



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

Permit ID: 2-6205-00246/00005

Renewal Number: 2

09/29/2015

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

Application for renewal of Air Title V Facility.

Permit renewal #2 application including fuel switching and the conversion of three mid-size boilers



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formerly firing # 6 residual fuel oil (and natural gas) to #2 ultra low sulfur distillate fuel oil (and natural gas) incorporating new burner management controls.

This application is for the renewal of the Title V air permit for New York University's Cogeneration Power Plant at 251 Mercer Street, New York City, NY, and includes: gas turbines (Emission Sources TURB1 & TURB2) and duct burners (Emission Sources/Controls DUCT1 & DUCT2) for electricity, heat recovery and steam generation (HRSG); three 65 MM Btu/hr each boilers (Emission Sources/Controls 0BLRA, 0BLRB and 0BLRC) for hot water and steam, and seven identical Caterpillar D399 diesel engine generators with waste heat boilers (Emission sources GEN01, GEN02, GEN03, GEN04, GEN05, GEN06 & GEN07), with waste heat boilers, may participate in the Special Case Resources (SCR) program of the New York Independent System Operator (NYISO) or any other demand response program, as well as providing emergency back-up as needed.

There are no criteria or regulated pollutant emission increases, and New Source Review (NSR) regulations are not applicable to this renewal.

In the current permit term during the renewal process, the three boilers will be upgraded and converted from firing # 6 residual fuel oil to firing # 2 ultra-low-sulfur distillate fuel oil while maintaining the ability to fire natural gas.

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
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:

NYU's Central Plant is a central cogeneration power plant at a major urban university in New York City. There are no emission increases or changes to any capped emission limitations from the existing permit. There are no criteria or regulated pollutant emission increases.

The NYU Central Power Plant produces hot water, steam and electricity using three identical boilers identified as Emission Sources 0BLRA, 0BLRB and 0BLRC in Emission Unit 1-00000; each boiler is rated at 65 MM BTU/hr. The 114 MM Btu/hr boiler (Emission Source 0BLRD) was eliminated from the



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facility on 1/1/2009.

Seven reciprocating engines identified as ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 and ENG07 comprise Emission Unit 2-00000.

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 were 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 became eligible to participate in the Special Case Resources (SCR) of the New York Independent System Operator (NYISO) or any other demand response program. The engines operate no more than 2,000 hours per seven engines per year upon repowering. 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 is 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 of the two combustion turbines began in December, 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).

NYU proposed 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 Central Plant has submitted and was granted a NOx RACT variance for the seven diesel engine generators to continue operating and to comply with the 9.0 grams per brake horsepower-hour, and limit their operations to no more than 2,000 hours/7 engines/year. Reducing total hours of operation of all seven engine generators to 2,000 hours per year was to reduce the NOx emissions by about 306 tons per year in addition to significant reductions in annual emissions of criteria or regulated pollutants. Current operations have since been shown to exceed those reductions.

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 requested and was granted an economic variance from the newly implemented NOx emission limits, maintaining the current actual NOx emissions (9.0 grams per brake horsepower-hour as RACT instead of the current 2.3 grams per brake horsepower-hour).

Combustion Turbine Trains:

The facility's electrical output is approximately 11 MW from two combustion turbines (@ 5.5 MW each = 11 MW, or 11MW x 8,760 hours = 96,360 MWe-hrs). The two combustion turbines (Emission Sources TURB1 & TURB2) operate on natural gas (Process 004) and # 2 distillate fuel oil (Process 005). Maximum possible emissions for the turbines are based on combusting # 2 fuel oil for 8,760 hours per year. Potential to emit (PTE) for the combined two turbines 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 or hours that does not exceed emissions caps or applicable regulations. The combined turbines have a NOx PTE of 56.93 tpy. The two combustion turbines are identical and each is approximately 60.5 MM Btu/hr.



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The two duct burners 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 two combustion turbines; thus duct burner fuel is not required for this fraction of heat input. The duct burners never operate by themselves without their concomitant combustion turbine. The maximum possible NO_x emissions for the combined HRSG/duct burners operating [only] on natural gas is 47.30 tpy. The duct burners do not have a specific regulated 'cap', but the two combined combustion turbine/HRSG-duct burner pairs have a capped NO_x PTE of 104.23 tpy.

Boilers:

NYU dual-fuel boilers normally operate using natural gas (Process 001) with historical back-up # 6 residual fuel oil (Process 002). Potential to emit (PTE) for the boilers is based on the heat content equivalent of 9 months of natural gas and 3 months of # 6 fuel oil, with a self-imposed (federally enforceable) cap of emissions equivalent to 2 boilers, 40.4 tons of NO_x per annual maximum rolled monthly. The cap is based strictly on emissions and not any specific individual use of gas or fuel oil, or hours of operation. Thus, emission contribution from distillate fuel oil will be significantly less than that from residual fuel oil. The three boilers may be used singularly or in any combination at different times. The cap applies to the overall combination of both fuels (natural gas and fuel oil) and is not prorated for any single fuel.

The three boilers are being upgraded from firing # 6 residual fuel oil (Process 002) to firing # 2 ultra-low-sulfur distillate fuel oil (Process 006). This work was completed in 2015. All boilers will continue to burn natural gas as the primary fuel (Process 001) and maintain their current ratings.

Upgrades include incorporating new oil guns, new fuel oil trains, and new steam atomization trains and compressed air atomization trains for full burning capacity for optimal steam and air atomization. Additional efficiency and safety upgrades include an oil purifier centrifuge for the oil tanks, and extended fire protection in the oil pump room.

The facility already uses oil with sulfur content not exceeding the 0.0015 % (15 ppm) limit for its turbines and is in [default] facility compliance with 6 NYCRR 225-1.2 (f), which will be incorporated into the permit renewal. The boilers will fire the same distillate fuel oil, under new Process 006.

Diesel Engine Generators:

Each of the seven engines is rated at 850 kilowatts (1,000 hp mechanical). The seven diesel engine generators operate under a NO_x RACT Compliance and Operating Plan pursuant to 6 NYCRR 227. The Plan became effective upon the repowering of the facility and the last revised permit in January 2010. The plan concluded that no NO_x control technologies were economic and technically feasible for the engines in view of the major repowering energy-saving, equipment replacement project at the time.

Since repowering, it has been determined that diesel engine stack testing cannot be properly and safely performed due to electrical infrastructure connectivity and busbar issues. The engines can only be operated in the emergency event of a city-wide blackout where Consolidated Edison is unable to provide resources to NYU and the facility's power plant cogeneration operations are shutdown. Thus, the engines have not been used to provide electricity, and NYU has restricted their use to limited maintenance. It is anticipated that these capital intense engine adjustments to correct this situation may be carried out during the next term of the Title V permit.

