



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

Permit ID: 2-6205-00246/00005

**Renewal Number: 1
01/29/2010**

Facility Identification Data

Name: NYU CENTRAL PLANT
Address: 251 MERCER ST
NEW YORK, NY 10012

Owner/Firm

Name: NEW YORK UNIVERSITY
Address: 70 WASHINGTON SQUARE SOUTH
NEW YORK, NY 10012-1019, USA
Owner Classification: Corporation/Partnership

Permit Contacts

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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 application is for the renewal of the Title V air permit for New York University's Central Power Plant at 251 Mercer Street, New York City, NY, and includes: replacing existing combustion equipment with new, state-of-the-art turbines (Emission Sources TURB1 & TURB2) and duct burners (Emission



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

Sources/Controls DUCT1 & DUCT2) for electricity, heat recovery and steam generation (HRSG); retiring the 114 MMBtu/hr Keeler Steam boiler (Emission Source 0BLRD); and designation of the seven identical Caterpillar D399 diesel engine generators (Emission Sources GEN01, GEN02, GEN03, GEN04, GEN05, GEN05, GEN06 & GEN07 with waste heat boilers) to participate in the Special Case Resources (SCR) program of the New York Independent System Operator (NYISO) or any other demand response program, and to operate no more than 2,000 hours per seven engines per year upon plant repowering scheduled for June 30, 2010. Boiler 0BLRD was removed from the facility on January 1, 2009 to accommodate new construction. The reassignment of the seven engines from primary power source will be simultaneous with repowering by the turbines, HRSGs and three reconfigured boilers (0BLRA-0BLRC). With the exception of 0BLRD removal, all other repowering issues are slated to begin June 30, 2010.

On June 30, 2004 NYU submitted to NYSDEC Region 2 an Engine NOx RACT Compliance and Operating Plan pursuant to 6 NYCRR 227 to maintain the then current 9.0 gm/bhp-hr (gram per brake horsepower-hour) NOx emissions as Reasonably Available Control Technology for the seven diesel engine generators nearing the end of their useful lives, as a variance to the newly implemented standard of 2.3 gm/bhp-hr, effective April 1, 2005.

The plan concluded that no NOx control technologies were economically feasible for the generators and the facility seeks an economic variance (pursuant to Part 621, Uniform Procedures Act) from the then newly implemented regulation 6 NYCRR 227-2.4(f) for controlling NOx from such engines, which required a plan in place by July 1, 2004. The plan presented economic and technical criteria supporting the non-feasibility of adopting any new operating conditions to the diesel engines in view of the major repowering energy-saving, equipment replacement project.

The facility conducted NOx RACT stack testing in March 2002 at three different operating loads (low, medium and high) for each of the seven engine generators in Emission Unit 2-00000; all engines met the NOx RACT requirement of 9.0 gm/bhp-hr: NOx emissions ranged between 7.4 and 7.9 gm/bhp-hr. The issuance of this permit is the approval of the NOx RACT Variance Plan relevant to Compliance Certification for 6 NYCRR 227-2.4(f)(2)(ii), and applies to the seven engine-generators.

The facility's new electrical output will be approximately 11 MW from the two turbines (2 @ 5.5 MW each = 11 MW), or 11 MW x 8,760 hours = 96,360 MWe-hrs). There are no criteria or regulated pollutant emission increases, only emission decreases, and Prevention of Significant Deterioration (PSD) and New Source Review (NSR) regulations are not applicable to this repowering project.

Netting analysis shows significant facility emission reductions. The repowering project is anticipated to have the following major annual emission reductions (tons per year, tpy):

Contaminant	Existing Plant Emissions	Proposed Plant Limits	Emissions Reductions	Reduction
NOx	465	159	306	66%
SO2	115	33	82	71%
CO	147	129	18	12%
VOC	13	9	4	29%
PM	31	13	18	58%
PM-10	24	8	16	67%



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

The two turbines will operate on natural gas (Process 004) and #2 distillate fuel oil (Process 005). Maximum possible emissions for the two turbines are based on combusting #2 fuel oil for 8,760 hours per year. Potentia to emit (PTE) for the two turbines [combined] is based on the heat content equivalent of combusting 9 months of natural gas and 3 months of #2 fuel oil, not precluding any mixture of gas and oil that does not exceed emissions caps or any pertinent regulation. Field testing the turbines will confirm their ability to run between 100% load and 52% load. The two combustion turbines are identical and each is approximately 60.5 MM Btu/hr.

The duct burners will combust only natural gas (Process 004) and their maximum possible emissions are equivalent to the PTE based on 8,760 hours per year. The duct burners are 70 MM Btu/hr each and 20 MM Btu/hr of that heat input is provided by the turbines; thus duct burner fuel is not required for this fraction of heat input. Since the duct burners will never operate by themselves without the turbines, PTE NOx for both HRSG duct burners operating only on natural gas is 47.30 tpy. The combined turbines will have a NOx PTE of 56.93 tpy, and thus the two combined turbine/HRSG duct burner pairs will have a NOx PTE of 104.23 tpy.

NYU boilers normally operate at mid loads using natural gas (Process 001) and #6 residual fuel oil (Process 002), and 2005 boiler stack testing was performed in compliance at high, mid and low load heat inputs. Potential to emit (PTE) for the boilers is based on mid-load burning using the heat content equivalent of 9 months of natural gas and 3 months of no. 6 fuel oil, with a self-imposed cap of emissions equivalent to 2 boilers at mid-load.

The existing continuous opacity monitoring system (COMS) unit will remain on the stack of Emission Point 00001 to voluntarily monitor opacity, since the total heat input for the combustion sources (excluding gas turbines is <250 MMBtu/hr threshold) and COMS is not required by opacity regulation 6 NYCRR 227-1.3(a). The existing COMS on Emission Point 00002 will remain at the facility for monitoring the (diesel, Process 003) seven engines in Emission Unit 2-00000. This COMS is voluntary since it does not meet the 250 MMBtu/hr heat input threshold of the regulation governing COMS. NYU will voluntarily use COMS at Emission Point 00002, and all issues that would ordinarily be applicable such as maintenance, reporting and recordkeeping will be voluntarily performed. NYU historically has maintained COMS compliance.

PM-2.5 is set equal to PM-10 in accordance with NYSDEC Policy CP-33 for assessing and mitigating fine particulate matter.

Attainment Status

NYU CENTRAL 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



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

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 NYU Central Power Plant currently produces hot water, steam and electricity using three identical boilers identified as Emission Sources 0BLRA, 0BLRB and 0BLRC in Emission Unit 1-00000 and seven reciprocating engines identified as ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 and ENG07 in Emission Unit 2-00000. The three boilers are identified as Emission Sources 0BLRA, 0BLRB and 0BLRC and each boiler is rated at 65 MM BTU/hr. The 114 MM Btu/hr boiler (Emission Source 0BLRD) was eliminated from the facility on 1/1/2009.

Each of the seven engines is rated at 850 kilowatts (1,000 hp mechanical), and due to the engine generators nearing the end of their useful life cycles, they will be replaced with two new state-of-the-art turbines (Emission Sources TURB1 & TURB2) with duct burners (DUCT1 & DUCT2; respectively) for electricity generation, heat exchange and heating of water. After the construction of the two turbines all seven engine generators may participate in the Special Case Resources (SCR) of the New York Independent System Operator (NYISO) or any other demand response program. The engines will operate no more than 2,000 hours per seven engines per year upon repowering (scheduled for 6/30/2010). The two turbines are rated at 5.5 megawatt each, and the two duct burners are rated at 70 MM BTU/hr each. The facility's new electrical output will be approximately 11 MW from the two turbines (2 @ 5.5 MW = 11 MW), or 11 MW x 8,760 hours = 96,360 MWe-hrs. New plant operations are anticipated to begin at the end of June, 2010.

The existing COMS on Emission Point 00002 will voluntarily remain for the seven engines in Emission Unit 2-00000.

The existing continuous opacity monitoring system (COMS) unit will also voluntarily remain on the stack of Emission Point 00001, since the total heat input for the combustion sources (excluding gas turbines is <250 MM Btu/hr threshold) and COMS is not required by opacity regulation 6 NYCRR 227-1.3(a).

There are no criteria or regulated pollutant emission increases. Netting analysis shows a significant facility emissions reduction. Thus, Prevention of Significant Deterioration (PSD) and New Source Review are not applicable to this repowering project.

NYU proposes the existing NOx limits attained during the March 20 - 22, 2002 stack testing and current operations as the reasonable and achievable control technology (RACT) for its seven diesel engines. NYU is requesting a RACT variance to continue to operate the seven diesel engine-generators in their current state and upon repowering with the two new turbines (scheduled for 6/30/2010). Reducing total hours of operation of all seven engine generators to 2,000 hours per year will reduce the NOx emissions by about 306 tons per year. Electricity will be provided by dual-fueled gas combustion turbines (thus replacing the seven engines). This plan for a reduced rate of NOx emissions for the engines according to 6 NYCRR 227-2.4(f), presents a technical and economic evaluation of engine and fuel technologies. Therefore, NYU seeks an economic variance from the newly implemented NOx emission limits, maintaining the current



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

actual NOx emissions as RACT.

The facility has submitted a NOx RACT variance for the seven diesel engine generators to continue to comply with the with the 9.0 grams per brake horsepower-hour, and limit their operations to no more than 2,000 hours/7 engines/year. Significant reductions in annual emissions can be expected with the new equipment. Depending on the amount of natural gas versus oil consumed, reduction of 306 tons NOx, 82 tons SO2, 18 tons CO, and 18 tons of PM are expected. This is a significant endeavor for NYU and tremendously favorable reductions for New York State in its non-attainment area. Intensive capital investment into the engines, other than that which would contribute to the equipment replacement project at this time, would be disadvantageous to the project. Technologies that could meet the new NOx limits would require significant capital investment and would be counter-effective and counter-productive in the long term, and provide nowhere near the efficiency of reducing NOx as would the repowering (equipment replacement) project. A significant permanent environmental benefit will result from this proposed project. The analysis concluded that no NOx control technologies were economically feasible for any of the seven generators at the facility. This report was submitted to comply with a variance request to the NOx emission limit stated above pursuant to Part 621, Uniform Procedures act.

Permit Structure and Description of Operations

The Title V permit for NYU CENTRAL 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.

