



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

**Facility Identification Data**

Name: NEWTOWN CREEK WASTEWATER TREATMENT PLANT

Address: 329-69 GREENPOINT AVE

BROOKLYN, NY 11222

**Owner/Firm**

Name: NYC DEPT OF ENVIRONMENTAL PROTECTION

Address: 96-05 HORACE HARDING EXPWY 5TH FL

CORONA, NY 11368, USA

Owner Classification: Municipal

**Permit Contacts**

Division of Environmental Permits:

Name: ELIZABETH A CLARKE

Address: NYSDEC

47-40 21ST ST

LONG ISLAND CITY, NY 11101-5407

Phone:7184824997

Division of Air Resources:

Name: PARESH SHAH

Address: NYSDEC

47-40 21ST ST

LONG ISLAND CITY, NY 11101

Air Permitting Contact:

Name: VINCENT SAPIENZA

Address: NYCDEP / BWPC

96-05 HORACE HARDING EXPWY

FLUSHING, NY 11368

Phone:7185954906

**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**

This is a permit application for the renewal of the Part 201 Title V permit for Newtown Creek Wastewater Pollution Control Plant (WPCP). The facility operates under a Part 201 Title V air permit. As required under 6NYCRR621.13, the renewal application is being submitted no less than 180 calendar days prior to the expiration of the existing permit.



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

**Attainment Status**

NEWTOWN CREEK WASTEWATER TREATMENT PLANT is located in the town of BROOKLYN in the county of KINGS.

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)	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:**

Newtown Creek WPCP is a 310 million gallon per day (mgd) publicly owned secondary wastewater treatment plant. The standard industrial classification code is 4952-Sewerage Systems.

This facility is currently undergoing a major construction upgrade. This process upgrade is divided into two components: interim, final. The final upgrade will include construction of new processes and reconstruction of some existing processes as well as repair and replacement of existing equipments.

The plant is using purchased electricity. This facility is categorized into eight (8) Emission Units i.e.: 1-BLERS, 2-WWTRE, 3-NSLUD, 3-SLUDG, 4-RESID, 5-MISCS, 6-FLARE and 7-GTURB.

Newtown Creek WPCP is a major air pollution facility since it emits Nitrogen Oxide (NOx) in excess of the 25 tons per year (TPY) NOx major source threshold (see the definition section of 6NYCRR Part 231-2). Volatile Organic Compounds (VOC) are being emitted in amounts that are less than the major source threshold. The upgrade of the facility involves the construction of new air pollution sources that constitute a significant source project. A significant source causes Maximum Annual Potential Emissions or MAP (of any of the major pollutants: NOx, CO, VOC or Particulate Matters) that exceed the existing facility's MAP for the corresponding major pollutant or pollutants.

NYCDEP, as owner and operator of the Newtown Creek WPCP has conducted a New Source Review (NSR) Applicability Determination for NOx. 6NYCRR Part 231-2 (NSR) and its air pollutant control requirements such as LAER (Lowest Achievable Emission Rate) could apply to the new project being constructed at Newtown Creek WPCP if the net emission increase (NEI) for any major pollutant exceeds the Significant Source Project

Net Emission Increase Threshold (SNEIT) for the major pollutant. In the case of NOx the Net Emission Source Increase was 23.2 TPY, which is below the NOx SNEIT of 25 TPY.



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

For compliance with NSR, the facility wide NO<sub>x</sub> emission will be capped at 45.1 tons per year and the VOC emission rate will be less than 25 tons per year.

**Permit Structure and Description of Operations**

The Title V permit for NEWTOWN CREEK 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.

NEWTOWN CREEK WASTEWATER TREATMENT PLANT is defined by the following emission unit(s):

Emission unit 6FLARE - This unit consists of the plant's four new enclosed waste sludge digester gas burners installed as part of the upgrade to flare excessive sludge digester gas.

Emission unit 6FLARE is associated with the following emission points (EP):

6BUR1, 6BUR2, 6BUR3, 6BUR4, OXIDS

Process: BUG is located at Building NMAIN - AS PART OF THE PLANT'S FINAL UPGRADE, FOUR NEW WASTE SLUDGE DIGESTER GAS BURNERS WILL BE INSTALLED. THE FOUR NEW WASTE GAS BURNERS WILL REPLACE THE THREE EXISTING WASTE GAS BURNERS. THE EXCESSIVE SLUDGE DIGESTER GAS PRODUCED AT THE PLANT WILL BE BURNED AT THESE FOUR WASTE GAS BURNERS. AFTER THE FINAL UPGRADE, THIS PROCESS (BUR/BUG) WILL REPLACE PROCESS (FLA). THE TOTAL THROUGHPUT OF THE WASTE BURNER OPERATIONS IS BASED ON THE ESTIMATED DIGESTER GAS PRODUCTION AT THE PLANT AFTER THE FINAL UPGRADE.