Continuous Opacity Monitoring Systems (COMS):



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The turbines, duct burners and boilers emit through a shared stack (Emission Point 00001), which has an existing COMS unit to voluntarily monitor opacity, since the total heat input for the combustion sources (excluding gas turbines per regulation) is < 250 MM Btu/hr threshold and COMS is not required by opacity regulation 6 NYCRR 227-1.3 (a) under this condition.

Similarly, for the same criterion, the existing COMS on Emission Point 00002 for monitoring the diesel process (Process 003) opacity from the seven engines in Emission Unit 2-0000 also remains voluntary at the facility.

All issues that would ordinarily be applicable such as maintenance, reporting and recordkeeping for the engines and boilers COMS are also voluntarily performed.

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 OBLRA, OBLRB & OBLRC) used for hot water. Each boiler is capable of burning natural gas (Process 001) and # 2 fuel oil - distillate fuel oil (Process 006). 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.

Also emitting through this emission point at the plant are two 5.5 MW gas turbines (Emission Sources TURB1 & TURB2) burning natural gas (Process 004) and # 2 ultra low sulfur distillate fuel oil (Process 005), and two 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 electrical output is approximately 11 MW from the two turbines (2 @ 5.5 MW = 11 MW = 11 MW x 8,760 hours = 96,360 MWe-hrs). The two combustion turbines are identical, each is approximately 60.5 MM Btu/hr and each is equipped with a



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heat recovery steam generator (HRSG). Emissions from the two turbines 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 began operating December 2010 (though they were allowed to operate beginning June 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 0BLRA, 0BLRB & 0BLRC) @ 65 MMBtu/hr each total 195 MMBtu/hr (< 250 MMBtu/hr), therefore COMS is not required, but 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 0BLRA, 0BLRB & 0BLRC) in Emission Unit 1-0000. Boilers 0BLRA, 0BLRB and 0BLRC are 65 MM Btu/hr each. These three boilers combust natural gas (Process 001) and # 2 fuel oil (Process 006).

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 exhausts emissions from the two turbines (Emission Sources TURB1 & TURB2) and their corresponding duct burners (Emission Controls DUCT1 & DUCT2; respectively).

Process: 004 is located at sub-basement, Building 251 - Process 004 consists of the combustion of natural gas in the two 5.5 MW turbines (Emission Sources TURB1 & TURB2) with or without their corresponding two 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 do not operate and supplemental hot water is provided by the boilers. The duct burners operate only when the turbines are operating. The duct burners (Emission Controls DUCT1 & DUCT2) do not operate independent of the turbines (Emission Sources TURB1 & TURB2).

The two combustion turbines (Emission Sources TURB1 & TURB2) are identical, and each is approximately 60.5 MM Btu/hr.

Process: 005 is located at sub-basement, Building 251 - Process 005 consists of the combustion of # 2 fuel oil (distillate oil) in the two 5.5 MW turbines (Emission Sources TURB1 & TURB2) with or without their corresponding two 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



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emergency or maintenance, the duct burners do not operate and supplemental hot water is provided by the boilers.

The two combustion turbines (Emission Sources TURB1 & TURB2) are identical, and each is approximately 60.5 MM Btu/hr. The duct burners (Emission Controls DUCT1 & DUCT2) operate only when the turbines are operating; the duct burners do not operate independent of the turbines (Emission Sources TURB1 & TURB2).

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).

Process: 006 is located at Sub-basement, Building 251 - Process 006 is the firing of # 2 distillate fuel oil in the three mid-size boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) in Emission Unit 1-0000 after the conversion from # 6 residual fuel oil to # 2 distillate fuel oil (Process 006) beginning 7/1/2014. Process 002 (#6 residual fuel oil) will no longer be used at the facility (ended on 6/30/2014).

The boilers are dual fuel and will continue to burn natural gas (Process 001) as the predominant fuel and Process 006 (#2 ultra low sulfur distillate fuel oil) as the back-up fuel.

Changes to the boilers include new oil guns, new fuel oil trains, new steam atomization trains and compressed air atomization trains. The existing burners will remain in place.

Additional efficiency and safety upgrades include an oil purifier centrifuge for the oil tanks, extended fire protection in the oil pump room and full burnimng capacity for optimal steam and air atomization.

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).

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.

All seven identical diesel engine generators are permitted to 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 operate no more than 2,000 hours/7 engines/year.

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.



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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.

The seven identical Caterpillar D399 diesel engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) with waste heat boilers have been participating 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



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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 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



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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 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

1-02-006-02

EXTERNAL COMBUSTION BOILERS - INDUSTRIAL
INDUSTRIAL BOILER - NATURAL GAS
10-100 MMBtu/Hr

1-03-005-02

EXTERNAL COMBUSTION BOILERS -
COMMERCIAL/INDUSTRIAL
COMMERCIAL/INSTITUTIONAL BOILER -
DISTILLATE OIL
10-100MMBTU/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



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- 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 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	
0NY210-00-0	OXIDES OF NITROGEN	317000	
0NY075-00-0	PARTICULATES	25440	
0NY075-00-5	PM-10	16740	
007446-09-5	SULFUR DIOXIDE	66580	
0NY100-00-0	TOTAL HAP	3268	
0NY998-00-0	VOC	18600	

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5

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

- (a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - (1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
 - (2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;



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(3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

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

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

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

Item B: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)

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

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

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.



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Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

Item H: Property Rights - 6 NYCRR 201-6.4(a)(6)

This permit does not convey any property rights of any sort or any exclusive privilege.

Item I: Severability - 6 NYCRR Part 201-6.4(a)(9)

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

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

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

- i. The ability of the Department to seek to bring suit on behalf of the State of New York, or the Administrator to seek to bring suit on behalf of the United States, to immediately restrain any person causing or contributing to pollution presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;
- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

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

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

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.



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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 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

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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	149	Powers and Duties of the Department with respect to air pollution control
1- 00000/00001/004/DUCT1	40CFR 60-A.4	66	General provisions - Address
1- 00000/00001/004/DUCT2	40CFR 60-A.4	77	General provisions - Address
1- 00000/00001/004/TURB1	40CFR 60-A.4	88	General provisions - Address
1- 00000/00001/004/TURB2	40CFR 60-A.4	100	General provisions - Address
1- 00000/00001/005/TURB1	40CFR 60-A.4	118	General provisions - Address
1- 00000/00001/005/TURB2	40CFR 60-A.4	131	General provisions - Address
1- 00000/00001/005/TURB1	40CFR 60-A.7(a)	119	Notification and Recordkeeping
1- 00000/00001/005/TURB2	40CFR 60-A.7(a)	132	Notification and Recordkeeping
1- 00000/00001/004/DUCT1	40CFR 60-A.7(b)	67	Notification and Recordkeeping
1- 00000/00001/004/DUCT2	40CFR 60-A.7(b)	78	Notification and Recordkeeping
1- 00000/00001/004/TURB1	40CFR 60-A.7(b)	89	Notification and Recordkeeping
1- 00000/00001/004/TURB2	40CFR 60-A.7(b)	101	Notification and Recordkeeping
1- 00000/00001/005/TURB1	40CFR 60-A.7(b)	120	Notification and Recordkeeping
1- 00000/00001/005/TURB2	40CFR 60-A.7(b)	133	Notification and Recordkeeping
1- 00000/00001/004/DUCT1	40CFR 60-A.7(f)	68	Notification and Recordkeeping
1- 00000/00001/004/DUCT2	40CFR 60-A.7(f)	79	Notification and Recordkeeping
1- 00000/00001/004/TURB1	40CFR 60-A.7(f)	90	Notification and Recordkeeping
1- 00000/00001/004/TURB2	40CFR 60-A.7(f)	102	Notification and Recordkeeping
1- 00000/00001/005/TURB1	40CFR 60-A.7(f)	121	Notification and Recordkeeping
1-	40CFR 60-A.7(f)	134	Notification and