NYU CENTRAL PLANT is defined by the following emission unit(s):

Emission unit 100000 - The Central Power Plant at NYU, provides electricity and high temperature hot water and steam for heating and cooling of university buildings year round. Emission Unit 1-00000 located in the sub-basement of 251 Mercer Street, is part of the Central Plant and currently has three identical mid size high temperature hot water boilers of 65 MM Btu/hr each (Emission Sources 0BLRA, 0BLRB & 0BLRC) used for hot water. A 114 MM Btu/hr high pressure steam boiler (Boiler D - Emission Source 0BLRD) was removed from the facility on 1/1/2009. Each boiler is capable of burning natural gas (Process 001) and # 6 fuel oil - residual fuel oil (Process 002). Emissions from the three boilers are exhausted through a single emission point, a nine foot diameter stack on the roof of 251 Mercer Street, identified as Emission Point 00001. A licensed operating engineer is on duty at all times.

Upon repowering, the plant will add two new 5.5 MW gas turbines (Emission Sources TURB1 &



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

TURB2) burning natural gas (Process 004) and # 2 fuel oil (Process 005), and two new 70 MM Btu/hr duct burners (Emission Controls DUCT1 & DUCT2) fueled by natural gas (Process 004) for cogeneration with the two turbines. The facility's new electrical output will be approximately 11 MW from the two turbines (2 @ 5.5 MW = 11 MW), or 11 MW x 8,760 hours = 96,360 MWe-hrs. The two combustion turbines are identical, and each is approximately 60.5 MM Btu/hr. Emissions from the two turbines will co-exhaust with the boilers through the same single emission point identified as Emission Point 00001.

The two new 5.5 MW gas turbines (Emission Sources TURB1 & TURB2), and their two corresponding new 70 MM Btu/hr duct burners (Emission Controls DUCT1 & DUCT2; respectively) for cogeneration with the two turbines are scheduled to begin operating on 6/30/2010.

Per 6 NYCRR 227-1.4, COMS is required on combustion sources exceeding 250 MMBtu/hr heat input, excluding gas turbines. Heat input at Emission Point 00001 from the small boilers (Emission Sources OBLRA, OBLRB & OBLRC) @ 65 MMBtu/hr each total 195 MMBtu/hr (< 250 MMBtu/hr), therefore COMS is not required.

The existing continuous opacity monitoring system (COMS) unit will voluntarily remain on the stack of Emission Point 00001 since total heat input for the combustion sources (excluding gas turbines) is <250 MM Btu/hr threshold and COMS is not required by opacity regulation 6 NYCRR 227-1.3(a).

Emission unit 100000 is associated with the following emission points (EP):
00001

Process: 001 is located at sub-basement, Building 251 - Process 001 is the combustion of natural gas in three existing boilers (Emission Sources OBLRA, OBLRB & OBLRC) in Emission Unit 1-0000. Boilers OBLRA, OBLRB and OBLRC are 65 MM Btu/hr each. These three boilers combust natural gas at mid load (per stack test results). A 114 MM Btu/hr high pressure steam boiler (Boiler D - Emission Source OBLRD) was removed from the facility on 1/1/2009.

Emissions from the three boilers exhaust through a single emission point, a nine foot diameter stack on the roof of 251 Mercer Street, identified as Emission Point 00001. The same emission point will be used to exhaust emissions from the two new turbines (Emission Sources TURB1 & TURB2) and their corresponding duct burners (Emission Controls DUCT1 & DUCT2; respectively).

Process: 002 is located at sub-basement, Building 251 - Process 002 consists of the combustion of # 6 fuel oil (residual oil) in three existing boilers (Emission Sources OBLRA, OBLRB & OBLRC) in Emission Unit 1-0000. Boilers OBLRA, OBLRB and OBLRC are 65 MM Btu/hr each. A 114 MM Btu/hr high pressure steam boiler (Boiler D - Emission Source OBLRD) was removed from the facility on 1/1/2009.

Process: 004 is located at sub-basement, Building 251 - Process 004 will consist of the combustion of natural gas in the two new 5.5 MW turbines (Emission Sources TURB1 & TURB2) with or without their corresponding two new duct burners (Emission Controls DUCT1 & DUCT2; respectively) in Emission Unit 1-00000. The duct burners combust only natural gas. When the two turbines are not operating due to emergency or maintenance, the duct burners will not operate and supplemental hot water will be provided by the boilers. The duct burners operate only when the turbines are operating, and will not operate independent of the turbines.

The scheduled date for the operation of the two new turbines with their corresponding two new duct



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

burners is 6/30/2010, at which time the seven engine generators may participate in the Special Case Resources (SCR) of the New York Independent System Operator (NYISO) or any other demand response program and will operate no more than 2,000 hours/7 engines/year.

When the two combustion turbines (Emission Sources TURB1 & TURB2) achieve full operation, field testing will confirm the anticipated running between 100 % load and 52 % load on natural gas, depending on campus conditions, while maintaining emission levels. The two combustion turbines are identical, and each is approximately 60.5 MM Btu/hr.

Process: 005 is located at sub-basement, Building 251 - Process 005 will consist of the combustion of # 2 fuel oil (distillate oil) in the two new 5.5 MW turbines (Emission Sources TURB1 & TURB2) with or without their corresponding two new duct burners (Emission Controls DUCT1 & DUCT2; respectively) in Emission Unit 1-00000. The duct burners combust only natural gas. When the two new turbines are not operating due to emergency or maintenance, the duct burners will not operate and supplemental hot water will be provided by the boilers. The duct burners operate only when the turbines are operating; the duct burners will not operate independent of the turbines.

Emissions from the two turbines/duct burners will be exhausted through a single emission point, identified as Emission Point 00001 (the same emission point as the three boilers). The scheduled date for the operation of the two new turbines with their corresponding two new duct burners is 6/30/2010, at which time the seven engine generators may participate in the Special Case Resources (SCR) of the New York Independent System Operator (NYISO) or any other demand response program (scheduled for 6/30/2010), and will operate no more than 2,000 hours/7 engines/year.

When the two combustion turbines (Emission Sources TURB1 & TURB2) achieve full operation, field testing will confirm the anticipated running between 100 % load and 60 % load on # 2 fuel oil, depending on campus conditions, while maintaining emission levels. The two combustion turbines are identical, and each is approximately 60.5 MM Btu/hr.

Emission unit 200000 - Emission Unit 2-00000, located in the sub-basement of 40 West 4th Street, consists of seven identical Caterpillar D399 diesel engine electricity generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) with waste heat boilers. Each diesel engine generator is 1,000 mechanical horsepower (850 KW). These seven diesel engine generators operate on diesel oil - distillate oil (Process 003), and their emissions exhaust through one common stack, identified as Emission Point 00002.

Upon repowering with the two new turbines (Emission Sources TURB1 & TURB2) and their corresponding duct burners (Emission Controls DUCT1 & DUCT2; respectively), scheduled for 6/30/2010, all of the seven identical diesel engine generators may participate in the Special Case Resources (SCR) of the New York Independent System Operator (NYISO) or any other demand response program beginning 6/30/2010, and will operate no more than 2,000 hours/7 engines/year. The date provided in the source identification for closure is for capping at lower emission limits.

The existing COMS at Emission Point 00002 for the seven engines in Emission Unit 2-00000 will remain at the facility. This COMS is voluntary since the emission unit does not meet the 250 MMBtu/hr heat input threshold of the regulation governing COMS. NYU will voluntarily use COMS at Emission Point 00002, and all issues that would ordinarily be applicable such as maintenance, reporting and recordkeeping will be voluntarily performed. NYU historically has maintained COMS compliance.



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

Emission unit 200000 is associated with the following emission points (EP):
00002

Process: 003 is located at sub-basement, Building 40 - Process 003 is the firing of diesel oil (# 2 fuel oil) in the seven identical Caterpillar D399 diesel engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) associated with waste heat boilers at the plant in Emission Unit 2-00000. Each diesel engine generator is 850 KW (1,000 hp mechanical). The emissions from these seven diesel engine generators exhaust through one common stack, identified as Emission Point 00002.

Upon repowering with the two new turbines (Emission Sources TURB1 & TURB2) and their corresponding duct burners (Emission Controls DUCT1 & DUCT2; respectively), scheduled for 6/30/2010, the seven identical Caterpillar D399 diesel engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) with waste heat boilers may participate in the Special Case Resources (SCR) of the New York Independent System Operator (NYISO) or any other demand response program, and will operate no more than 2,000 hours/7 engines/year.

Title V/Major Source Status

NYU CENTRAL PLANT is subject to Title V requirements. This determination is based on the following information:

The Central Plant at New York University is a major facility that is subject to Title V requirements because the potential emissions of oxides of nitrogen and carbon monoxide are greater than the major source thresholds (25 tons/year for oxides of nitrogen and 100 tons/year for carbon monoxide).

Program Applicability

The following chart summarizes the applicability of NYU CENTRAL 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 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



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

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.

