaminants (HTACs) must provide evidence that the maximum offsite ambient air concentration is less than the

AGC/SGC and that emissions are less than the PB trigger for the respective air contaminant.

6 NYCRR 225-1.2 (h)
Sulfur-in-fuel limitation for the firing of distillate oil on or after July 1, 2016.

6 NYCRR 227.2 (b) (1)
This regulation is from the 1972 version of Part 227 and still remains as part of New York's SIP. The rule establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for any oil fired stationary combustion installation.

6 NYCRR 227-1.3 (a)
This regulation prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.

6 NYCRR 227-2.3 (b)
Deadline for application/information submission.

6 NYCRR 227-2.4 (c)
Emission limits for mid-size boilers.

6 NYCRR 227-2.4 (c) (1) (ii)
Future NOx RACT presumptive limit effective 7/1/14.

6 NYCRR 227-2.4 (d)
This section includes NOx RACT requirements for small boilers, small combustion turbines, and small stationary internal combustion engines.

6 NYCRR 227-2.4 (f)

NOx RACT emission limits for stationary internal combustion engines.

6 NYCRR 227-2.5 (c)

This provision allows the owner or operator to demonstrate that the applicable presumptive RACT emission limit in section 227-2.4 of this Subpart is not economically or technically feasible. Based on this determination the Department is allowed to set a higher emission source specific emission limit.

6 NYCRR Subpart 201-7

Capping exist for this facility under 231

6 NYCRR Subpart 202-1

This subpart of Part 202 establishes the general criteria for verifying emissions by means of emissions sampling, testing and associated analytical determinations.

6 NYCRR Subpart 227-2

This regulation limits the emission of oxides of nitrogen (NOx) from stationary combustion installations (boilers, combustion turbines and internal combustion engines).

6 NYCRR Subpart 231-10

This subpart outlines the procedures used to create and use emission reduction credits (ERCs).

6 NYCRR Subpart 231-6

This Subpart applies to modifications to existing major facilities in non-attainment areas and attainment areas of the State within the OTR.

Compliance Certification
Summary of monitoring activities at NORTH RIVER WASTEWATER TREATMENT PLANT:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
1--COMB/-/BLR	93	record keeping/maintenance procedures
1--COMB/-/BLR	94	record keeping/maintenance procedures
1--COMB/-/GNR	99	record keeping/maintenance procedures
1-COGEN/-/INT	76	record keeping/maintenance procedures
1-COGEN/-/INT	77	record keeping/maintenance procedures
1-COGEN/-/INT	78	work practice involving specific operations
1-COGEN/-/INT	79	work practice involving specific operations
1-COGEN/-/INT	80	record keeping/maintenance procedures
FACILITY	47	record keeping/maintenance procedures
1-COGEN/-/INT	81	monitoring of process or control device parameters as surrogate
FACILITY	48	record keeping/maintenance procedures
1-COGEN	59	record keeping/maintenance procedures
1-COGEN/-/INT	83	record keeping/maintenance procedures
1-COGEN/-/WGB/WGBR2	85	record keeping/maintenance procedures
1--COMB/-/FLA/WGBR1	97	monitoring of process or control device parameters as surrogate
FACILITY	22	record keeping/maintenance procedures
1-COGEN/-/COD	60	record keeping/maintenance procedures
1-COGEN/-/COD	61	record keeping/maintenance procedures
1-COGEN/-/COD	62	record keeping/maintenance procedures
1-COGEN/-/COD	63	intermittent emission testing
1-COGEN/-/COD	64	intermittent emission testing
1-COGEN/-/CON	68	record keeping/maintenance procedures
1-COGEN/-/CON	69	record keeping/maintenance procedures
1-COGEN/-/CON	70	intermittent emission testing
1-COGEN/-/CON	71	intermittent emission testing
1-COGEN	52	record keeping/maintenance procedures
1-COGEN	53	record keeping/maintenance procedures
1--COMB	86	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
1-COGEN	54	work practice involving specific operations
1-COGEN	55	work practice involving specific operations
1-COGEN	56	work practice involving specific operations
1-COGEN	57	work practice involving specific operations
1-COGEN	58	work practice involving specific operations
FACILITY	24	record keeping/maintenance procedures
FACILITY	25	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	27	record keeping/maintenance procedures
FACILITY	28	record keeping/maintenance procedures
FACILITY	29	record keeping/maintenance procedures
FACILITY	30	record keeping/maintenance procedures
FACILITY	31	record keeping/maintenance procedures
FACILITY	32	record keeping/maintenance procedures
FACILITY	33	record keeping/maintenance procedures
FACILITY	34	record keeping/maintenance procedures
FACILITY	35	record keeping/maintenance procedures
FACILITY	36	record keeping/maintenance procedures
FACILITY	37	record keeping/maintenance procedures
FACILITY	38	record keeping/maintenance procedures
FACILITY	39	record keeping/maintenance procedures