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00000/00001/005/TURB2				Recordkeeping
1-	40CFR 60-A.8 (a)	69		Performance Tests
00000/00001/004/DUCT1				
1-	40CFR 60-A.8 (a)	80		Performance Tests
00000/00001/004/DUCT2				
1-	40CFR 60-A.8 (a)	91		Performance Tests
00000/00001/004/TURB1				
1-	40CFR 60-A.8 (a)	103		Performance Tests
00000/00001/004/TURB2				
1-	40CFR 60-A.8 (a)	122		Performance Tests
00000/00001/005/TURB1				
1-	40CFR 60-A.8 (a)	135		Performance Tests
00000/00001/005/TURB2				
1-	40CFR 60-A.8 (b)	70		Performance Tests
00000/00001/004/DUCT1				
1-	40CFR 60-A.8 (b)	81		Performance Tests
00000/00001/004/DUCT2				
1-	40CFR 60-A.8 (b)	92		Performance Tests
00000/00001/004/TURB1				
1-	40CFR 60-A.8 (b)	104		Performance Tests
00000/00001/004/TURB2				
1-	40CFR 60-A.8 (b)	123		Performance Tests
00000/00001/005/TURB1				
1-	40CFR 60-A.8 (b)	136		Performance Tests
00000/00001/005/TURB2				
1-	40CFR 60-A.8 (d)	71		Performance Tests
00000/00001/004/DUCT1				
1-	40CFR 60-A.8 (d)	82		Performance Tests
00000/00001/004/DUCT2				
1-	40CFR 60-A.8 (d)	93		Performance Tests
00000/00001/004/TURB1				
1-	40CFR 60-A.8 (d)	105		Performance Tests
00000/00001/004/TURB2				
1-	40CFR 60-A.8 (d)	124		Performance Tests
00000/00001/005/TURB1				
1-	40CFR 60-A.8 (d)	137		Performance Tests
00000/00001/005/TURB2				
1-	40CFR 60-A.8 (e)	72		Performance Tests
00000/00001/004/DUCT1				
1-	40CFR 60-A.8 (e)	83		Performance Tests
00000/00001/004/DUCT2				
1-	40CFR 60-A.8 (e)	94		Performance Tests
00000/00001/004/TURB1				
1-	40CFR 60-A.8 (e)	106		Performance Tests
00000/00001/004/TURB2				
1-	40CFR 60-A.8 (e)	125		Performance Tests
00000/00001/005/TURB1				
1-	40CFR 60-A.8 (e)	138		Performance Tests
00000/00001/005/TURB2				
1-	40CFR 60-A.8 (f)	73		Performance Tests
00000/00001/004/DUCT1				
1-	40CFR 60-A.8 (f)	84		Performance Tests
00000/00001/004/DUCT2				
1-	40CFR 60-A.8 (f)	95		Performance Tests
00000/00001/004/TURB1				
1-	40CFR 60-A.8 (f)	107		Performance Tests
00000/00001/004/TURB2				
1-	40CFR 60-A.8 (f)	126		Performance Tests
00000/00001/005/TURB1				
1-	40CFR 60-A.8 (f)	139		Performance Tests
00000/00001/005/TURB2				
1-	40CFR 60-A.9	74		General provisions -
00000/00001/004/DUCT1				Availability of information



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1- 00000/00001/004/DUCT2	40CFR 60-A.9	85	General provisions - Availability of information
1- 00000/00001/004/TURB1	40CFR 60-A.9	96	General provisions - Availability of information
1- 00000/00001/004/TURB2	40CFR 60-A.9	108	General provisions - Availability of information
1- 00000/00001/005/TURB1	40CFR 60-A.9	127	General provisions - Availability of information
1- 00000/00001/005/TURB2	40CFR 60-A.9	140	General provisions - Availability of information
1-00000/00001/005	40CFR 60-Dc.45c (a)	112	Compliance and Performance Test Methods and Procedures for Particulate Matter.
FACILITY	40CFR 60-KKKK.4305	55	Stationary Combustion Turbine NSPS - applicability
1- 00000/00001/004/DUCT1	40CFR 60-KKKK.4325	75	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1- 00000/00001/004/DUCT2	40CFR 60-KKKK.4325	86	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1- 00000/00001/004/TURB1	40CFR 60-KKKK.4325	97	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1- 00000/00001/004/TURB2	40CFR 60-KKKK.4325	109	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1- 00000/00001/005/DUCT1	40CFR 60-KKKK.4325	114	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1- 00000/00001/005/DUCT2	40CFR 60-KKKK.4325	116	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1- 00000/00001/005/TURB1	40CFR 60-KKKK.4325	128	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1- 00000/00001/005/TURB2	40CFR 60-KKKK.4325	141	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
1- 00000/00001/005/TURB1	40CFR 60-KKKK.4330	129	Stationary Combustion Turbine NSPS - SO2 emission limits
1- 00000/00001/005/TURB2	40CFR 60-KKKK.4330	142	Stationary Combustion Turbine NSPS - SO2 emission limits
FACILITY	40CFR 60-KKKK.4340	56, 57	Stationary Combustion Turbine NSPS - demonstrating



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1- 00000/00001/004/TURB1	40CFR 60-KKKK.4340 (a)	98	compliance with NOx standard without using using water or steam injection Stationary Combustion Turbine NSPS - Continuous compliance with NOx limit
1- 00000/00001/004/TURB2	40CFR 60-KKKK.4340 (a)	110	Stationary Combustion Turbine NSPS - Continuous compliance with NOx limit
FACILITY	40CFR 60-KKKK.4365 (a)	58, 59	Stationary Combustion Turbine NSPS - Exemption from monitoring total sulfur content of fuel
FACILITY	40CFR 68	20	Chemical accident prevention provisions
FACILITY	40CFR 82-F	21	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	11	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	150	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	12	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	13	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2 (a)	14	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3 (a)	15	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	22, 60, 61	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4 (a) (4)	16	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4 (a) (7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4 (a) (8)	17	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4 (c)	3, 4	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4 (c) (2)	5	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4 (c) (3) (ii)	6	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4 (d) (4)	23	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4 (e)	7	Compliance