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

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005
Renewal Number: 1
01/29/2010

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
8221	COLLEGES AND UNIVERSITIES, NEC

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
1-02-004-02	EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - RESIDUAL OIL 10-100MMBTU/HR **
1-02-006-02	EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - NATURAL GAS 10-100 MMBtu/Hr
2-01-001-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Turbine
2-01-001-02	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Reciprocating
2-01-002-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - NATURAL GAS Turbine

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

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

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	Range
		lbs/yr	
000630-08-0	CARBON MONOXIDE	258000	
0NY100-00-0	HAP	3268	
0NY210-00-0	OXIDES OF NITROGEN	317000	
0NY075-00-0	PARTICULATES	25440	
0NY075-00-5	PM-10	16740	
007446-09-5	SULFUR DIOXIDE	66580	
0NY998-00-0	VOC	18600	

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6NYCRR Part 201-1.5

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

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

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

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

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

Item B: Public Access to Recordkeeping for Title V Facilities - 6NYCRR Part 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 6NYCRR 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 201-6.3(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.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

- Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(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 201-6.5(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 201-6.5(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 Part 201-6.5(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 Part 201-6.5(a)(6)**
This permit does not convey any property rights of any sort or any exclusive privilege.
- Item I: Severability - 6 NYCRR Part 201-6.5(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 201-6.5(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

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

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 201-6.5(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 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



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

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
--			
FACILITY	ECL 19-0301	168	Powers and Duties of the Department with respect to air pollution control
1- 00000/00001/004/DUCT1	40CFR 60-A.4	69	General provisions - Address
1- 00000/00001/004/DUCT2	40CFR 60-A.4	80	General provisions - Address
1- 00000/00001/004/TURB1	40CFR 60-A.4	92	General provisions - Address
1- 00000/00001/004/TURB2	40CFR 60-A.4	105	General provisions - Address
1- 00000/00001/005/TURB1	40CFR 60-A.4	124	General provisions - Address
1-	40CFR 60-A.4	137	General provisions -

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005
Renewal Number: 1
01/29/2010

00000/00001/005/TURB2			Address
1-	40CFR 60-A.7 (a)	125	Notification and Recordkeeping
00000/00001/005/TURB1			Notification and Recordkeeping
1-	40CFR 60-A.7 (a)	138	Notification and Recordkeeping
00000/00001/005/TURB2			Notification and Recordkeeping
1-	40CFR 60-A.7 (b)	70	Notification and Recordkeeping
00000/00001/004/DUCT1			Notification and Recordkeeping
1-	40CFR 60-A.7 (b)	81	Notification and Recordkeeping
00000/00001/004/DUCT2			Notification and Recordkeeping
1-	40CFR 60-A.7 (b)	93	Notification and Recordkeeping
00000/00001/004/TURB1			Notification and Recordkeeping
1-	40CFR 60-A.7 (b)	106	Notification and Recordkeeping
00000/00001/004/TURB2			Notification and Recordkeeping
1-	40CFR 60-A.7 (b)	126	Notification and Recordkeeping
00000/00001/005/TURB1			Notification and Recordkeeping
1-	40CFR 60-A.7 (b)	139	Notification and Recordkeeping
00000/00001/005/TURB2			Notification and Recordkeeping
1-	40CFR 60-A.7 (f)	71	Notification and Recordkeeping
00000/00001/004/DUCT1			Notification and Recordkeeping
1-	40CFR 60-A.7 (f)	82	Notification and Recordkeeping
00000/00001/004/DUCT2			Notification and Recordkeeping
1-	40CFR 60-A.7 (f)	94	Notification and Recordkeeping
00000/00001/004/TURB1			Notification and Recordkeeping
1-	40CFR 60-A.7 (f)	107	Notification and Recordkeeping
00000/00001/004/TURB2			Notification and Recordkeeping
1-	40CFR 60-A.7 (f)	127	Notification and Recordkeeping
00000/00001/005/TURB1			Notification and Recordkeeping
1-	40CFR 60-A.7 (f)	140	Notification and Recordkeeping
00000/00001/005/TURB2			Performance Tests
1-	40CFR 60-A.8 (a)	72	Performance Tests
00000/00001/004/DUCT1			Performance Tests
1-	40CFR 60-A.8 (a)	83	Performance Tests
00000/00001/004/DUCT2			Performance Tests
1-	40CFR 60-A.8 (a)	95	Performance Tests
00000/00001/004/TURB1			Performance Tests
1-	40CFR 60-A.8 (a)	108	Performance Tests
00000/00001/004/TURB2			Performance Tests
1-	40CFR 60-A.8 (a)	128	Performance Tests
00000/00001/005/TURB1			Performance Tests
1-	40CFR 60-A.8 (a)	141	Performance Tests
00000/00001/005/TURB2			Performance Tests
1-	40CFR 60-A.8 (b)	73	Performance Tests
00000/00001/004/DUCT1			Performance Tests
1-	40CFR 60-A.8 (b)	84	Performance Tests
00000/00001/004/DUCT2			Performance Tests
1-	40CFR 60-A.8 (b)	96	Performance Tests
00000/00001/004/TURB1			Performance Tests
1-	40CFR 60-A.8 (b)	109	Performance Tests
00000/00001/004/TURB2			Performance Tests
1-	40CFR 60-A.8 (b)	129	Performance Tests
00000/00001/005/TURB1			Performance Tests
1-	40CFR 60-A.8 (b)	142	Performance Tests
00000/00001/005/TURB2			Performance Tests
1-	40CFR 60-A.8 (d)	74	Performance Tests
00000/00001/004/DUCT1			Performance Tests
1-	40CFR 60-A.8 (d)	85	Performance Tests
00000/00001/004/DUCT2			Performance Tests
1-	40CFR 60-A.8 (d)	97	Performance Tests
00000/00001/004/TURB1			Performance Tests
1-	40CFR 60-A.8 (d)	110	Performance Tests
00000/00001/004/TURB2			Performance Tests
1-	40CFR 60-A.8 (d)	130	Performance Tests
00000/00001/005/TURB1			Performance Tests
1-	40CFR 60-A.8 (d)	143	Performance Tests



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

00000/00001/005/TURB2				
1-	40CFR 60-A.8(e)	75		Performance Tests
00000/00001/004/DUCT1				
1-	40CFR 60-A.8(e)	86		Performance Tests
00000/00001/004/DUCT2				
1-	40CFR 60-A.8(e)	98		Performance Tests
00000/00001/004/TURB1				
1-	40CFR 60-A.8(e)	111		Performance Tests
00000/00001/004/TURB2				
1-	40CFR 60-A.8(e)	131		Performance Tests
00000/00001/005/TURB1				
1-	40CFR 60-A.8(e)	144		Performance Tests
00000/00001/005/TURB2				
1-	40CFR 60-A.8(f)	76		Performance Tests
00000/00001/004/DUCT1				
1-	40CFR 60-A.8(f)	87		Performance Tests
00000/00001/004/DUCT2				
1-	40CFR 60-A.8(f)	99		Performance Tests
00000/00001/004/TURB1				
1-	40CFR 60-A.8(f)	112		Performance Tests
00000/00001/004/TURB2				
1-	40CFR 60-A.8(f)	132		Performance Tests
00000/00001/005/TURB1				
1-	40CFR 60-A.8(f)	145		Performance Tests
00000/00001/005/TURB2				
1-	40CFR 60-A.9	77		General provisions - Availability of information
00000/00001/004/DUCT1				
1-	40CFR 60-A.9	88		General provisions - Availability of information
00000/00001/004/DUCT2				
1-	40CFR 60-A.9	100		General provisions - Availability of information
00000/00001/004/TURB1				
1-	40CFR 60-A.9	113		General provisions - Availability of information
00000/00001/004/TURB2				
1-	40CFR 60-A.9	133		General provisions - Availability of information
00000/00001/005/TURB1				
1-	40CFR 60-A.9	146		General provisions - Availability of information
00000/00001/005/TURB2				
1-00000/00001/005	40CFR 60-Dc.45c(a)	118		Compliance and Performance Test Methods and Procedures for Particulate Matter.
FACILITY	40CFR 60-KKKK.4305	47		Stationary Combustion Turbine NSPS - applicability
1-	40CFR 60-KKKK.4325	78		Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
00000/00001/004/DUCT1				
1-	40CFR 60-KKKK.4325	89		Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
00000/00001/004/DUCT2				
1-	40CFR 60-KKKK.4325	101		Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
00000/00001/004/TURB1				
1-	40CFR 60-KKKK.4325	114		Stationary Combustion



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

00000/00001/004/TURB2				Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/DUCT1	40CFR 60-KKKK.4325	120		Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/DUCT2	40CFR 60-KKKK.4325	122		Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/TURB1	40CFR 60-KKKK.4325	134		Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/TURB2	40CFR 60-KKKK.4325	147		Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1-00000/00001/005/TURB1	40CFR 60-KKKK.4330	135		Stationary Combustion Turbine NSPS - SO2 emission limits
1-00000/00001/005/TURB2	40CFR 60-KKKK.4330	148		Stationary Combustion Turbine NSPS - SO2 emission limits
FACILITY	40CFR 60-KKKK.4340	48, 49		Stationary Combustion Turbine NSPS - demonstrating compliance with NOx standard without using using water or steam injection
1-00000/00001/004/TURB1	40CFR 60-KKKK.4340(a)	102		Stationary Combustion Turbine NSPS - Continuous compliance with NOx limit
1-00000/00001/004/TURB2	40CFR 60-KKKK.4340(a)	115		Stationary Combustion Turbine NSPS - Continuous compliance with NOx limit
FACILITY	40CFR 60-KKKK.4365(a)	50, 51		Stationary Combustion Turbine NSPS - Exemption from monitoring total sulfur content of fuel
FACILITY	40CFR 68	21		Chemical accident prevention provisions
FACILITY	40CFR 82-F	22		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.
FACILITY	6NYCRR 201-1.4	169		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

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005
Renewal Number: 1
01/29/2010

FACILITY	6NYCRR 201-3.2 (a)	13	air
FACILITY	6NYCRR 201-3.3 (a)	14	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-5.3 (b)	170	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	23, 52, 53	Permit Content and Terms of Issuance - permit conditions
FACILITY	6NYCRR 201-6.5 (a) (4)	15	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.5 (a) (7)	2	General conditions
FACILITY	6NYCRR 201-6.5 (a) (8)	16	General conditions
FACILITY	6NYCRR 201-6.5 (c)	3, 24	Fees
FACILITY	6NYCRR 201-6.5 (c) (2)	4	General conditions
FACILITY	6NYCRR 201-6.5 (c) (3) (ii)	5	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (d) (5)	17	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (e)	6	Compliance schedules
FACILITY	6NYCRR 201-6.5 (f) (6)	18	Compliance
FACILITY	6NYCRR 201-6.5 (g)	25	Certification
FACILITY	6NYCRR 201-7	26, 27, 28, 29, 30, 31	Off Permit Changes
FACILITY	6NYCRR 202-1.1	19	Permit shield
FACILITY	6NYCRR 202-2.1	7	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-2.5	8	Required emissions tests.
FACILITY	6NYCRR 211.2	171	Emission Statements - Applicability
FACILITY	6NYCRR 211.3	20	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 215	9	General Prohibitions - air pollution prohibited.
FACILITY	6NYCRR 225.1 (a) (3)	35, 36	General Prohibitions - visible emissions limited
FACILITY	6NYCRR 225.7 (a)	37	Open Fires
FACILITY	6NYCRR 225-1.2 (a) (2)	32, 33	Sulfur in Fuel Limitations (SIP)
FACILITY	6NYCRR 225-1.8	34	Reports, Sampling and Analysis
1-00000/00001	6NYCRR 227.2 (b) (1)	58	Sulfur in Fuel Limitations Post 12/31/87.
1-00000/00001/002	6NYCRR 227.2 (b) (1)	64	Reports, sampling and analysis.
1-00000/00001/005	6NYCRR 227.2 (b) (1)	117	Particulate emissions.
2-00000/00002/003	6NYCRR 227.2 (b) (1)	153	Particulate emissions.
			Particulate