Process: OXD is located at Building NMAIN - This process includes a thermal oxidizer to destroy those unwanted constituents (captured VOCs, H<sub>2</sub>S, and other separated constituents) removed from the plant's digester gas by a separation system. The thermal oxidizer is planned to be placed in the footprint of the plant existing 5th boiler. It will displace the 5th boiler's emissions and utilize the existing stack. Waste heat from the oxidizer flue gas will be captured to further reduce boiler use at the plant.

Emission unit 7GTURB - This EU consist of four 5 MW emergency gas turbines and two black start engines. The emergency turbine generators are used in the event of emergency, such as service disruption



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

or a black out and may be operated for participation in the New York State Demand Reduction Program. The emergency turbines would provide backup power to the plant during those times. These units will be exercised on a routine basis. The two black start engines are used to start the turbines and will be operated for routine maintenance.

Emission unit 7GTURB is associated with the following emission points (EP):

BSE1A, BSE1B, BSE2A, BSE2B, TURB1, TURB2, TURB3, TURB4

Process: ENG is located at Building NMAIN - The plant will have 2 black start internal combustion engine generators that will be used to kick start the emergency turbines. For testing, these units are expected to operate for routine testing and maintenance and to start the turbines.

Process: TRB is located at Building NMAIN - As part of track 3 upgrade, new generators will be installed and operated at the plant. The proposed upgrade will include four 5 MW gas turbines. The emergency turbine generators are used in the event of emergency, such as service disruption or a black out and may be operated for participation in the New York State Demand Reduction Program. The emergency turbines would provide backup power to the plant during those times.

Emission unit 1BLERS - THIS EMISSION UNIT CONSISTS OF THE PLANT'S BOILERS FOR BOTH THE SPACE AND SLUDGE HEATING DEMAND. THE PLANT CURRENTLY HAS THREE CLEAVER BROOKS CB 700-400-15 GAS FIRED STEAM BOILERS INSTALLED IN 1998 AND EACH RATED 16.75 MMBTU/HR. ONE BOILER IS OPERATED CONTINUOUSLY THROUGHOUT THE YEAR AND TWO BOILERS WILL BE OPERATED FOR PEAK HEATING DEMAND DURING WINTER. DURING THE INTERIM UPGRADE, TWO 350 HP GAS FIRED BOILERS WILL BE INSTALLED AND OPERATED TO PROVIDE HEATING FOR THE SUPPORT AND DISINFECTION BUILDINGS. THE FINAL PLANT UPGRADING WILL REPLACE THE EXISTING THREE BOILERS AND THE TWO INTERIM BOILERS WITH NINE 29.5 MMBTU/HR CLEAVER BROOKS/CB-LE BOILERS. ALL OF THESE BOILERS USE PRIMARILY SLUDGE DIGESTER GAS UNDER NORMAL CONDITION AND NATURAL GAS WHEN SLUDGE DIGESTER GAS IS INSUFFICIENT. THE INTERIM BOILERS WILL USE ONLY NATURAL GAS.

Emission unit 1BLERS is associated with the following emission points (EP):

1BLR1, 1BLR2, 1BLR3, 1BLR4, 1UBLR

Process: BLR is located at Building NMAIN - This process is for the new nine 29.5 mmBtu/hr Cleaver Brooks CB-LE boilers to fire gaseous fuel (sludge digester gas or natural gas or blend). Once the upgrade is complete these new boilers will normally fire sludge digester gas. At times that sludge digester gas is unavailable, these boilers will fire natural gas or blend. Up to eight of these new boilers may be operated at a time for peak demand during winter. At all times, at least one boiler is kept offline as standby.

Process: IUB is located at Building MAIN -

This process is for the three existing 16.75 mmBtu/hr Cleaver Brooks (CB 700-400-15) boilers that fire natural gas. One boiler is continuously operated throughout the year and two boilers are operated for peak heating demand during winter. At all times, at the least one boiler is kept offline as standby.