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FACILITY	6NYCRR 201-6.4 (f) (6)	18	Certification
FACILITY	6NYCRR 201-6.4 (g)	24	Off Permit Changes
FACILITY	6NYCRR 201-7	25, 26, 27, 28, 29, 30, 31	Permit Shield
FACILITY	6NYCRR 202-1.1	19	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-2.1	8	Required emissions tests.
FACILITY	6NYCRR 202-2.5	9	Emission Statements - Applicability
FACILITY	6NYCRR 211.1	32	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 215.2	10	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 225.7 (a)	37	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2 (f)	33	Reports, Sampling and Analysis
FACILITY	6NYCRR 225-1.2 (g)	34	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2 (h)	35	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.6	36	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 227.2 (b) (1)	52, 53, 54	Reports, Sampling, and Analysis
1-00000/00001	6NYCRR 227-1.2 (a) (1)	62	Particulate emissions.
FACILITY	6NYCRR 227-1.3	38, 39	Particulate Emissions from Liquid Fuels.
1-00000/00001/006	6NYCRR 227-1.3	143	Smoke Emission Limitations.
2-00000/00002/003	6NYCRR 227-1.3	146, 147	Smoke Emission Limitations.
1-00000/00001	6NYCRR 227-1.3 (a)	63	Smoke Emission Limitations.
1-00000/00001/005	6NYCRR 227-1.3 (a)	111	Smoke Emission Limitations.
1-00000/00001/006	6NYCRR 227-1.3 (a)	144	Smoke Emission Limitations.
2-00000/00002/003	6NYCRR 227-1.3 (a)	148	Smoke Emission Limitations.
1-00000/00001	6NYCRR 227-1.4 (a)	151	Stack Monitoring. (see narrative)
FACILITY	6NYCRR 227-1.4 (b)	40	Stack Monitoring
1-00000/00001	6NYCRR 227-1.4 (b)	64	Stack Monitoring
2-00000/00002	6NYCRR 227-1.4 (b)	145	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.
FACILITY	6NYCRR 227- 2.4 (c) (1) (ii)	45	2010 NOx RACT presumptive limit.
1- 00000/00001/004/DUCT1	6NYCRR 227-2.4 (e) (3)	65	NOx requirements for other combustion turbines.



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1- 00000/00001/004/DUCT2	6NYCRR 227-2.4 (e) (3)	76	NOx requirements for other combustion turbines.
1- 00000/00001/004/TURB1	6NYCRR 227-2.4 (e) (3)	87	NOx requirements for other combustion turbines.
1- 00000/00001/004/TURB2	6NYCRR 227-2.4 (e) (3)	99	NOx requirements for other combustion turbines.
1- 00000/00001/005/DUCT1	6NYCRR 227-2.4 (e) (3)	113	NOx requirements for other combustion turbines.
1- 00000/00001/005/DUCT2	6NYCRR 227-2.4 (e) (3)	115	NOx requirements for other combustion turbines.
1- 00000/00001/005/TURB1	6NYCRR 227-2.4 (e) (3)	117	NOx requirements for other combustion turbines.
1- 00000/00001/005/TURB2	6NYCRR 227-2.4 (e) (3)	130	NOx requirements for other combustion turbines.
FACILITY	6NYCRR 227-2.4 (f) (3)	46, 47	Emission limit for distillate oil fired engines.
FACILITY	6NYCRR 227-2.4 (g)	48	Other combustion installations.
FACILITY	6NYCRR 227-2.5 (a)	49	Fuel switching option.
FACILITY	6NYCRR 227-2.5 (c)	50, 51	Alternative RACT option.
FACILITY	6NYCRR 231-2	26, 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.

6 NYCRR 200.6

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

6 NYCRR 200.7

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

6 NYCRR 201-1.4

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

6 NYCRR 201-1.7



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Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR 201-3.3 (a)

The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR Subpart 201-6

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

6 NYCRR 201-6.4 (a) (4)

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

6 NYCRR 201-6.4 (a) (7)

This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.4 (a) (8)

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

6 NYCRR 201-6.4 (c)

This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well



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as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.4 (c) (2)

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

6 NYCRR 201-6.4 (c) (3) (ii)

This regulation specifies any reporting requirements incorporated into the permit must include provisions regarding the notification and reporting of permit deviations and incidences of noncompliance stating the probable cause of such deviations, and any corrective actions or preventive measures taken.

6 NYCRR 201-6.4 (d) (5)

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

6 NYCRR 201-6.4 (e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 201-6.4 (f) (6)

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

6 NYCRR 201-6.4 (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.

6 NYCRR 202-1.1

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

6 NYCRR 202-2.1

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

6 NYCRR 202-2.5

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



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6 NYCRR 215.2

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

40 CFR Part 68

This Part lists the regulated substances and their 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 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



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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 specifies that the emission limit for sulfur dioxide from a stationary combustion turbine is 0.060 lb SO₂/MMBtu heat input.

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 condition specifies NO_x annual testing requirement for turbines.

40 CFR 60.4365 (a)

This section provides an exemption from monitoring total sulfur content of the fuel used by a facility.

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%.

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.



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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 211.1

This regulation requires that no person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property.

6 NYCRR 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-**



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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 (f)

Sulfur-in-fuel limitations for the purchase of #2 heating oil on or after July 1, 2012.

6 NYCRR 225-1.2 (g)

Sulfur-in-fuel limitations for the purchase of distillate oil on or after July 1, 2014.

6 NYCRR 225-1.2 (h)

Sulfur-in-fuel limitation for the firing of distillate oil on or after July 1, 2016.

6 NYCRR 225-1.6

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

6 NYCRR 227.2 (b) (1)

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

6 NYCRR 227-1.2 (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)



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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

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) (1) (ii)

Future NOx RACT presumptive limit effective 7/1/14.

6 NYCRR 227-2.4 (e) (3)

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.



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6 NYCRR 227-2.4 (f) (3)

Presumptive NO_x RACT emission limit for distillate oil fired stationary internal combustion engines.

6 NYCRR 227-2.4 (g)

This subdivision establishes NO_x RACT for emission sources that are subject to this rule but not specifically regulated under the other source categories of this rule.

6 NYCRR 227-2.5 (a)

Fuel switching NO_x RACT compliance option.