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

1-00000/00001	6NYCRR 227-1.2 (a) (1)	54	emissions.
FACILITY	6NYCRR 227-1.3	38, 39	Particulate Emissions from Liquid Fuels.
1-00000/00001/002	6NYCRR 227-1.3	62	Smoke Emission Limitations.
2-00000/00002/003	6NYCRR 227-1.3	150, 151	Smoke Emission Limitations.
1-00000/00001	6NYCRR 227-1.3 (a)	55	Smoke Emission Limitations.
1-00000/00001/002	6NYCRR 227-1.3 (a)	63	Smoke Emission Limitations.
1-00000/00001/005	6NYCRR 227-1.3 (a)	116	Smoke Emission Limitations.
2-00000/00002/003	6NYCRR 227-1.3 (a)	152	Smoke Emission Limitations.
1-00000/00001	6NYCRR 227-1.4 (a)	172	Stack Monitoring. (see narrative)
FACILITY	6NYCRR 227-1.4 (b)	40	Stack Monitoring
1-00000/00001	6NYCRR 227-1.4 (b)	56	Stack Monitoring
2-00000/00002	6NYCRR 227-1.4 (b)	149	Stack Monitoring
FACILITY	6NYCRR 227-1.6 (a)	41	Corrective Action.
FACILITY	6NYCRR 227-1.6 (b)	42	Corrective Action: Facility Shutdown.
FACILITY	6NYCRR 227-1.6 (c)	43	Corrective Action: Facility Shutdown Prohibitions.
FACILITY	6NYCRR 227-1.6 (d)	44	Corrective Action: Facility Shutdown Prohibitions.
1-00000/00001/001/OBLRA	6NYCRR 227-2.4 (c) (2)	59	Emission limitations for mid-sized boilers firing gas, distillate or residual fuels.
1-00000/00001/001/OBLRB	6NYCRR 227-2.4 (c) (2)	60	Emission limitations for mid-sized boilers firing gas, distillate or residual fuels.
1-00000/00001/001/OBLRC	6NYCRR 227-2.4 (c) (2)	61	Emission limitations for mid-sized boilers firing gas, distillate or residual fuels.
1-00000/00001/002/OBLRA	6NYCRR 227-2.4 (c) (2)	65	Emission limitations for mid-sized boilers firing gas, distillate or residual fuels.
1-00000/00001/002/OBLRB	6NYCRR 227-2.4 (c) (2)	66	Emission limitations for mid-sized boilers firing gas, distillate or residual fuels.
1-00000/00001/002/OBLRC	6NYCRR 227-2.4 (c) (2)	67	Emission limitations for mid-sized boilers firing gas, distillate or residual fuels.
1-00000/00001/004/TURB1	6NYCRR 227-2.4 (e) (2)	90	RACT requirements for combined cycle combustion turbines.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

1- 00000/00001/004/TURB2	6NYCRR 227-2.4 (e) (2)	103	RACT requirements for combined cycle combustion turbines.
1- 00000/00001/004/DUCT1	6NYCRR 227-2.4 (e) (2) (i)	68	RACT requirements for gas fired combined cycle combustion turbines.
1- 00000/00001/004/DUCT2	6NYCRR 227-2.4 (e) (2) (i)	79	RACT requirements for gas fired combined cycle combustion turbines.
1- 00000/00001/004/TURB1	6NYCRR 227-2.4 (e) (2) (i)	91	RACT requirements for gas fired combined cycle combustion turbines.
1- 00000/00001/004/TURB2	6NYCRR 227-2.4 (e) (2) (i)	104	RACT requirements for gas fired combined cycle combustion turbines.
1- 00000/00001/005/DUCT1	6NYCRR 227-2.4 (e) (2) (ii)	119	RACT requirements for combined cycle combustion turbines when firing oil.
1- 00000/00001/005/DUCT2	6NYCRR 227-2.4 (e) (2) (ii)	121	RACT requirements for combined cycle combustion turbines when firing oil.
1- 00000/00001/005/TURB1	6NYCRR 227-2.4 (e) (2) (ii)	123	RACT requirements for combined cycle combustion turbines when firing oil.
1- 00000/00001/005/TURB2	6NYCRR 227-2.4 (e) (2) (ii)	136	RACT requirements for combined cycle combustion turbines when firing oil.
2- 00000/00002/003/ENG01	6NYCRR 227-2.4 (f) (2)	154	Emission limits for lean burn engines.
2- 00000/00002/003/ENG02	6NYCRR 227-2.4 (f) (2)	156	Emission limits for lean burn engines.
2- 00000/00002/003/ENG03	6NYCRR 227-2.4 (f) (2)	158	Emission limits for lean burn engines.
2- 00000/00002/003/ENG04	6NYCRR 227-2.4 (f) (2)	160	Emission limits for lean burn engines.
2- 00000/00002/003/ENG05	6NYCRR 227-2.4 (f) (2)	162	Emission limits for lean burn engines.
2- 00000/00002/003/ENG06	6NYCRR 227-2.4 (f) (2)	164	Emission limits for lean burn engines.
2- 00000/00002/003/ENG07	6NYCRR 227-2.4 (f) (2)	166	Emission limits for lean burn engines.
FACILITY	6NYCRR 227-2.4 (f) (2) (ii)	45	Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2- 00000/00002/003/ENG01	6NYCRR 227-2.4 (f) (2) (ii)	155	Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2- 00000/00002/003/ENG02	6NYCRR 227-2.4 (f) (2) (ii)	157	Emission limitation for NOx for lean burn internal combustion



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

2- 00000/00002/003/ENG03	6NYCRR 227- 2.4 (f) (2) (ii)	159	engines with compression ignition sources Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2- 00000/00002/003/ENG04	6NYCRR 227- 2.4 (f) (2) (ii)	161	Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2- 00000/00002/003/ENG05	6NYCRR 227- 2.4 (f) (2) (ii)	163	Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2- 00000/00002/003/ENG06	6NYCRR 227- 2.4 (f) (2) (ii)	165	Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
2- 00000/00002/003/ENG07	6NYCRR 227- 2.4 (f) (2) (ii)	167	Emission limitation for NOx for lean burn internal combustion engines with compression ignition sources
1-00000/00001 FACILITY	6NYCRR 227-2.5 (a) 6NYCRR 227-2.5 (c)	57 46	Fuel Switching Alternative emission limits
FACILITY	6NYCRR 231-2	27, 28, 29, 30, 31	New Source Review in Nonattainment Areas and Ozone Transport Region

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.

6NYCRR Part 200-.6

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

6NYCRR Part 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

6NYCRR Part 201-1.4



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

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.

6NYCRR Part 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6NYCRR Part 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6NYCRR Part 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.

6NYCRR Part 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.

6NYCRR Part 201-5.3(b)

Lists those contaminants subject to contaminant specific requirements

6NYCRR Part 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.

6NYCRR 201-6.5(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.

6NYCRR 201-6.5(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.

6NYCRR 201-6.5(a)(8)



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

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.

6NYCRR Part 201-6.5(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.

6NYCRR Part 201-6.5(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.

6NYCRR Part 201-6.5(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.

6NYCRR 201-6.5(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.

6NYCRR Part 201-6.5(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.

6NYCRR 201-6.5(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.

6NYCRR Part 201-6.5(g)

Permit Exclusion Provisions - specifies those actions, such as administrative orders, suits, claims for natural resource damages, etc that are not affected by the federally enforceable portion of the permit, unless they are specifically addressed by it.

6NYCRR Part 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.

6NYCRR Part 202-2.1



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calENdAr year.

6NYCRR Part 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.

6NYCRR Part 211-.2

This regulation prohibits any emissions of air contaminants to the outdoor atmosphere which may be detrimental to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property regardless of the existence of any specific air quality standard or emission limit.

6 NYCRR Part 211.3

This condition requires that the opacity (i.e., the degree to which emissions other than water reduce the transmission of light) of the emissions from any air contamination source be less than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent.

6 NYCRR Part 215

Prohibits open fires at industrial and commercial sites.

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, NYU CENTRAL 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 60.4305

This regulation is an NSPS regulation for Stationary Combustion Turbines and it explains the applicability of this subpart to stationary combustion turbines as:

(a) Owners or operators of a stationary combustion turbine with a heat input at peak load equal to or



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

greater than 10.7 gigajoules (10 MM Btu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, the turbine is subject to this subpart. Only heat input to the combustion turbine should be included when determining whether or not this subpart is applicable to the turbine. Any additional heat input to associated heat recovery steam generators (HRSG) or duct burners should not be included when determining your peak heat input. However, this subpart does apply to emissions from any associated HRSG and duct burners.

(b) Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this part. Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part.

40 CFR 60.4325

This regulation is an NSPS regulation for Stationary Combustion Turbines and it specifies the NO_x emission limits specified in Table 1 to this subpart. If the turbine's total heat input is greater than or equal to 50 percent natural gas, then the owner or operator must meet the corresponding limit for a natural gas-fired turbine when the turbine is burning that fuel. Similarly, when the turbine's total heat input is greater than 50 percent distillate oil and fuels other than natural gas, then the owner or operator must meet the corresponding limit for distillate oil and fuels other than natural gas for the duration of the time that the turbine burns that particular fuel.

40 CFR 60.4330

This regulation is an NSPS regulation for Stationary Combustion Turbines and it specifies the sulfur dioxide emission limit.

(a) If the turbine is located in a continental area, then the owner or operator must comply with either paragraph (a)(1) or (a)(2) of this section. If the turbine is located in Alaska, then the owner or operator do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.

(1) The owner or operator must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO₂ in excess of 0.90 pounds per megawatt-hour (lb/MWh) gross output or

(2) The owner or operator must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO₂/MMBtu heat input. If the turbine simultaneously fires multiple fuels, then each fuel must meet this requirement.