Emission unit 2WWTRE - This unit consists of the plant's wastewater treatment processes. These processes include the existing Headworks (HW), Aeration and Final Settling process (AFS) and chlorine contact (CCT). The on going interim upgrade has demolished and removed the old Grit Chambers process (GC). Other than the headworks, all processes are all outdoor and in large tanks. These processes also



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

include the chlorine contact disinfection process to be constructed under the plant's final upgrade. Under the plant's interim upgrade and the final upgrade construction, these processes will be reconstructed and new processes will be added to the plant. Activated carbon adsorption vessels either have been installed or have been scheduled to be installed. 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. Therefore, the emissions are based on currently available data.

Two packaged carbon adsorber odor control systems will be added to the plant's headworks process to control the odors at the Manhattan uptake shaft and the influent splitter box. A new odor control system is installed at the Main Building that has four carbon adsorber tanks.

Emission unit 2WWTRE is associated with the following emission points (EP):

2FBAY, 2NCOC, 2SOOC, ISBOC, MBOCA, MBOCB, MBOCC, MBOCD, MUSOC

Process: 0AS is located at Building OUTDOOR - THIS IS THE PLANT'S MODIFIED ACTIVATED SLUDGE (AS) SECONDARY TREATMENT PROCESS CONSISTING OF 24 MODIFIED DIFFUSED AIR ACTIVATED SLUDGE AERATION TANKS. 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. LARGE AMOUNTS OF AIR ARE PUMPED INTO AERATION TANKS MIXING THE WASTEWATER AND SLUDGE RETURNED FROM THE PLANT'S FINAL SETTLING TANKS. THIS SPEEDS THE GROWTH OF THE OXYGEN-USING BACTERIA AND OTHER TINY ORGANISMS THAT ARE NATURALLY PRESENT IN THE SEWAGE. THESE BENEFICIAL MICROORGANISMS CONSUME MOST OF THE REMAINING ORGANIC POLLUTANTS PRODUCING HEAVIER PARTICLES WHICH SETTLE OUT LATER IN THE FINAL SETTLING TANKS.

THE TOTAL THROUGHPUT IS BASED ON DRY WEATHER FLOW.

Renewal 2010

THE AERATION TANKS AND THE FINAL SETTLING TANKS WEIRS ARE COVERED AND THE ODORS ARE CONTROLLED USING CARBON ADSORPTION TANKS.

Process: 0CC is located at Building OUTDOOR - THIS IS THE PLANT'S CHLORINE CONTACT (CC) DISINFECTION PROCESS TO BE CONSTRUCTED IN THE FUTURE BY THE PLANT FINAL UPGRADING. THE WASTEWATER FROM THE FINAL SETTLING TANKS FLOWS TO THE CHLORINE CONTACT TANKS WHERE SODIUM HYPOCHLORITE IS ADDED TO DISINFECT AND KILL DISEASE-CAUSING ORGANISMS. THE TREATED WASTEWATER (EFFLUENT) IS THEN RELEASED TO LOCAL WATERWAYS.

THE TOTAL THRUPTUT IS BASED ON DRY WEATHER FLOW.

Process: 0HW is located at Building OUTDOOR - THIS PROCESS IS THE PLANT'S WASTEWATER PRE TREATMENT HEAD WORKS (HW) PROCESSES INCLUDING FOREBAY, BAR SCREENING, AFTERBAY, INFLUENT SPLIT BOX AND ITS WEIR. THE BAR SCREENS CONSIST OF UPRIGHT BARS SPACED ONE TO THREE INCHES APART. THE PRIMARY PURPOSE OF THE BAR SCREEN IS TO REMOVE LARGE PIECES OF TRASH (RAGS, STICKS, NEWSPAPER, CANS, ETC.,) FOR THE PROTECTION OF THE MAIN SEWAGE PUMP AND OTHER EQUIPMENT.

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

AN ACTIVATED CARBON ADSORPTION VESSEL IS SCHEDULED TO BE INSTALLED AT THE FOREBAY FOR H<sub>2</sub>S ODOR CONTROL.

THE TOTAL THROUGHPUT IS BASED ON DRY WEATHER FLOW.

MOD 1

AS PART OF THE FINAL UPGRADE, THE MANHATTAN UPTAKE SHAFT AND THE INFLUENT SPLITTER BOX WILL BE EQUIPPED WITH TWO PACKAGED CARBON ADSORBER ODOR CONTROL SYSTEMS TO CONTROL ODORS AT THE PLANT'S HEADWORKS PROCESS.