6 NYCRR 227-2.5 (c)

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

6 NYCRR Subpart 201-7

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

158.5 tpy facility-wide,

56.93 tpy for the two turbines (Emission Sources TURB21 & TURB2) for natural gas(Process 004) and #2 fuel oil (Process 005),

40.4 tpy for the three boilers (Emission Sources BLRA, BLRB & BLRC) for natural gas (Process 001) and #2 fuel oil (Process 006),

104.23 tpy for the two turbines (Emission Sources TURB1 & TURB2) and their corresponding ducts (Emission Controls DUCT1 & DUCT2) for natural gas (Process 004) and #2 fuel oil (Process 005), and

13.9 tpy for all the combined seven engine generators (Emission Sources ENG01, ENG02, ENG03,



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ENG04, ENG05, ENG06 & ENG07) for the 2000 hours of maximum operating hours.

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
1-00000/00001	6 NYCRR 227-1.4	Stack Monitoring. (see narrative)

Reason: As 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 0BLRA, 0BLRB & 0BLRC) @ 65 MMBtu/hr each total 195 MMBtu/hr (< 250 MMBtu/hr), therefore COMS is not required, but the existing continuous opacity monitoring system (COMS) unit will voluntarily remain on the stack of Emission Point 00001.

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 00001, and all issues that would ordinarily be applicable such as maintenance, reporting and recordkeeping will be voluntarily performed.

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).

2-00000/00002	6 NYCRR 227-1.4 (a)	Stack Monitoring. (see narrative)
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Reason: Regulation 6 NYCRR 227-1.4(a) for continuously monitoring and recording opacity is not applicable to the seven identical Caterpillar D399 diesel engine generators (Emission Sources GEN01, GEN02, GEN03, GEN04, GEN05, GEN05, GEN06 & GEN07) in Emission Unit 2-00000, Emission Point 00002, and Process 003 (# 2 fuel oil). Each engine generator has a



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heat input of 850 KW.

The total combined heat input from all the seven engine generators is:

[7 engine generators x (850 KW/engine generator) x (3,413 Btu/hr/ 1 KW)] x (1 MM Btu/hr / 1,000,000 Btu/hr) = 20.307 MM Btu/hr

which is < 250 MM Btu/hr heat capacity applicability for 6 NYCRR 227-1.4(a) from any stationary combustion installation using any liquid fuel.

Therefore, installation and operation with the opacity manufacturer's instruction, and proper maintenance of continuously monitoring and recording opacity at all times, that the stationary combustion installation firing liquid fuel is in service, satisfying the criteria in Appendix B of Title 40, Part 60 of the Code of Federal Regulations, is not applicable to these seven identical engine generators.

NOTE: Non-applicability determinations are cited as a permit condition under 6 NYCRR Part 201-6.4(g). This information is optional and provided only if the applicant is seeking to obtain formal confirmation, within an issued Title V permit, that specified activities are not subject to the listed federal applicable or state only requirement. The applicant is seeking to obtain verification that a requirement does not apply for the stated reason(s) and the Department has agreed to include the non-applicability determination in the issued Title V permit which in turn provides a shield against any potential enforcement action.

Compliance Certification

Summary of monitoring activities at NYU CENTRAL PLANT:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
1-00000/00001/005	112	intermittent emission testing
FACILITY	55	record keeping/maintenance procedures
1-00000/00001/004/DUCT1	75	intermittent emission testing
1-00000/00001/004/DUCT2	86	intermittent emission testing
1-00000/00001/004/TURB1	97	intermittent emission testing
1-00000/00001/004/TURB2	109	intermittent emission testing
1-00000/00001/005/DUCT1	114	intermittent emission testing
1-00000/00001/005/DUCT2	116	intermittent emission testing
1-00000/00001/005/TURB1	128	intermittent emission testing
1-00000/00001/005/TURB2	141	intermittent emission testing
1-00000/00001/005/TURB1	129	monitoring of process or control device parameters as surrogate
1-00000/00001/005/TURB2	142	monitoring of process or control device parameters as surrogate
FACILITY	56	intermittent emission testing
FACILITY	57	intermittent emission testing
1-00000/00001/004/TURB1	98	record keeping/maintenance procedures
1-00000/00001/004/TURB2	110	record keeping/maintenance procedures

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FACILITY	58	work practice involving specific operations
FACILITY	59	work practice involving specific operations
FACILITY	4	work practice involving specific operations
FACILITY	6	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	26	work practice involving specific operations
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	8	record keeping/maintenance procedures
FACILITY	37	record keeping/maintenance procedures
FACILITY	33	work practice involving specific operations
FACILITY	34	work practice involving specific operations
FACILITY	35	work practice involving specific operations
FACILITY	36	record keeping/maintenance procedures
FACILITY	52	intermittent emission testing
FACILITY	53	intermittent emission testing
FACILITY	54	intermittent emission testing
1-00000/00001	62	intermittent emission testing
FACILITY	38	monitoring of process or control device parameters as surrogate
FACILITY	39	record keeping/maintenance procedures
1-00000/00001/006	143	record keeping/maintenance procedures
2-00000/00002/003	146	monitoring of process or control device parameters as surrogate
2-00000/00002/003	147	record keeping/maintenance procedures
1-00000/00001	63	monitoring of process or control device parameters as surrogate
1-00000/00001/005	111	monitoring of process or control device parameters as surrogate
1-00000/00001/006	144	monitoring of process or control device parameters as surrogate
2-00000/00002/003	148	monitoring of process or control device parameters as surrogate
1-00000/00001	151	monitoring of process or control device parameters as surrogate
FACILITY	40	record keeping/maintenance procedures
1-00000/00001	64	record keeping/maintenance procedures
2-00000/00002	145	record keeping/maintenance procedures
FACILITY	41	record keeping/maintenance procedures
FACILITY	45	intermittent emission testing
1-00000/00001/004/DUCT1	65	intermittent emission testing
1-00000/00001/004/DUCT2	76	intermittent emission testing
1-00000/00001/004/TURB1	87	intermittent emission testing
1-00000/00001/004/TURB2	99	intermittent emission testing
1-00000/00001/005/DUCT1	113	intermittent emission testing
1-00000/00001/005/DUCT2	115	intermittent emission testing
1-00000/00001/005/TURB1	117	intermittent emission testing
1-00000/00001/005/TURB2	130	intermittent emission testing
FACILITY	46	record keeping/maintenance procedures
FACILITY	47	intermittent emission testing
FACILITY	48	record keeping/maintenance procedures
FACILITY	49	intermittent emission testing
FACILITY	50	record keeping/maintenance procedures
FACILITY	51	monitoring of process or control device parameters as surrogate

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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 #4 for 6 NYCRR 201-6.4(c): This is a facility-wide condition for Work Practice Involving Specific Operations for Oxides of Nitrogen. The facility's NO_x emissions will not exceed 158.5 tpy.

Condition #6 for 6 NYCRR 201-6.4(c) (3) (ii): This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition 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.