(b) If the turbine is located in a noncontinental area or a continental area that the Administrator determines does have excess to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit, then the owner or operator must comply with one or the other of the following conditions:

(1) The turbine must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO₂ in excess of 6.2 lb/MWh gross output, or

(2) The owner or operator must not burn in the subject stationary combustion turbine any fuel which contains total sulfur with potential sulfur emissions in excess of 0.42 lb SO₂/MMBtu heat input. If the turbine simultaneously fires multiple fuels, then each fuel must meet this requirement.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

40 CFR 60.4340

This regulation requires the facility to perform an annual compliance test on internal combustion engines that do not use water or steam injection to control the emissions of oxides of nitrogen (NO_x). Alternatively, the facility may use a continuous emissions monitor to determine the emissions of NO_x.

40 CFR 60.4340 (a)

This regulation is an NSPS regulation for Stationary Combustion Turbines and it specifies demonstrating the continuous compliance with the NO_x emission limits specified in Table 1 to this subpart if water or steam injection is not used.

(a) If the owner or operator is not using water or steam injection to control NO_x emissions, then the owner or operator must perform annual performance tests in accordance with Part 60.4400 to demonstrate continuous compliance. If the NO_x emission result from the performance test is less than or equal to 75 percent of the NO_x emission limit for the turbine, the owner or operator may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO_x emission limit for the turbine, the owner or operator must resume annual performance tests.

40 CFR 60.4365 (a)

This regulation is an NSPS regulation for Stationary Combustion Turbines and it explains the exemption from monitoring the total sulfur content of the fuel. The owner or operator may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO₂/J (0.060 lb SO₂/MM Btu) heat input for units located in continental areas and 180 ng SO₂/J (0.42 lb SO₂/MM Btu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds, would cause more environmental harm than benefit. The owner or operator must use one of the following sources of information to make the required demonstration:

(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) for less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than 26 ng SO₂/J (0.060 lb SO₂/MM Btu) heat input for continental areas and has potential sulfur emissions of less than 180 ng SO₂/J (0.42 lb SO₂/MM Btu) heat input for noncontinental areas; or

(b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO₂/J (0.060 lb SO₂/MM Btu) heat input for continental areas or 180 ng SO₂/J (0.42 lb SO₂/MM Btu) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 of this chapter is required.

40 CFR 60.45c (a)

This regulation requires that the opacity of the emissions be monitored during the stack test. The opacity may not exceed 20%.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

40 CFR 60.7 (a)

This regulation requires any owner or operator subject to a New Source Performance Standard (NSPS) to furnish the Administrator with notification of the dates of: construction or reconstruction, initial startup, any physical or operational changes, commencement of performance testing for continuous monitors and anticipated date for opacity observations as required.

40 CFR 60.7 (b)

This regulation requires the owner or operator to maintain records of the occurrence and duration of any startup, shutdown, or malfunction of the source or control equipment or continuous monitoring system.

40 CFR 60.7 (f)

This condition specifies requirements for maintenance of files of all measurements, including continuous monitoring system (CMS), monitoring device, and performance testing measurements; all CMS performance evaluations; all CMS or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices for at least two years.

40 CFR 60.8 (a)

This regulation contains the requirements for the completion date and reporting of Performance Testing (stack testing), at the facility. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, the owner or operator of the facility must conduct performance test(s) and furnish a written report of the test results.

40 CFR 60.8 (b)

This regulation contains the requirements for Performance test methods and procedures, to be used by the owner or operator, of the affected facility.

40 CFR 60.8 (d)

This regulation contains the requirements for advance notification of Performance (stack) testing.

40 CFR 60.8 (e)

This regulation requires the facility to provide appropriate sampling ports, safe platforms and utilities as necessary for Performance (stack) testing.

40 CFR 60.8 (f)

This regulation requires that Performance (stack) tests consist of three runs unless otherwise specified. The rule also designates the allowable averaging methods for the analysis of the results.

40 CFR 60.9

This rule citation allows the public access to any information submitted to the EPA Administrator (or state contact), in conjunction with a project subject to this section of the regulation.

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).**



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

6 NYCRR 225.7 (a)

The commissioner may require an owner of an air contamination source to retain for up to three years, and to submit to him, fuel analyses, information on the quantity of fuel received, burned or sold, and results of stack sampling, stack monitoring and other procedures to ensure compliance with the provisions of the Part. **NOTE: This citation has been replaced by requirements cited under 225-1.8(a) and is no longer a part of current State regulations, however, it remains as part of New York State's approved State Implementation Plan (SIP).**

6 NYCRR 225-1.2 (a) (2)

This regulation prohibits any person from selling, offering for sale, purchasing or using any fuel which contains sulfur in a quantity exceeding the limitations set forth in Table 1, Table 2, or Table 3 of this section.

6 NYCRR 225-1.8

This regulation requires an owner or operator of a facility which purchases and fires coal and/or oil to submit reports to the commissioner containing fuel analysis data, information on the quantity of the fuel received, burned, and results of any stack sampling, stack monitoring and any other procedures to ensure compliance with the provisions of 6 NYCRR Part 225-1.

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 227-1.2 (a) (1)

This regulation establishes a particulate emission limit in terms of lbs per mmBtu of heat input for stationary combustion units of greater than 250 mmBtu/hr heat input capacity which fire coal, oil, or coal derived fuels.

6 NYCRR 227-1.3

This regulation requires a limitation and compliance monitoring for opacity from a 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 227-1.4 (a)

Subdivisions (a) and (f) of this section (227-1.4) have not been approved by EPA and have not been included in the NYS SIP.

6 NYCRR 227-1.4 (b)

This regulation requires the specific contents of excess emissions reports for opacity from facilities that employ continuous opacity monitors (COMs).

6 NYCRR 227-1.6 (a)

This regulation requires that any facility found in violation of the provisions of Part 227 must not operate the affected stationary combustion installation that is in violation unless it is equipped with approved emission control equipment, it is rehabilitated or upgraded in an approved manner; or the fuel is changed to an acceptable type



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

6 NYCRR 227-1.6 (b)

This regulation states that the Department may seal the affected stationary combustion installation that does not comply with the provisions in subdivision 6 NYCRR 227-1.6(a) within the time provided.

6 NYCRR 227-1.6 (c)

This regulation state that no person may operate any affected stationary combustion installation sealed by the commissioner in accordance with this Part 227.

6 NYCRR 227-1.6 (d)

This regulation states that no person except Department personnel may remove, tamper with, or destroy any seal affixed to any affected stationary combustion installation.

6 NYCRR 227-2.4 (c) (2)

This regulation requires mid-size boilers (fuel combustion units with a maximum heat input capacity greater than 50 million Btu per hour and equal to or less than 100 million Btu per hour that produce steam or heats water or any other heat transfer medium) to meet the following emission limits (listed in pounds NO_x per million Btu) by May 31, 1985:

for Gas fuel -
0.10

for Distillate Oil - 0.12

for Residual Oil - 0.30

Compliance with these emission limits are determined with a 1-hour average in accordance with section 227-2.6(a)(4). If CEMs are used to determine compliance, the requirements of 227-2.6(b) apply, including the use of a 24-hour averaging period.

6 NYCRR 227-2.4 (e) (2)

This regulation specifies the NO_x RACT emission limits requirements for combined cycle combustion turbines when firing gas and when firing oil. For units with a duct burner, compliance will be based on the combination of the turbine and the duct burner when both fire, and the turbine alone when not duct firing.

6 NYCRR 227-2.4 (e) (2) (i)

This regulation specifies the RACT emission limitations for combined cycle combustion turbines when firing gas. The NO_x emission limit is 42 ppmvd corrected to 15 percent oxygen, when firing gas. For units with a duct burner, compliance will be based on the combination of the turbine and the duct burner when both fire, and the turbine alone when not duct firing.

6 NYCRR 227-2.4 (e) (2) (ii)

This regulation specifies the RACT emission limitations for combined cycle combustion turbines when firing oil. The NO_x emission limit is 65 ppmvd corrected to 15 percent oxygen, when firing oil. For units with a duct burner, compliance will be based on the combination of the turbine and the duct burner when both fire, and the turbine alone when not duct firing.

6 NYCRR 227-2.4 (f) (2)

This citation sets emission limits of oxides of nitrogen for lean burn engines.

6 NYCRR 227-2.4 (f) (2) (ii)

This regulation sets the NO_x emission limit for lean burn engines that provide electrical generation for peak shaving. The limit, which applies to engines listed at 225 horsepower for those in the severe ozone non-attainment area and 400 horsepower for the rest of the state, is 2.3 grams of NO_x per brake horsepower-hour, effective April 1, 2005.



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

6 NYCRR 227-2.5 (a)

The emission limits associated with fuel switching should be included as a special condition. The fuel switching plan should be included in the approved compliance plan and should be referenced here. The fuel switching must result in quantifiable annual NOx emissions equal to or less than the NOx emissions expected if the combustion installation complied with the emission limits in 227-2.4. The cleaner fuel must be utilized during the ozone season.

6 NYCRR 227-2.5 (c)

This regulation provides alternative emission limits. For those sources for which the owner or operator demonstrates that the applicable presumptive RACT emission limit of 2.3 grams per brake horsepower-hour in section 227-2.4 of this Subpart is not economically or technically feasible, the owner or operator can request the Department to set a higher source specific emission limit. Economic or technical feasibility must include, but is not limited, the evaluation of fuel switching, selective catalytic reduction or system averaging as compliance options. This alternative RACT emission limit must be approved by the Department and by the Administrator as a revision to the State Implementation Plan.

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 2,000 hours of operation for the combined seven engines when the reciprocating engines will be delegated to emergency status upon repowering with the two new turbines.

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 County.

Non Applicability Analysis

List of non-applicable rules and regulations:

Location Facility/EU/EP/Process/ES	Regulation	Short Description
1-00000	40 CFR 52.21	Prevention of Significant Deterioration
Reason: Due to the Repowering project with the two new turbines (Emission Sources TURB1 & TURB2), the emissions facility wide & within Emission Unit 1-00000: There are no criteria or regulated pollutant emission increases. Netting analysis shows a significant facility emissions reduction. Thus, Prevention of Significant Deterioration (PSD) is not applicable.		
1-00000/00001/001	40 CFR 60.40c (a)	Steam generators 10-100 million Btu per hour
Reason: Since existing Boilers 0BLRA, 0BLRB and 0BLRC, which have a		



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

utility. Otherwise, 40 CFR Part 75.11 applies and it lists the requirements for permits, monitoring, SO2 allowances, record keeping and reporting. Sulfur dioxide emissions are calculated hourly based on fuel usage and sulfur content in accordance with 40 CFR 60 Subpart GG, 40 CFR 72, and 40 CFR 75.