Renewal 2010

ODORS FROM THIS PROCESS IN THE MAIN BLDG ARE CONTROLLED BY 4 ODOR CONTROL UNITS IN THE MAIN BLDG SCREENING WING.

Emission unit 3NSLUD - THIS UNIT WILL CONSIST OF THE OPERATION IN THE NEW DIGESTION BUILDING AND THE SERVICE BUILDING. THE DIGESTION BUILDING WILL INCLUDE 8 NEW ANAEROBIC DIGESTERS AND TWO NEW SLUDGE STORAGE TANKS. THE SERVICE BUILDING HOUSES THE ODOR CONTROL SYSTEM THAT WILL BE USED TO CONTROL THE ODORS FROM THE DIGESTERS AND THE SLUDGE STORAGE TANKS.

Emission unit 3NSLUD is associated with the following emission points (EP):

3NAD1

Process: NAD is located at Building SERVICE - UNDER THE FINAL UPGRADE, THE NEW SLUDGE ANAEROBIC DIGESTION (NAD) PROCESS WILL CONSIST OF 8 NEW DIGESTERS AND 2 NEW SLUDGE STORAGE TANKS. THE PROCESS WILL REPLACE THE EXISTING SLUDGE ANAEROBIC DIGESTION (SAD) PROCESS. THE ODORS FROM THE 8 DIGESTER OVERFLOW BOXES AND THE 2 SLUDGE STORAGE TANKS WILL BE CONTROLLED USING A CARBON ADSORBER SYSTEM. THE ODOR CONTROL SYSTEM WILL CONSIST OF TWO DUAL BED CARBON ADSORBERS. UNDER NORMAL OPERATIONS, ONE UNIT WILL BE OPERATING AND ONE UNIT WILL BE ON STANDBY.

Emission unit 4RESID - This emission unit consists of the Central Residuals process which takes place in the central residual building. The process includes the following areas: screening room, channels and compactor, the sludge screening areas, the grit cyclone and classifier areas, the skimmings concentrator areas and the disposal areas. The odor control system consists of 16 carbon adsorbers that discharge through a common single exhaust stack.

Emission unit 4RESID is associated with the following emission points (EP):

4RHOC

Process: SCU is located at Building RESID - The SCU process takes place in the central residual building. The process includes the following areas: screening room, channels and compactor, the sludge screening areas, the grit cyclone and classifier areas, the skimmings concentrator areas and the disposal areas. The odor control system consists of 16 carbon adsorbers that discharge through a common single exhaust stack. The total throughput is based on the designed ventilation air flow capacity of the activated



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

carbon adsorption vessels. This process is at the Central Residual Building.

Emission unit 3SLUDG - THIS UNIT CONSISTS OF THE PLANT'S SLUDGE HANDLING PROCESSES. THESE PROCESSES INCLUDE THE EXISTING GRAVITY THICKENING, SLUDGE DIGESTER, SLUDGE STORAGE AND SLUDGE DIGESTER GAS HOLDING TANKS. WASTEWATER SLUDGE (MIXTURE OF WASTEWATER AND SETTLED SOLIDS) PRODUCED BY THE PRIMARY AND SECONDARY TREATMENT ARE PROCESSED IN THESE PROCESSES BEFORE BEING SENT TO PLANTS THAT HAVE DEWATERING FACILITIES. THE PRIMARY OBJECTIVES OF THESE PROCESSES ARE: 1) TO REDUCE THE VOLUME OF MATERIAL TO BE HANDLED BY REMOVING SOME OF THE LIQUID PORTION OF THE SLUDGE; 2) TO DECOMPOSE THE SLUDGE INTO RELATIVELY STABLE OR INERT ORGANIC AND INORGANIC COMPOUNDS FROM WHICH LIQUID WILL SEPARATE MORE EASILY.

UNDER THE PLANT'S INTERIM UPGRADING AND THE FINAL UPGRADING CONSTRUCTION, THESE PROCESSES WILL BE RECONSTRUCTED AND EQUIPMENT WILL BE REPAIRED OR REPLACED. A TOTAL OF 5 ACTIVATED CARBON ADSORPTION VESSELS ARE INSTALLED AT THESE PROCESSES FOR H<sub>2</sub>S ODOR CONTROL AND TWO ADDITIONAL CARBON VESSELS ARE SCHEDULED TO BE INSTALLED.

ALTHOUGH THE ACTIVATED CARBON ADSORPTION VESSELS ARE INSTALLED FOR ODOR CONTROL, THESE VESSELS SHOULD ALSO REMOVE AIR POLLUTANTS. HOWEVER, NO SUCH REMOVAL CREDIT IS CONSIDERED IN THE POTENTIAL TO EMIT (PTE) CALCULATIONS.