FACILITY	40	monitoring of process or control device parameters as surrogate
FACILITY	44	intermittent emission testing
FACILITY	41	record keeping/maintenance procedures
1-COGEN/-/INT	75	monitoring of process or control device parameters as surrogate
1-COGEN/-/COD	65	intermittent emission testing
1-COGEN/-/CON	72	intermittent emission testing
1--COMB	87	record keeping/maintenance procedures
1--COMB	88	record keeping/maintenance procedures
1--COMB/-/BLR/BLER1	95	intermittent emission testing
1--COMB/-/BLR/BLER2	96	record keeping/maintenance procedures
FACILITY	42	record keeping/maintenance procedures
FACILITY	43	record keeping/maintenance procedures
1--COMB/-/GNR	98	intermittent emission testing
1--COMB/-/PED	100	intermittent emission testing
1--COMB/-/PEG	101	intermittent emission testing
1--COMB	89	record keeping/maintenance procedures
1--COMB	90	record keeping/maintenance procedures
1--COMB	91	record keeping/maintenance procedures
1-COGEN/-/COD	66	record keeping/maintenance procedures
1-COGEN/-/CON	73	record keeping/maintenance procedures
1-COGEN/-/WGB	84	record keeping/maintenance procedures

Basis for Monitoring

Facility has to monitor for the following contaminnats as per relavant regulations.
225: fuel in sulfur
227: PM 10 and Opacity
227: NOx
211/212: H2S/Odor

DEP had performed a plant-wide Air Guide 1 Analysis including both the plant's combustion and process sources, and the report submitted to DEC 6/25/2014.

6 NYCRR Part 231 defines "PM10" and "PM2.5" as the sum of the filterable and condensable fractions of PM10 and PM2.5, respectively. The limits on PM10 and PM2.5 emissions for emission unit EU:1-COGEN include condensable PM10 and PM2.5; Facility will conduct its performance tests for both condensable and filterable PM10 and PM2.5; account for both condensable and filterable PM10 and PM2.5 when determining compliance with the permit limits on PM10 and PM2.5 emissions for EU:1- COGEN.

Formaldehyde emissions be included in the calculations of VOC emissions.

Facility is subject to the following federal regulations: NSPS 2G (2 existing turbine generators), 4J (Stationary spark ignition internal cumbustion engines, Cogen engines). Facility will not be subject to 4I (compression ignited internal combustion engines (interim engine generators, not plan to install now), NESHAP 3V, NESHAP 4Z, NESHAP 5D (all blower engines ceased operation since Jan 2018 and currently not a major source of HAP, NESHAP for major HAP source not applicable).

Existing Pump Engines: Delaval Transamerican R 46 1700 bhp
Existing Blower Engines: Mirrlees Blackstone K5 940 bhp. All blowers engines removed as of Jan 2018

DEP had performed a plant-wide Air Guide 1 Analysis including both the plant's combustion and process sources, and the report submitted to DEC 6/25/2014.

6 NYCRR Part 231 defines "PM10" and "PM2.5" as the sum of the filterable and condensable fractions of PM10 and PM2.5, respectively. The limits on PM10 and PM2.5 emissions for emission unit EU:1-COGEN include condensable PM10 and PM2.5; Facility will conduct its performance tests for both condensable and filterable PM10 and PM2.5; account for both condensable and filterable PM10 and PM2.5 when determining compliance with the permit limits on PM10 and PM2.5 emissions for EU:1- COGEN.

Formaldehyde emissions be included in the calculations of VOC emissions.

Facility is subject to the following federal regulations: NSPS 2G (2 existing turbine generators), 4J (Stationary spark ignition internal cumbustion engines, Cogen engines). Facility will not be subject to 4I (compression ignited internal combustion engines (interim engine generators, not plan to install now), NESHAP 3V, NESHAP 4Z, NESHAP 5D (all blower engines ceased operation since Jan 2018 and currently not a major source of HAP, NESHAP for major HAP

source not applicable).