Condition #7 for 6 NYCRR 201-6.4(e): This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition specifies the overall permit requirements for compliance certification, including emission limitations, standards or work practices.

Condition #8 for 6 NYCRR 202-2.1: This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition sets forth the applicability criteria for submitting an annual statement of emissions. The criteria is based on annual emission threshold quantities and ozone attainment designation. This condition applies to all Title V facilities and these facilities must submit an annual emission statement by April 15th of each year.

Condition #26 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2: This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for Oxides of Nitrogen. The facility's NO_x emissions will not exceed 158.5 tpy. Computerized records, will be kept on file that calculate emissions based on equipment manufacturer's emissions factors, stack test results, and EPA emission factors.

Condition #27 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 004 & 005 and Emission Sources/Controls: DUCT1, DUCT2, TURB1 & TURB2 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

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The NO_x PTE for the two combined combustion turbine/ HRSG duct burners pairs (Emission Sources/Controls: DUCT1, DUCT2, TURB1 & TURB2) will not exceed 104.23 tpy.

Condition #28 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, an emission point level, a process level and emission source condition that applies to EU: 2-00000, EP: 00002, Process: 003 and Emission Sources: ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

This condition applies to the seven identical diesel engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) when firing # 2 fuel oil (Process 003).

All seven identical reciprocating diesel engine generators are 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: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 004 & 005 and Emission Sources: TURB1 & TURB2 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

The NO_x PTE for the two combustion turbine (Emission Sources TURB1 & TURB2) when operating without their duct burners will not exceed 56.93 tpy.

Condition #30 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, an emission point level, a process level and emission source condition that applies to EU: 2-00000, EP: 00002, Process: 003 and Emission Sources: ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07 for Work Practice Involving Specific Operations for Oxides of Nitrogen.

This condition applies to the seven identical diesel engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) when firing # 2 fuel oil (Process 003).

All seven identical reciprocating diesel engine generators are 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.

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Condition #31 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 231-2: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 001 & 006 and Emission Sources: 0BLRA, 0BLRB & 0BLRC for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

All three mid-size boilers, 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 #33 for 6 NYCRR 225-1.2(f): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for Sulfur Dioxide for the sulfur content limit of 0.0015 percent by weight. The distillate fuel oil (#2 heating oil) purchase is limited to 0.0015 percent sulfur by weight on or after July 1, 2012. Compliance with this limit will be based on vendor certifications.

Condition #34 for 6 NYCRR 225-1.2(g): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for Sulfur Dioxide for the sulfur content limit of 0.0015 percent by weight. The distillate fuel oil (#2 heating oil) purchase is limited to 0.0015 percent sulfur by weight on or after July 1, 2014. Compliance with this limit will be based on vendor certifications.

Condition #35 for 6 NYCRR 225.1(h): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for Sulfur Dioxide for the sulfur content limit of 0.0015 percent by weight. The distillate fuel oil (#2 heating oil) firing is limited to 0.0015 percent sulfur by weight on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Condition #36 for 6 NYCRR 225-1.6: This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures for Sulfur Dioxide. The owner or operator of a facility which purchases and fires coal or oil shall submit reports to the commissioner containing a fuel analysis, 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. All records shall be available for a minimum of three years.

Condition #37 for 6 NYCRR 225.7 (a): This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. 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.



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The permittee shall retain fuel oil supplier certifications for each shipment of oil received. Such certifications shall contain, as a minimum, supplier name, date of shipment, quantity shipped, heating value of the oil, oil sulfur content, and the method used to determine the sulfur content. Such certifications shall be available for inspection by, or submitted to, the NYSDEC as per the stated reporting requirement.

Condition #38 for 6 NYCRR 227-1.3 for Particulates: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Sources: TURB1 & TURB2 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates. This is a condition that applies to the two combustion turbines (Emission Sources TURB1 & TURB2).

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation: The 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 #39 for 6 NYCRR 227-1.3: This is a facility-wide condition for Record Keeping/Maintenance Procedures. The facility is required to observe the stacks for each combustion source operating on oil once per day for visible emissions.

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation: The 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 #40 for 6 NYCRR 227-1.4 (b): This is a facility-wide condition for Record Keeping/Maintenance Procedures. This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation: The opacity will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

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

NYU will maintain a voluntary COMS since a COMS is not required for the facility's emission sources. Either by voluntary COMS or visible emissions observations, NYU will include the excess emission report. The regulation does not require COMS for these emission sources, but NYU has voluntarily installed COMS.



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Condition #41 for 6 NYCRR 227-1.6 (a): This is a facility-wide condition for Record Keeping/Maintenance Procedures.

This condition 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.

Condition # 45 for 6 NYCRR 227-2.4(c)(1)(ii): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 001 & 006 and Emission Sources: 0BLRA, 0BLRB & 0BLRC for Intermittent Emission Testing for Oxides of Nitrogen.

This condition is for NO_x RACT presumptive limit effective 7/1/14 for mid-size boilers. A mid-size boiler is a boiler with a maximum heat input capacity greater than 25 million Btu per hour and equal to or less than 100 million Btu per hour.

Due to the Fuel Switching Compliance Option [(6 NYCRR 227-2.5 (a)], the three mid-size boilers that recently have been firing # 6 fuel oil/gas will require to meet the 0.20 lbs/MM Btu upon switching to # 2 fuel oil/gas and not the 0.08 lbs/MM Btu which is for the # 2 fuel oil. See related Condition # 48 for 6 NYCRR 227-2.5 (a).

Condition #46 for 6 NYCRR 227-2.4 (f) (3): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: 003 and Emission Sources: ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07 for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.

This condition is for the presumptive NO_x RACT emission limit for distillate oil fired stationary internal combustion engines. This condition is to ensure that the engines run at optimum conditions and stays in compliance with the NO_x RACT emission limit by performing periodic maintenance in accordance with the manufacturer's specifications.

Condition #47 for 6 NYCRR 227-2.4 (f) (3): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: 003 and Emission Sources: ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition is for the presumptive NO_x RACT emission limit for distillate oil fired stationary internal combustion engines of 9.0 grams per brake horsepower-hour because



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of the approved NO_x RACT Variance, in which each of the seven identical reciprocating diesel engine generators is allowed to emit up to 9.0 grams per brake horsepower-hour.

The facility is required to conduct stack testing on diesel engine generators identified as Emission Sources: ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & 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 #48 for 6 NYCRR 227-2.4 (g): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: 003 and Emission Sources: ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07 for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.

This condition establishes the NO_x RACT for emission sources that are subject to this rule but not specifically regulated under the other source categories of this rule.

The Title V Operating permit includes continuing the already approved engine RACT Plan technical and economic reasons and provides for a NO_x emission limit of 9.0 grams per brake horsepower-hour for all of the seven reciprocating engines identified as ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 and ENG07 in Emission Unit 2-00000.