Since both turbines (Emission Sources TURB1 & TURB2) are at 11 MW total (5.5 MW each), and will operate at 8,760 hours/year, then the new facility' annual electrical output will max out at 96,360 MW-hr as:

$$2 \times 5.5 \text{ MW} \times 8,760 \text{ hrs} = 96,360 \text{ MW-hr (which is } < 219,000 \text{ MW-hrs)}$$

40 CFR Part 75 does not apply to any new unit that serves one or more generators with total nameplate capacity of 25 MW or less (NYU will generate 11 MW) and burns only fuels with a sulfur content of 0.05 percent or less by weight may apply for exemption.

FACILITY	40 CFR 75.11 (d)	Continuous emission monitoring - specific provisions for monitoring SO2 emissions gas-fired units and oil-fired units
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Reason: NYU's Central Plant two gas turbines will be exempt from 40 CFR 75, as long as the gas turbines are not an "affected unit" as defined under 40 CFR 72.6 (b) (4) (ii) by supplying "equal to or less than 219,000 MWe-hrs actual electrical output on an annual basis to any utility power distribution system for sale".

The permit limit is 219,000 MWe-hr electrical output supplied to any utility. Otherwise, 40 CFR Part 75.11 applies and it lists the requirements for permits, monitoring, SO2 allowances, record keeping and reporting. Sulfur dioxide emissions are calculated hourly based on fuel usage and sulfur content in accordance with 40 CFR 60 Subpart GG, 40 CFR 72, and 40 CFR 75.

Since both turbines (Emission Sources TURB1 & TURB2) are at 11 MW total (5.5 MW each), and will operate at 8,760 hours/year, then the new facility' annual electrical output will max out at 96,360 MW-hr as:

$$2 \times 5.5 \text{ MW} \times 8,760 \text{ hrs} = 96,360 \text{ MW-hr (which is } < 219,000 \text{ MW-hrs)}$$

FACILITY	40 CFR 75.20	CEM operation and maintenance requirements - certification and recertification procedures
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Reason: Acid Precipitation: CEM operation and maintenance requirements - certification and re certification procedures:



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

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

Whenever the owner or operator makes a replacement, modification, or change in the certified continuous emission monitoring system or continuous opacity monitoring system (which includes the automated data acquisition and handling system, and, where applicable, the CO2 continuous emission monitoring system), that significantly affects the ability of the system to measure or record the SO2 concentration, volumetric gas flow, SO2 mass emissions, NOx emission rate, CO2 concentration, or opacity, or to meet the requirements of appendix B of this 40 CFR 75, the owner or operator shall re certify the continuous emission monitoring system, continuous opacity monitoring system, or component thereof according to the procedures in 40 CFR 75. Examples of changes which require re certification include: replacement of the analytical method, including the analyzer; change in location or orientation of the sampling probe or site; rebuilding of the analyzer or all monitoring system equipment; and replacement of an existing continuous emission monitoring system or continuous opacity monitoring system.

Since both turbines (Emission Sources TURB1 & TURB2) are at 11 MW total (5.5 MW each), and will operate at 8,760 hours/year, then the new facility' annual electrical output will max out at 96,360 MW-hr as:

$$2 \times 5.5 \text{ MW} \times 8,760 \text{ hrs} = 96,360 \text{ MW-hr (which is } < 219,000 \text{ MW-hrs)}$$

2-00000/00002/003 6 NYCRR 227-1.2 (a) Particulate Emissions
from Liquid Fuels.

Reason: Regulation 6 NYCRR 227-1.2(a) for current stationary combustion installation firing liquid fuel for Particulate emissions limit of 0.1/0.2 lb/MM Btus is not applicable to the seven engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) in Emission Unit 2-00000 and Emission Point 00002 and Process 003 (# 2 fuel oil).

Each of the seven identical Caterpillar D399 diesel engine generators in Emission Unit 2-00000 (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) is 1,000 mechanical horsepower (850 KW). The total combined heat input from all seven engine generators is:

$$7 \times (850 \text{ KW}) \times (3,413 \text{ BTU/hr} / 1 \text{ KW}) \times (1 \text{ MM BTU}/1,000,000 \text{ BTU}) \\ = 20.307 \text{ MM BTU/hr}$$

which is < 250 MM Btu/hr heat input applicability for 6 NYCRR 227-1.2(a)(1), and < 50 MM Btu/hr heat input applicability for 6 NYCRR 227-1.2(a)(2) from any stationary combustion installation using any liquid fuel.

2-00000/00002 6 NYCRR 227-1.4 (a) Stack Monitoring. (see
narrative)

Reason: Regulation 6 NYCRR 227-1.4(a) for continuously monitoring and recording opacity is not applicable to the seven identical Caterpillar



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

1-00000/00001/005/DUCT2	122	intermittent emission testing
1-00000/00001/005/TURB1	134	intermittent emission testing
1-00000/00001/005/TURB2	147	intermittent emission testing
1-00000/00001/005/TURB1	135	monitoring of process or control device parameters as surrogate
1-00000/00001/005/TURB2	148	monitoring of process or control device parameters as surrogate
FACILITY	48	intermittent emission testing
FACILITY	49	intermittent emission testing
1-00000/00001/004/TURB1	102	record keeping/maintenance procedures
1-00000/00001/004/TURB2	115	record keeping/maintenance procedures
FACILITY	50	work practice involving specific operations
FACILITY	51	work practice involving specific operations
FACILITY	170	record keeping/maintenance procedures
FACILITY	24	work practice involving specific operations
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	27	monitoring of process or control device parameters as surrogate
FACILITY	28	monitoring of process or control device parameters as surrogate
FACILITY	29	monitoring of process or control device parameters as surrogate
FACILITY	30	work practice involving specific operations
FACILITY	31	monitoring of process or control device parameters as surrogate
FACILITY	7	record keeping/maintenance procedures
FACILITY	35	work practice involving specific operations
FACILITY	36	work practice involving specific operations
FACILITY	37	record keeping/maintenance procedures
FACILITY	32	work practice involving specific operations
FACILITY	33	work practice involving specific operations
FACILITY	34	record keeping/maintenance procedures
1-00000/00001	58	intermittent emission testing
1-00000/00001/002	64	intermittent emission testing



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

1-00000/00001/005	117	intermittent emission testing
2-00000/00002/003	153	intermittent emission testing
1-00000/00001	54	intermittent emission testing
FACILITY	38	monitoring of process or control device parameters as surrogate
FACILITY	39	record keeping/maintenance procedures
1-00000/00001/002	62	record keeping/maintenance procedures
2-00000/00002/003	150	monitoring of process or control device parameters as surrogate
2-00000/00002/003	151	record keeping/maintenance procedures
1-00000/00001	55	monitoring of process or control device parameters as surrogate
1-00000/00001/002	63	monitoring of process or control device parameters as surrogate
1-00000/00001/005	116	monitoring of process or control device parameters as surrogate
2-00000/00002/003	152	monitoring of process or control device parameters as surrogate
1-00000/00001	172	monitoring of process or control device parameters as surrogate
FACILITY	40	record keeping/maintenance procedures
1-00000/00001	56	record keeping/maintenance procedures
2-00000/00002	149	record keeping/maintenance procedures
FACILITY	41	record keeping/maintenance procedures
1-00000/00001/001/0BLRA	59	intermittent emission testing
1-00000/00001/001/0BLRB	60	intermittent emission testing
1-00000/00001/001/0BLRC	61	intermittent emission testing
1-00000/00001/002/0BLRA	65	intermittent emission testing
1-00000/00001/002/0BLRB	66	intermittent emission testing
1-00000/00001/002/0BLRC	67	intermittent emission testing
1-00000/00001/004/TURB1	90	intermittent emission testing
1-00000/00001/004/TURB2	103	intermittent emission testing
1-00000/00001/004/DUCT1	68	intermittent emission testing
1-00000/00001/004/DUCT2	79	intermittent emission testing
1-00000/00001/004/TURB1	91	intermittent emission testing
1-00000/00001/004/TURB2	104	intermittent emission testing

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005
Renewal Number: 1
01/29/2010

1-00000/00001/005/DUCT1	119	testing intermittent emission testing
1-00000/00001/005/DUCT2	121	intermittent emission testing
1-00000/00001/005/TURB1	123	intermittent emission testing
1-00000/00001/005/TURB2	136	intermittent emission testing
2-00000/00002/003/ENG01	154	record keeping/maintenance procedures
2-00000/00002/003/ENG02	156	record keeping/maintenance procedures
2-00000/00002/003/ENG03	158	record keeping/maintenance procedures
2-00000/00002/003/ENG04	160	record keeping/maintenance procedures
2-00000/00002/003/ENG05	162	record keeping/maintenance procedures
2-00000/00002/003/ENG06	164	record keeping/maintenance procedures
2-00000/00002/003/ENG07	166	record keeping/maintenance procedures
FACILITY	45	record keeping/maintenance procedures
2-00000/00002/003/ENG01	155	intermittent emission testing
2-00000/00002/003/ENG02	157	intermittent emission testing
2-00000/00002/003/ENG03	159	intermittent emission testing
2-00000/00002/003/ENG04	161	intermittent emission testing
2-00000/00002/003/ENG05	163	intermittent emission testing
2-00000/00002/003/ENG06	165	intermittent emission testing
2-00000/00002/003/ENG07	167	intermittent emission testing
FACILITY	46	monitoring of process or control device parameters as surrogate

Basis for Monitoring

The NYU Central Plant is subject to the requirements of Title V. The facility is required, under the provisions of 6 NYCRR Subpart 201-6, to submit semiannual compliance reports and an annual Compliance Certification. This facility is required to comply with the following monitoring conditions:

Condition #24 for 6 NYCRR 201-6.5(c) for Oxides of Nitrogen: Upon repowering with the two new turbines, scheduled for 6/30/2010, the facility's NOx emissions will not exceed 158.5 tpy.

Condition #27 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2 for Oxides of Nitrogen: Upon repowering with the two new turbines, scheduled for 6/30/2010, the



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

NO_x PTE for the two combined turbine/ HRSG duct burners pairs will not exceed 104.23 tpy.

Condition #28 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2 for Oxides of Nitrogen: Upon repowering with the two new turbines, scheduled for 6/30/2010, the seven identical reciprocating diesel engine generators will be delegated to participate in a demand response program, and will be capped at an overall 2,000 hours of operation and 13.9 tpy of NO_x for the combined seven engines.