Emission unit 3SLUDG is associated with the following emission points (EP):

3ERST, 3GT01, 3GT02

Process: DGH is located at Building SLUDGE - THIS PROCESS IS THE DIGESTER GAS HOLDING (DGH) TANK. THIS TANK HAS NO ADD ON EMISSION CONTROL BUT ITS EMISSION COULD BE IGNORED BECAUSE THE TANK HAS NO ACTIVE EMISSION POINTS AND OR POLLUTANT RELEASES. THE TOTAL THRUPUT IS ESTIMATED BASED ON THE OPERATION DATA 07/1996-06/1998.

Process: ESS is located at Building ERSTORAGE - THIS PROCESS IS THE EAST RIVER SLUDGE STORAGE (ESS) TANK. THE PURPOSE OF THIS TANK IS TO STORE DIGESTED SLUDGE BEFORE THE SLUDGE IS SHIPPED TO OTHER LOCATIONS AT PLANTS THAT HAVE DEWATERING FACILITIES.

ONE SINGLE BED ACTIVATED CARBON ADSORPTION VESSEL IS INSTALLED ON THIS TANK FOR ODOR CONTROL.

THE TOTAL THRUPUT IS CALCULATED BASED ON THE ODOR CONTROL SYSTEMS' DESIGNED VENTILATION AIR FLOW CAPACITY.

Process: SGT is located at Building SLUDGE - THIS PROCESS IS THE SLUDGE GRAVITY THICKENING (SGT) PROCESS CONSISTING OF 8 GRAVITY THICKENING TANKS. THE SLUDGE FROM PRIMARY AND SETTLING (APPROXIMATELY 99% WATER) ARE CONCENTRATED IN THE THICKENING TANKS. THE WATER IS SENT BACK TO THE HEAD OF THE PLANT OR AERATION TANKS FOR ADDITIONAL TREATMENT.



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

TWO SINGLE BED ACTIVATED CARBON ADSORPTION VESSELS ARE INSTALLED AT THIS PROCESS FOR ODOR CONTROL.

THE TOTAL THRUPUT IS BASED ON THE ODOR CONTROL SYSTEM'S DESIGNED VENTILATION AIR FLOW CAPACITY.

Emission unit 5MISCS - This emission unit is for the facility's non- exempt chemical storage and fuel storage tanks.

The CST process includes a total of 7 (seven) non-exempt hypochlorite tanks, 1 x 20,000 gallon and 6 x 16,800 gallon tanks.

There are also 5 non-exempt Diesel fuel tanks, 4 x 20,000 gallons and 1 x 12,000 gallon tanks

Process: CST is located at Building OUTDOOR - This process includes the plant's Chemical Storage Tanks (CST) that exceeds the 10,000 gal exempt threshold. There are a total of seven (7) tanks for Hypochlorite storages: 1x 20,000 gallon Hypochlorite storage tanks and 6 16,800 gallon Hypochlorite storage tanks. There are also five (5) nonexempt diesel storage tanks: 4 x 20,000 gallon diesel tanks and 1 x 12,000 gallon diesel tank.

**Title V/Major Source Status**

NEWTOWN CREEK WASTEWATER TREATMENT PLANT is subject to Title V requirements. This determination is based on the following information:

Facility has NOx PTE emissions more than TV threshold.

**Program Applicability**

The following chart summarizes the applicability of NEWTOWN CREEK WASTEWATER TREATMENT PLANT with regards to the principal air pollution regulatory programs:

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

**NOTES:**

PSD Prevention of Significant Deterioration (40 CFR 52) - requirements which pertain to major



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

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 Part 231) - 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) - 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) - 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) - 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)** - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

**Title VI Stratospheric Ozone Protection (40 CFR 82, Subparts A thru G)** - 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 212.10, 226, 227-2, 228, 229, 230, 232, 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) - 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.