The seven engines will be operated in accordance with the NO_x RACT Compliance Plan (6 NYCRR 227) submitted in June 30, 2004.

Condition #49 for 6 NYCRR 227-2.5(a): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 001 & 006 and Emission Sources: 0BLRA, 0BLRB & 0BLRC for Intermittent Emission Testing for Oxides of Nitrogen.

This condition is for NO_x RACT presumptive limit effective 7/1/14 for mid-size boilers. A mid-size boiler is a boiler with a maximum heat input capacity greater than 25 million Btu per hour and equal to or less than 100 million Btu per hour.

Due to the Fuel Switching Compliance Option [(6 NYCRR 227-2.5 (a)], the three mid-size boilers that recently have been firing # 6 fuel oil/gas will require to meet the 0.20 lbs/MM Btu upon switching to # 2 fuel oil/gas and not the 0.08 lbs/MM Btu which is for the # 2 fuel oil. See related Condition # 45 for 6 NYCRR 227-2.4 (c)(1)(ii).

Condition #50 for 6 NYCRR 227-2.5(c): This is a facility-wide condition for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.



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

Condition #51 for 6 NYCRR 227-2.5(c): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: 003 and Emission Sources: ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

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

The seven engines will be operated in accordance with the NO_x RACT Compliance Plan (6 NYCRR 227) submitted in June 30, 2004. Per the approved NO_x 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 # 52 for 6 NYCRR 227.2 (b) (1): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 006 and Emission Sources: OBLRA, OBLRB & OBLRC for Intermittent Emission Testing for Particulates.

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

Condition # 53 for 6 NYCRR 227.2 (b) (1): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: 003 and Emission Sources: ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07 for Intermittent Emission Testing for Particulates.

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

Condition # 54 for 6 NYCRR 227.2 (b) (1): This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Sources: TURB1, TURB2, DUCT1 &



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DUCT2 for Intermittent Emission Testing for Particulates. This is a condition that applies to the two combustion turbines (Emission Sources TURB1 & TURB2) with their associated duct burners (Emission Controls DUCT1 & DUCT2). This condition is Intermittent Emission Testing.

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

Condition #55 for 40 CFR 60.4305, NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Processes: 004 & 005 and Emission Sources: TURB1 & TURB2 for Record Keeping/Maintenance Procedures for Oxides of Oxygen.

The two combustion turbines (Emission Sources TURB1 & TURB2) are subject to 40 CFR 60.KKKK - Standards of Performance for Stationary Combustion Turbines for the operation of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MM Btu) per hour, which commenced construction, modification, or reconstruction after February 18, 2005. The two combustion turbines are identical, and each one is approximately 60.5 MM Btu/hr and they will burn either natural gas (Process 004) or # 2 fuel oil (Process 005). This replaces the requirements of 40 CFR 60.GG which have expired. NOx emissions under 40 CFR 60.KKKK are limited to less than or equal to 25 ppm (when firing natural gas), and are limited to 74 ppm (when firing oil) subject to initial and periodic performance testing to confirm compliance.

Condition #56 for 40 CFR 60.4340, NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Sources: TURB1 & TURB2 for Intermittent Stack Testing for Oxides of Nitrogen.

The two combustion turbines (Emission Sources TURB1 & TURB2) are subject to 40 CFR 60.KKKK - Standards of Performance for Stationary Combustion Turbines for the operation of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MM Btu) per hour, which commenced construction, modification, or reconstruction after February 18, 2005. The two combustion turbines are identical, and each one is approximately 60.5 MM Btu/hr and they will burn either natural gas (Process 004) or # 2 fuel oil (Process 005). This replaces the requirements of 40 CFR 60.GG which have expired. NOx emissions under 40 CFR 60.KKKK are limited to less than or equal to 25 ppm (when firing natural gas), and are limited to 74 ppm (when firing oil) subject to initial and periodic performance testing to confirm compliance.



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The NO_x emission limit for each of the two combustion turbines will be 74 ppm at 15% O₂ firing fuels other than natural gas, where stack testing is required for compliance.

Condition #57 for 40 CFR 60.4340, NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Sources: TURB1 & TURB2 for Intermittent Stack Testing for Oxides of Nitrogen.

The two combustion turbines (Emission Sources TURB1 & TURB2) are subject to 40 CFR 60.KKKK - Standards of Performance for Stationary Combustion Turbines for the operation of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MM Btu) per hour, which commenced construction, modification, or reconstruction after February 18, 2005. The two combustion turbines are identical, and each one is approximately 60.5 MM Btu/hr and they will burn either natural gas (Process 004) or # 2 fuel oil (Process 005). This replaces the requirements of 40 CFR 60.GG which have expired. NO_x emissions under 40 CFR 60.KKKK are limited to less than or equal to 25 ppm (when firing natural gas), and are limited to 74 ppm (when firing oil) subject to initial and periodic performance testing to confirm compliance.

The NO_x 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 #58 for 40 CFR 60.4365(a), NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Sources: TURB1 & TURB2 for Work Practice Involving Specific Operations 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.**

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.

This section provides an exemption from monitoring total sulfur content of the fuel used by a facility.

Condition #59 for 40 CFR 60.4365(a), NSPS Subpart KKKK: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Sources: TURB1 & TURB2 for Sulfur Dioxide for Work Practice Involving Specific Operations.

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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 #62 for 6 NYCRR 227-1.2(a)(1): This condition is an emission unit level and an emission point level condition that applies to EU: 1-00000 & EP: 00001 for Intermittent Emission Testing 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 combustion turbines, and Process 002 for the reconfigured three mid-size boilers, where stack testing is required for compliance.

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.

Condition #63 for 6 NYCRR 227-1.3(a): This condition is an emission unit level and an emission point level condition that applies to EU: 1-00000 & EP: 00001 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates.

This condition 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.

The opacity is limited to 20% at Emission Point 00001 when any of the boilers or combustion turbines is firing #2 fuel oil.

Condition # 64 for 6 NYCRR 227-1.4 (b): This condition is an emission unit level and an emission point level condition that applies to EU: 1-00000 & EP: 00001 for Record Keeping/Maintenance Procedures.

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

As 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 0BLRA, 0BLRB & 0BLRC) @ 65 MMBtu/hr each total 195 MMBtu/hr (< 250 MMBtu/hr), therefore COMS is not required, but the existing



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continuous opacity monitoring system (COMS) unit will voluntarily remain on the stack of Emission Point 00001.

NYU will maintain a voluntary COMS on Emission Point 00001 since a COMS is not required due to the exclusion of turbines. Either by voluntary COMS or visible emissions observations, NYU will include the excess emission report. The regulation does not require COMS for these emission sources, but NYU has voluntarily installed COMS.

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).