Condition #29 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2 for Oxides of Nitrogen: Upon repowering with the two new turbines, scheduled for 6/30/2010, the NO_x PTE for the two new turbines will not exceed 56.93 tpy.

Condition #30 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2 for Oxides of Nitrogen: Upon repowering with the two new turbines, scheduled for 6/30/2010, the seven identical reciprocating diesel engine generators will be delegated to participate in a demand response program, and will be capped at an overall 2,000 hours of operation for the combined seven engines.

Condition #31 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2 for Oxides of Nitrogen: Upon repowering with the two new turbines, scheduled for 6/30/2010, Boilers 0BLRA, 0BLRB and 0BLRC will have a 40.4 tpy NO_x emission cap equivalent to the PTE emissions of two of the identical boilers.

Condition #32 for 6 NYCRR 225-1.2(a)(2): Facility distillate fuel oil is limited to 0.20% sulfur content by weight.

Condition #33 for 6 NYCRR 225-1.2(a)(2): Facility #6 residual fuel oil is limited to 0.30 % sulfur content by weight.

Condition #35 for 6 NYCRR 225.1(a)(3): Facility #2 distillate fuel oil is limited to 0.20% sulfur content by weight.

Condition #36 for 6 NYCRR 225.1(a)(3): Facility #6 residual fuel oil is limited to 0.30 % sulfur content by weight.

Condition #38 for 6 NYCRR 227-1.3 for Particulates: Upon repowering with the two new turbines, scheduled for 6/30/2010, their opacity will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

Condition # 45 for 6 NYCRR 227-2.4(f)(2)(ii) for Oxides of Nitrogen: Upon repowering with the two new turbines (scheduled for 6/30/2010), all of the seven identical diesel engine generators with waste heat boilers at the plant, will be delegated to



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

participate in the Special Case Resources (SCR) of the New York Independent System Operator (NYISO) or any other demand response program, scheduled for 6/30/2010, and will operate no more than 2,000 hours/7 engines/year and are limited to 13.9 tpy of NOx emission.

Condition #46 for 6 NYCRR 227-2.5(c) for Oxides of Nitrogen: Per the approved NOx RACT Variance, each of the seven identical reciprocating diesel engine generators is allowed to emit up to 9.0 grams per brake horsepower-hour.

Condition #48 for 40 CFR 60.4340, NSPS Subpart KKKK for Oxides of Nitrogen: Upon repowering with the two new turbines, scheduled for 6/30/2010, the NOx emission limit for each of the two turbines will be 74 ppm at 15% O₂ firing fuels other than natural gas, where stack testing is required for compliance.

Condition #49 for 40 CFR 60.4340, NSPS Subpart KKKK for Oxides of Nitrogen: Upon repowering with the two new turbines, scheduled for 6/30/2010, the NOx emission limit for each of the two turbines will be 25 ppm at 15% O₂ firing natural gas, where stack testing is required for compliance.

Condition #50 for 40 CFR 60.4365(a), NSPS Subpart KKKK for Sulfur Dioxide: Sulfur content in #2 fuel oil combusting in the two new combustion turbines is limited to 0.05% sulfur by weight. This is equivalent to 500 ppm by weight, and 0.06 lbs per million BTU of heat input.

Condition #51 for 40 CFR 60.4365(a), NSPS Subpart KKKK for Sulfur Dioxide: Sulfur content in the natural gas combusting in the two new turbines is limited to 0.05% sulfur by weight. This is equivalent to 20 grains per 100 scf, and 0.06 lbs per million BTU of heat input.

Condition #54 for 6 NYCRR 227-1.2(a)(1) for Particulates: The particulate emission limit for a stationary combustion installation ducted through a common stack, firing liquid fuels, and having a heat capacity exceeding 250 MM Btu/hr is limited to 0.10 pounds per million Btus. This condition applies to Emission Unit 1-00000, Emission Point 00001, Process 005 for the two new turbines, and Process 002 for the reconfigured three boilers, where stack testing is required for compliance.

Condition #55 for 6 NYCRR 227-1.3(a) for Particulates: Upon repowering with the two new turbines, scheduled for 6/30/2010, the opacity will be limited to 20% at Emission Point 00001 when firing #2 fuel oil.

Condition #58 for 6 NYCRR 227.2(b)(1) for Particulates: The particulate emission limit from any stationary combustion installation ducted through a common stack, which fires liquid fuels, is limited to 0.10 pounds per million Btus. This condition applies to



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

Emission Unit 1-00000, Emission Point 00001 when firing residual oil for the three boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC), where stack testing is required for compliance.

Condition #59 for 6 NYCRR 227-2.4(c)(2) for Oxides of Nitrogen: The NO_x emission limit for mid-size boilers where stack testing is required for compliance is 0.10 pounds per million Btus. This condition applies to Boiler 0BLRA when firing natural gas.

Condition #60 for 6 NYCRR 227-2.4(c)(2) for Oxides of Nitrogen: The NO_x emission limit for mid-size boilers where stack testing is required for compliance is 0.10 pounds per million Btus. This condition applies to Boiler 0BLRB when firing natural gas.

Condition #61 for 6 NYCRR 227-2.4(c)(2) for Oxides of Nitrogen: The NO_x emission limit for mid-size boilers where stack testing is required for compliance is 0.10 pounds per million Btus. This condition applies to Boiler 0BLRC when firing natural gas.

Condition #63 for 6 NYCRR 227-1.3(a) for Opacity: The opacity will be limited to 20% at Emission Point 00001 when the boilers are firing #2 fuel oil.

Condition #64 for 6 NYCRR 227.2(b)(1) for Particulates: The particulate emission limit at Emission Point 00001 is limited to 0.10 pounds per million Btus when firing # 2 fuel oil in the boilers, where stack testing is required for compliance.

Condition #65 for 6 NYCRR 227-2.4(c)(2) for Oxides of Nitrogen: The NO_x emission limit for mid-size boilers where stack testing is required for compliance is 0.30 pounds per million Btus. This condition applies to Boiler 0BLRA when firing residual oil.

Condition #66 for 6 NYCRR 227-2.4(c)(2) for Oxides of Nitrogen: The NO_x emission limit for mid-size boilers where stack testing is required for compliance is 0.30 pounds per million Btus. This condition applies to Boiler 0BLRB when firing residual oil.

Condition #67 for 6 NYCRR 227-2.4(c)(2) for Oxides of Nitrogen: The NO_x emission limit for mid-size boilers where stack testing is required for compliance is 0.30 pounds per million Btus. This condition applies to Boiler 0BLRC when firing residual oil.

Condition #68 for 6 NYCRR 227-2.4(e)(2)(i) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 42.0 ppmvd for the combined turbine Emission Source TURB1 burning natural gas with its associated HRSG duct burner Emission Control DUCT1, where stack testing is required for compliance.

Condition #78 for 40 CFR 60.4325, NSPS Subpart KKKK for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 25.0 ppmvd at 15 % O₂ for the combined turbine Emission Source TURB1 burning natural gas with its

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

associated HRSG duct burner Emission Source/Control DUCT1, where stack testing is required for compliance.

Condition #79 for 6 NYCRR 227-2.4(e)(2)(i) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 42.0 ppmvd for the combined turbine Emission Source TURB2 burning natural gas with its associated HRSG duct burner Emission Source/Control DUCT2, where stack testing is required for compliance.

Condition #89 for 40 CFR 60.4325, NSPS Subpart KKKK for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 25.0 ppm at 15 % O₂ for the combined combustion turbine Emission Source TURB2 burning natural gas with its associated HRSG duct burner Emission Control DUCT2, where stack testing is required for compliance.

Condition #90 for 6 NYCRR 227-2.4(e)(2) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 42.0 ppmvd for turbine Emission Source TURB1 burning natural gas without its associated duct burner Emission Source/Control DUCT1, where stack testing is required for compliance.

Condition #91 for 6 NYCRR 227-2.4(e)(2)(i) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 42.0 ppmvd for the turbine Emission Source TURB1 burning natural gas without its HRSG duct burner Emission Source/Control DUCT1, where stack testing is required for compliance.

Condition #101 for 40 CFR 60.4325, NSPS Subpart KKKK for Oxides of Nitrogen: The facility will perform annual NO_x stack testing to demonstrate compliance with the NSPS Stationary Combustion Turbine NO_x emission limit of 25.0 ppmvd by volume at 15% O₂ when firing gas in turbine Emission Source TURB1 without its associated HRSG duct burner Emission Source/Control DUCT1.

Condition #103 for 6 NYCRR 227-2.4(e)(2) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 42.0 ppmvd for turbine Emission Source TURB2 burning natural gas without its associated duct burner Emission Source/Control DUCT1, where stack testing is required for compliance.

Condition #104 for 6 NYCRR 227-2.4(e)(2)(i) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 42.0 ppmvd for the turbine Emission Source TURB2 burning natural gas without its associated HRSG duct burner Emission Source/Control DUCT2, where stack testing is required for compliance.

Condition #114 for 40 CFR 60.4325, NSPS Subpart KKKK for Oxides of Nitrogen: The facility will perform annual NO_x stack testing to demonstrate compliance with the NSPS Stationary Combustion Turbine NO_x emission limit of 25.0 ppmvd by volume at



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

15% O₂ when firing gas in turbine Emission Source TURB2 without its associated HRSG duct burner Emission Source/Control DUCT2 burning natural gas.

Condition #116 for 6 NYCRR 227-1.3(a): Upon repowering with the two new turbines, scheduled for 6/30/2010, the opacity will be limited to 20% at Emission Point 00001 when firing #2 fuel oil in the turbines.

Condition #117 for 6 NYCRR 227.2(b)(1) for Particulates: Upon repowering with the two new turbines, scheduled for 6/30/2010, the particulate emission limit at Emission Point 00001 is limited to 0.10 pounds per million Btus when firing # 2 fuel oil in the turbines, where stack testing is required for compliance.

Condition #118 for 40 CFR 60.45c(a), NSPS Subpart Dc for Particulates: Upon repowering, the two new turbines and their corresponding HRSG duct burners require stack testing to demonstrate compliance with the 20% opacity limit at Emission Point 00001 when the turbines fire # 2 fuel oil.

Condition #119 for 6 NYCRR 227-2.4(e)(2)(ii) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 65.0 ppmvd for the combined turbine Emission Source TURB1 burning #2 fuel oil with its associated HRSG duct burner Emission Source/Control DUCT1, where stack testing is required for compliance.