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

**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**

1-03-007-01

EXTERNAL COMBUSTION BOILERS -  
 COMMERCIAL/INDUSTRIAL  
 COMMERCIAL/INSTITUTIONAL BOILER - PROCESS  
 GAS

2-01-001-01

POTW DIGESTER GAS-FIRED BOILER  
 INTERNAL COMBUSTION ENGINES - ELECTRIC  
 GENERATION  
 ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE  
 - DISTILLATE OIL (DIESEL)  
 Turbine

2-02-004-02

INTERNAL COMBUSTION ENGINES - INDUSTRIAL  
 INDUSTRIAL INTERNAL COMBUSTION LARGE BORE  
 ENGINE

3-01-830-01

Dual Fuel (Oil/Gas)  
 CHEMICAL MANUFACTURING  
 CHEMICAL MANUFACTURING - GENERAL PROCESSES  
 Storage/Transfer

5-01-007-07

SOLID WASTE DISPOSAL - GOVERNMENT  
 SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE  
 TREATMENT

5-01-007-31

POTW: HEADWORKS SCREENING  
 SOLID WASTE DISPOSAL - GOVERNMENT  
 SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE  
 TREATMENT

5-01-007-60

POTW: DIFFUSED AIR ACT SLUDGE  
 SOLID WASTE DISPOSAL - GOVERNMENT  
 SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE  
 TREATMENT

5-01-007-71

POTW: CHLORINE CONTACT TANK  
 SOLID WASTE DISPOSAL - GOVERNMENT  
 SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE  
 TREATMENT

5-01-007-89

POTW: GRAVITY SLUDGE THICKENER  
 SOLID WASTE DISPOSAL - GOVERNMENT  
 SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE  
 TREATMENT  
 SLUDGE DIGESTER GAS FLARE

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

5-01-007-99

SOLID WASTE DISPOSAL - GOVERNMENT  
 SOLID WASTE DISPOSAL: GOVERNMENT - SEWAGE  
 TREATMENT  
 OTHER NOT CLASSIFIED

**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 Range represents an emission range for a contaminant. Any PTE quantity that is displayed represents a facility-wide emission cap or limitation for that contaminant. If no PTE quantity is displayed, the PTE Range is provided to indicate the approximate magnitude of facility-wide emissions for the specified contaminant in terms of tons per year (tpy). 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 Name	PTE	
		lbs/yr	Range
000079-34-5	1,1,2,2-TETRACHLOROETHANE	> 0	but < 10 tpy
000107-06-2	1,2-DICHLOROETHANE	> 0	but < 10 tpy
000108-38-3	1,3 DIMETHYL BENZENE	> 0	but < 10 tpy
000108-10-1	2-PENTANONE, 4-METHYL	> 0	but < 10 tpy
000071-43-2	BENZENE	> 0	but < 10 tpy
000098-82-8	BENZENE, (1-METHYLETHYL)	> 0	but < 10 tpy
000106-46-7	BENZENE, 1,4-DICHLORO-	> 0	but < 10 tpy
000095-47-6	BENZENE, 1,2-DIMETHYL	> 0	but < 10 tpy
000075-25-2	BROMOFORM	> 0	but < 10 tpy
000630-08-0	CARBON MONOXIDE	>= 100 tpy	but < 250 tpy
000056-23-5	CARBON TETRACHLORIDE	> 0	but < 10 tpy
000108-90-7	CHLOROBENZENE	> 0	but < 10 tpy
000067-66-3	CHLOROFORM	> 0	but < 10 tpy
000075-09-2	DICHLOROMETHANE	> 0	but < 10 tpy
000071-55-6	ETHANE, 1,1,1-TRICHLORO	> 0	but < 10 tpy
000079-00-5	ETHANE, 1,1,2-TRICHLORO	> 0	but < 10 tpy
000075-34-3	ETHANE, 1,1-DICHLORO-	> 0	but < 10 tpy
000075-00-3	ETHANE, CHLORO	> 0	but < 10 tpy
000075-35-4	ETHENE, 1,1-DICHLORO	> 0	but < 10 tpy
000100-41-4	ETHYLBENZENE	> 0	but < 10 tpy
000050-00-0	FORMALDEHYDE	> 0	but < 10 tpy
007783-06-4	HYDROGEN SULFIDE	> 0	but < 2.5 tpy
007439-92-1	LEAD	> 0	but < 10 tpy
000074-83-9	METHYL BROMIDE	> 0	but < 10 tpy



New York State Department of Environmental Conservation  
Permit Review Report

Permit ID: 2-6101-00025/00057

Renewal Number: 1

01/08/2014

000074-87-3	METHYL CHLORIDE	> 0 but < 10 tpy
000091-20-3	NAPHTHALENE	> 0 but < 10 tpy
ONY210-00-0	OXIDES OF NITROGEN 90200	
ONY075-00-0	PARTICULATES	>= 2.5 tpy but < 10 tpy
000127-18-4	PERCHLOROETHYLENE	> 0 but < 10 tpy
ONY075-00-5	PM-10	>= 2.5 tpy but < 10 tpy
000078-87-5	PROPANE, 1,2-DICHLORO	> 0 but < 10 tpy
007446-09-5	SULFUR DIOXIDE	>= 50 tpy but < 100 tpy
000108-88-3	TOLUENE	> 0 but < 10 tpy
ONY100-00-0	TOTAL HAP	>= 10 tpy but < 25 tpy
000079-01-6	TRICHLOROETHYLENE	> 0 but < 10 tpy
000075-01-4	VINYL CHLORIDE	> 0 but < 10 tpy
ONY998-00-0	VOC	>= 10 tpy but < 25 tpy
000106-42-3	XYLENE, PARA-	> 0 but < 10 tpy

**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.



New York State Department of Environmental Conservation  
**Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

- Item B: 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 C: 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 D: 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 E: 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 F: 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 G: 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 H: 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 I: 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 J: Permit Shield - 6 NYCRR Part 201-6.4(g)**



New York State Department of Environmental Conservation  
**Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

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 K: 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 201-6.7 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



New York State Department of Environmental Conservation  
Permit Review Report

Permit ID: 2-6101-00025/00057

Renewal Number: 1

01/08/2014

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 L: Permit Exclusion - ECL 19-0305**

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

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

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

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**Item A: 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
---------------------------------------	------------	-----------	-------------------

-----

--

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

FACILITY	ECL 19-0301	52	Powers and Duties of the Department with respect to air
1-BLERS	40CFR 60-Dc.48c (a)	37	pollution control
7-GTURB	40CFR 60-Dc.48c (a)	48	Reporting and Recordkeeping Requirements.
FACILITY	40CFR 68	19	Reporting and Recordkeeping Requirements.
FACILITY	40CFR 82-F	20	Chemical accident prevention provisions
FACILITY	6NYCRR 200.6	1	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.7	10	Acceptable ambient air quality.
FACILITY	6NYCRR 201-1.4	53	Maintenance of equipment.
FACILITY	6NYCRR 201-1.7	11	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.8	12	Recycling and Salvage
FACILITY	6NYCRR 201-3.2 (a)	13	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.3 (a)	14	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-6	21, 31, 32	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6.4 (a) (4)	15	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4 (a) (7)	2	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4 (a) (8)	16	General Conditions - Fees
FACILITY	6NYCRR 201-6.4 (c)	3	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4 (c) (2)	4	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4 (c) (3) (ii)	5	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4 (d) (4)	22	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4 (e)	6	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4 (f) (6)	17	Compliance Certification
FACILITY	6NYCRR 201-7	23, 24, 25, 33	Off Permit Changes
1-BLERS	6NYCRR 201-7	34	Federally Enforceable Emissions Caps
6-FLARE	6NYCRR 201-7	42	Federally Enforceable Emissions Caps

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

7-GTURB	6NYCRR 201-7	46	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1	26, 27	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	28	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	54, 55, 56, 57	General Prohibitions - visible emissions limited.
2-WWTRE	6NYCRR 212.3(a)	39	General Process Emission Sources - emissions from existing emission sources
3-NSLUD	6NYCRR 212.3(a)	40	General Process Emission Sources - emissions from existing emission sources
3-SLUDG	6NYCRR 212.3(a)	41	General Process Emission Sources - emissions from existing emission sources
6-FLARE	6NYCRR 212.3(a)	43	General Process Emission Sources - emissions from existing emission sources
FACILITY	6NYCRR 215.2	9	Open Fires - Prohibitions
FACILITY	6NYCRR 225.1(a)(3)	30	Sulfur in Fuel Limitations (SIP)
FACILITY	6NYCRR 225-1.6	29	Reports, Sampling, and Analysis
7-GTURB/-/ENG	6NYCRR 227.2(b)(1)	49	Particulate emissions.
7-GTURB/-/TRB	6NYCRR 227.2(b)(1)	51	Particulate emissions.
1-BLERS	6NYCRR 227-1.3(a)	35	Smoke Emission Limitations.
6-FLARE	6NYCRR 227-1.3(a)	44	Smoke Emission Limitations.
7-GTURB	6NYCRR 227-1.3(a)	47	Smoke Emission Limitations.
1-BLERS	6NYCRR 227-2.4(d)	36	Small boilers, small combustion turbines, and small stationary internal combustion engines.
1-BLERS/-/BLR	6NYCRR 227-2.4(d)	38	Small boilers, small combustion turbines, and small stationary internal combustion