Condition #120 for 40 CFR 60.4325, NSPS Subpart KKKK for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 74.0 ppmvd for turbine Emission Source TURB1 burning #2 fuel oil with its associated HRSG duct burner Emission Source/Control DUCT1, where stack testing is required for compliance.

Condition #121 for 6 NYCRR 227-2.4(e)(2)(ii) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 65.0 ppmvd for the combined turbine Emission Source TURB2 burning #2 fuel oil with its associated HRSG duct burner Emission Source/Control DUCT2, where stack testing is required for compliance.

Condition #122 for 40 CFR 60.4325, NSPS Subpart KKKK for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 74.0 ppmvd for turbine Emission Source TURB2 burning #2 fuel oil with its associated HRSG duct burner Emission Source/Control DUCT2, where stack testing is required for compliance.

Condition #123 for 6 NYCRR 227-2.4(e)(2)(ii) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 65.0 ppmvd for the combined turbine Emission Source TURB1 burning #2 fuel oil without its associated HRSG duct burner Emission Source/Control DUCT1, where stack testing is required for compliance.

Condition #134 for 40 CFR 60.4325, NSPS Subpart KKKK for Oxides of Nitrogen:

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

The facility will demonstrate compliance with the NO_x standard of 74.0 ppmvd for turbine Emission Source TURB1 burning #2 fuel oil without its associated HRSG duct burner Emission Source/Control DUCT1, where stack testing is required for compliance.

Condition #135 for 40 CFR 60.4330, NSPS Subpart KKKK for Sulfur Dioxide: For each fuel delivery, the sulfur content of the #2 fuel oil to be burned in turbine Emission Source TURB1 has a limit of 500 ppm (0.05% by weight). This is equivalent to 0.060 pounds per million Btus.

Condition #136 for 6 NYCRR 227-2.4(e)(2)(ii) for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 65.0 ppmvd for the combined turbine Emission Source TURB2 burning #2 fuel oil without its associated HRSG duct burner Emission Source/Control DUCT2, where stack testing is required for compliance.

Condition #147 for 40 CFR 60.4325, NSPS Subpart KKKK for Oxides of Nitrogen: The facility will demonstrate compliance with the NO_x standard of 74.0 ppmvd for turbine Emission Source TURB2 burning #2 fuel oil without its associated HRSG duct burner Emission Source/Control DUCT2, where stack testing is required for compliance.

Condition #148 for 40 CFR 60.4330, NSPS Subpart KKKK for Sulfur Dioxide: For each fuel delivery, the sulfur content of the #2 fuel oil to be burned in turbine Emission Source TURB2 has a limit of 500 ppm (0.05% by weight). This is equivalent to 0.060 pounds per million Btus.

Condition #150 for 6 NYCRR 227-1.3 for Particulates: The opacity any of the seven identical reciprocating diesel engine generators will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

Condition #151 for 6 NYCRR 227-1.3 for Opacity: If any visible emissions are observed on two consecutive days from the diesel engine generators stack, then the facility must conduct a Method 9 analysis of the affected emission point(s) within two (2) business days of such occurrence.

Condition #152 for 6 NYCRR 227-1.3(a) for Opacity: Opacity will be limited to 20% at Emission Point 00002 when firing #2 fuel oil in any of the seven identical reciprocating diesel engine generators in Emission Unit 2-00000.

Condition #153 for 6 NYCRR 227.2(b)(1) for Particulates: The particulate emission limit for any of the seven identical reciprocating diesel engine generators in Emission Point 00002 is limited to 0.10 pounds per million Btus, when firing # 2 fuel oil, where a stack testing is required for compliance.

Condition #154 for 6 NYCRR 227-2.4(f)(2) for Oxides of Nitrogen: For diesel engine

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

generator identified as Emission Source ENG01, NYU will continue to maintain its normal engine-maintenance compliance program which includes the following routine items:

1. Every 1,000 hours: Oil change and filters sampled. Fuel oil filters and air filters by pressure drop.
2. Every 2,000 hours: Valve lash adjustments and crankcase filter change.
3. Every 12,000 hours: Engine top end overhaul.
4. Every 24,000 hours: Engine top and bottom overhaul.

Condition #155 for 6 NYCRR 227-2.4(f)(2)(ii) for Oxides of Nitrogen: The facility is required to conduct stack testing on diesel engine generator identified as Emission Source ENG01 to demonstrate compliance with the approved NO_x RACT Compliance Plan variance of 9.0 grams per brake horsepower-hour NO_x emission limit, once during the term of the permit.

Condition #156 for 6 NYCRR 227-2.4(f)(2) for Oxides of Nitrogen: For diesel engine generator identified as Emission Source ENG02, NYU will continue to maintain its normal engine-maintenance compliance program which includes the following routine items:

1. Every 1,000 hours: Oil change and filters sampled. Fuel oil filters and air filters by pressure drop.
2. Every 2,000 hours: Valve lash adjustments and crankcase filter change.
3. Every 12,000 hours: Engine top end overhaul.
4. Every 24,000 hours: Engine top and bottom overhaul.

Condition #157 for 6 NYCRR 227-2.4(f)(2)(ii) for Oxides of Nitrogen: The facility is required to conduct stack testing on diesel engine generator identified as Emission Source ENG02 to demonstrate compliance with the approved NO_x RACT Compliance Plan variance of 9.0 grams per brake horsepower-hour NO_x emission limit, once during the term of the permit.

Condition #158 for 6 NYCRR 227-2.4(f)(2) for Oxides of Nitrogen: For diesel engine generator identified as Emission Source ENG03, NYU will continue to maintain its normal engine-maintenance compliance program which includes the following routine items:

1. Every 1,000 hours: Oil change and filters sampled. Fuel oil filters and air filters by pressure drop.
2. Every 2,000 hours: Valve lash adjustments and crankcase filter change.
3. Every 12,000 hours: Engine top end overhaul.
4. Every 24,000 hours: Engine top and bottom overhaul.

Condition #159 for 6 NYCRR 227-2.4(f)(2)(ii) for Oxides of Nitrogen: The facility is required to conduct stack testing on diesel engine generator identified as Emission Source

New York State Department of Environmental Conservation
Permit Review Report



Permit ID: 2-6205-00246/00005
Renewal Number: 1
01/29/2010

ENG03 to demonstrate compliance with the approved NO_x RACT Compliance Plan variance of 9.0 grams per brake horsepower-hour NO_x emission limit, once during the term of the permit.

Condition #160 for 6 NYCRR 227-2.4(f)(2) for Oxides of Nitrogen: For diesel engine generator identified as Emission Source ENG04, NYU will continue to maintain its normal engine-maintenance compliance program which includes the following routine items:

1. Every 1,000 hours: Oil change and filters sampled. Fuel oil filters and air filters by pressure drop.
2. Every 2,000 hours: Valve lash adjustments and crankcase filter change.
3. Every 12,000 hours: Engine top end overhaul.
4. Every 24,000 hours: Engine top and bottom overhaul.

Condition #161 for 6 NYCRR 227-2.4(f)(2)(ii) for Oxides of Nitrogen: The facility is required to conduct stack testing on diesel engine generator identified as Emission Source ENG04 to demonstrate compliance with the approved NO_x RACT Compliance Plan variance of 9.0 grams per brake horsepower-hour NO_x emission limit, once during the term of the permit.

Condition #162 for 6 NYCRR 227-2.4(f)(2) for Oxides of Nitrogen: For diesel engine generator identified as Emission Source ENG05, NYU will continue to maintain its normal engine-maintenance compliance program which includes the following routine items:

1. Every 1,000 hours: Oil change and filters sampled. Fuel oil filters and air filters by pressure drop.
2. Every 2,000 hours: Valve lash adjustments and crankcase filter change.
3. Every 12,000 hours: Engine top end overhaul.
4. Every 24,000 hours: Engine top and bottom overhaul.

Condition #163 for 6 NYCRR 227-2.4(f)(2)(ii) for Oxides of Nitrogen: The facility is required to conduct stack testing on diesel engine generator identified as Emission Source ENG05, to demonstrate compliance with the approved NO_x RACT Compliance Plan variance of 9.0 grams per brake horsepower-hour NO_x emission limit, once during the term of the permit.

Condition #164 for 6 NYCRR 227-2.4(f)(2) for Oxides of Nitrogen: For diesel engine generator identified as Emission Source ENG06, NYU will continue to maintain its normal engine-maintenance compliance program which includes the following routine items:

1. Every 1,000 hours: Oil change and filters sampled. Fuel oil filters and air filters by pressure drop.
2. Every 2,000 hours: Valve lash adjustments and crankcase filter change.



New York State Department of Environmental Conservation
Permit Review Report

Permit ID: 2-6205-00246/00005

Renewal Number: 1

01/29/2010

3. Every 12,000 hours: Engine top end overhaul.
4. Every 24,000 hours: Engine top and bottom overhaul.

Condition #165 for 6 NYCRR 227-2.4(f)(2)(ii) for Oxides of Nitrogen: The facility is required to conduct stack testing on diesel engine generator identified as Emission Source ENG06 to demonstrate compliance with the approved NO_x RACT Compliance Plan variance of 9.0 grams per brake horsepower-hour NO_x emission limit, once during the term of the permit.

Condition #166 for 6 NYCRR 227-2.4(f)(2) for Oxides of Nitrogen: For diesel engine generator identified as Emission Source ENG07, NYU will continue to maintain its normal engine-maintenance compliance program which includes the following routine items:

1. Every 1,000 hours: Oil change and filters sampled. Fuel oil filters and air filters by pressure drop.
2. Every 2,000 hours: Valve lash adjustments and crankcase filter change.
3. Every 12,000 hours: Engine top end overhaul.
4. Every 24,000 hours: Engine top and bottom overhaul.

Condition #167 for 6 NYCRR 227-2.4(f)(2)(ii) for Oxides of Nitrogen: The facility is required to conduct stack testing on diesel engine generator identified as Emission Source ENG07 to demonstrate compliance with the approved NO_x RACT Compliance Plan variance of 9.0 grams per brake horsepower-hour NO_x emission limit, once during the term of the permit.

Condition #172 for 6 NYCRR 227-1.4(a) for Particulates: Opacity is limited to 20% at Emission Point 00001 in Emission Unit 1-00000.