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

7-GTURB/-/TRB	6NYCRR 227-2.4 (e) (1)	50	engines. Simple cycle combustion turbines.
6-FLARE	6NYCRR 227-2.4 (g)	45	Other combustion installations.
FACILITY	6NYCRR 231-2	24, 25	New Source Review in Nonattainment Areas and Ozone Transport Region
1-BLERS	6NYCRR 231-2	34	New Source Review in Nonattainment Areas and Ozone Transport Region
6-FLARE	6NYCRR 231-2	42	New Source Review in Nonattainment Areas and Ozone Transport Region
7-GTURB	6NYCRR 231-2	46	New Source Review in Nonattainment Areas and Ozone Transport Region
FACILITY	6NYCRR 257-10	58	Air Quality Standards - Hydrogen Sulfide

**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,



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

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



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

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) (5)

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



New York State Department of Environmental Conservation  
Permit Review Report

Permit ID: 2-6101-00025/00057

Renewal Number: 1

01/08/2014

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, NEWTOWN CREEK WASTEWATER TREATMENT PLANT has been determined to be subject to the following regulations:

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.

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 212.3 (a)

This rule requires compliance with the degree of control specified in Tables 2, 3 and 4 for existing (on or before July 1, 1973) process emission sources.

6 NYCRR 225.1 (a) (3)

This regulation limits the amount of sulfur that can be in fuel burned at a stationary source. It references Table 1 of the 1979 version of the sulfur in fuel limitations expressed in terms of percent by weight for fuel oil and pounds per million Btu gross heat content for solid fuel. **NOTE: This citation has been replaced by requirements cited under 225-1.2(a)(2) and is no longer part of current State regulations, however, it remains part of New York State's approved State Implementation Plan (SIP).**

6 NYCRR 225-1.6



**New York State Department of Environmental Conservation  
Permit Review Report**

**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

This section establishes the requirements for reporting, sampling, and analyzing fuel by subject facilities.

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 227-2.4 (d)

NO<sub>x</sub> RACT requirements for small boilers, small combustion turbines, and small stationary internal combustion engines.

6 NYCRR 227-2.4 (e) (1)

Presumptive NO<sub>x</sub> RACT emission limits for simple cycle combustion turbines.

6 NYCRR 227-2.4 (g)

This subdivision establishes NO<sub>x</sub> RACT for emission sources that are subject to this rule but not specifically regulated under the other source categories of this rule.

6 NYCRR Subpart 201-7

This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit that cap is

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 231-2

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan

New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 2-6101-00025/00057**

**Renewal Number: 1**

**01/08/2014**

County.

6 NYCRR Subpart 257-10

This is for H2S.

**Compliance Certification**

**Summary of monitoring activities at NEWTOWN CREEK WASTEWATER TREATMENT PLANT:**

<b>Location Facility/EU/EP/Process/ES</b>	<b>Cond No.</b>	<b>Type of Monitoring</b>
-----		
---		
1-BLERS	37	record keeping/maintenance procedures
7-GTURB	48	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	24	monitoring of process or control device parameters as surrogate
FACILITY	25	monitoring of process or control device parameters as surrogate
1-BLERS	34	work practice involving specific operations
6-FLARE	42	work practice involving specific operations
7-GTURB	46	work practice involving specific operations
FACILITY	26	monitoring of process or control device parameters as surrogate
FACILITY	27	monitoring of process or control device parameters as surrogate
FACILITY	7	record keeping/maintenance procedures
FACILITY	55	record keeping/maintenance procedures
FACILITY	56	monitoring of process or control device parameters as surrogate
FACILITY	57	record keeping/maintenance procedures
FACILITY	30	work practice involving specific operations
FACILITY	29	work practice involving specific operations
7-GTURB/-/ENG	49	intermittent emission testing
7-GTURB/-/TRB	51	intermittent emission testing
1-BLERS	35	monitoring of process or control device parameters as surrogate
6-FLARE	44	monitoring of process or control device parameters as surrogate
7-GTURB	47	monitoring of process or control device parameters as surrogate
1-BLERS	36	record keeping/maintenance procedures
1-BLERS/-/BLR	38	intermittent emission testing
7-GTURB/-/TRB	50	intermittent emission testing
6-FLARE	45	intermittent emission testing
FACILITY	58	record keeping/maintenance procedures
-----		
----		

**Basis for Monitoring**

.