Condition # 65 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Control: DUCT1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires natural gas and the duct burner also fires natural gas. The duct burner fires only natural gas.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 25 parts per million by volume (dry, corrected to 15% O₂) for the combined cycle combustion turbine (Emission Source TURB1) firing natural gas (Process 004) with its associated/corresponding duct burner (Emission Control DUCT1) in Emission Unit 1-00000.

Condition # 75 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: DUCT1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires natural gas and the duct burner also fires natural gas. The duct burner fires only natural gas.

The facility will demonstrate compliance with the NOx standard of 25.0 parts per million by volume (dry, corrected to 15% O₂) for the turbine burning natural gas with its associated/corresponding HRSG duct burner (Emission Control DUCT1) burning natural gas, where stack testing is required for compliance.



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Condition # 76 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Control: DUCT2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Source TURB2) firing natural gas (Process 004) with its associated/corresponding duct burner (Emission Controls DUCT2) where the combustion turbine fires natural gas and the duct burner also fires natural gas. The duct burner fires only natural gas.

NO_x RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NO_x RACT limit is 25 parts per million by volume (dry, corrected to 15% O₂) for the combined cycle combustion turbine (Emission Source TURB2) firing natural gas (Process 004) with its corresponding duct burner (Emission Control DUCT2) in Emission Unit 1-00000.

Condition # 86 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: DUCT2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Control DUCT2) firing natural gas (Process 004) with its corresponding duct burner (Emission Control DUCT2) where the combustion turbine fires natural gas and the duct burner also fires natural gas. The duct burner fires only natural gas.

The facility will demonstrate compliance with the NO_x standard of 25.0 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine burning natural gas and with its associated/corresponding HRSG duct burner (Emission Control DUCT2) also burning natural gas, where stack testing is required for compliance.

Condition # 87 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source: TURB1 for Intermittent Emission Testing for Oxides of Nitrogen.



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This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 1 for Emission Source TURB1, where the combustion turbine fires natural gas without the duct burner.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 25 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Source TURB1) firing natural gas (Process 004) without its associated/corresponding duct burner in Emission Unit 1-00000.

Condition # 97 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: TURB1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 1 for Emission Source TURB1, where the combustion turbine fires natural gas without the duct burner.

The facility will demonstrate compliance with the NOx standard of 25.0 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Source TURB1) burning natural gas without its associated/corresponding HRSG duct burner, where stack testing is required for compliance.

Condition # 98 for 40 CFR 60.4340(a), NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: TURB1 for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.

To demonstrate continuous compliance, this condition specifies NOx annual testing requirement for combustion turbines if the facility is not using water or steam injection to control NOx emissions.

Condition # 99 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source: TURB2 for Intermittent Emission Testing for Oxides of Nitrogen.



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This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Source TURB2) firing natural gas (Process 004) without its associated/corresponding duct burner, where the combustion turbine fires natural gas.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 25 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Source TURB2) firing natural gas (Process 004) without its associated/corresponding duct burner in Emission Unit 1-00000.

Condition # 109 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: TURB2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 2 (Emission Sources TURB2) firing natural gas (Process 004) without its associated/corresponding duct burner, where the combustion turbine fires natural gas.

The facility will demonstrate compliance with the NOx standard of 25.0 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Source TURB2) without its associated/corresponding HRSG duct burner (Emission Control DUCT2), burning natural gas without its associated HRSG duct burner, where stack testing is required for compliance

Condition # 110 for 40 CFR 60.4340(a), NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 004 and Emission Source/Control: TURB2 for Record Keeping/Maintenance Procedures for Oxides of Nitrogen.

To demonstrate continuous compliance, this condition specifies NOx annual testing requirement for combustion turbines if the facility is not using water or steam injection to control NOx emissions.

Condition # 111 for 6 NYCRR 227-1.3 (a): This condition is an emission unit level, an emission point level and process level condition that applies to EU: 1-00000, EP: 00001 and Process: 005 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates.



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This condition 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 when firing # 2 fuel oil (Process 005).

The opacity is limited to 20% at Emission Point 00001 when any of the combustion turbines is firing #2 fuel oil (Process 005).

Condition # 112 for 40 CFR 60.45c (a), NSPS Subpart Dc: This condition is an emission unit level, an emission point level and process level condition that applies to EU: 1-00000, EP: 00001 and Process: 005 for Intermittent Emission Testing for Particulates.

Initial performance test for Particulates is required under 40 CFR 60.8 when firing #2 fuel oil.

Condition # 113 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Control: DUCT1 for Intermittent Emission Testing Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires #2 fuel oil and the duct burner fires natural gas. The duct burner fires only natural gas.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 65 parts per million by volume (dry, corrected to 15% O₂) for the combined cycle combustion (Emission Source TURB1) firing #2 fuel oil (Process 005) with its associated/corresponding duct burner (Emission Control DUCT1) in Emission Unit 1-00000.

Condition # 114 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: DUCT1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires #2 fuel oil and the duct burner fires natural gas. The duct burner fires only natural gas.

The facility will demonstrate compliance with the NOx standard of 74.0 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Source



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TURB1) with its associated/corresponding HRSG duct burner (Emission Control DUCT1), where the combustion turbine fires #2 fuel oil (Process 005) and its associated/corresponding HRSG duct burner fires natural gas, where stack testing is required for compliance. The duct burner fires only natural gas.

Condition # 115 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: DUCT2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 for Emission Control DUCT1, where the combustion turbine fires #2 fuel oil and the duct burner fires natural gas. The duct burner fires only natural gas.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 65 parts per million by volume (dry, corrected to 15% O₂) for the combined cycle combustion (Emission Source TURB2) firing #2 fuel oil (Process 005) with its associated/corresponding duct burner (Emission Control DUCT2) in Emission Unit 1-00000.

Condition # 116 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: DUCT2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 for Emission Control DUCT2, where the combustion turbine fires #2 fuel oil and the duct burner fires natural gas. The duct burner fires only natural gas.

The facility will demonstrate compliance with the NOx standard of 74.0 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Source TURB2) with its associated/corresponding HRSG duct burner (Emission Control DUCT2), where the combustion turbine fires #2 fuel oil (Process 005) and its associated/corresponding HRSG duct burner fires natural gas, where stack testing is required for compliance. The duct burner fires only natural gas.

Condition # 117 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB1 for Intermittent Emission Testing for Oxides of Nitrogen.

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This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 1 (Emission Source TURB1) firing # 2 fuel oil (Process 005) without its associated/corresponding duct burner, where the combustion turbine fires # 2 fuel oil.

NO_x RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NO_x RACT limit is 65 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Source TURB1) firing # 2 fuel oil (Process 005) without its associated/corresponding duct burner in Emission Unit 1-00000.

Condition # 128 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB1 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 1 for Emission Source TURB1, where the combustion turbine fires # 2 fuel oil without its associated/corresponding HRSG duct burner.

The facility will demonstrate compliance with the NO_x standard of 74.0 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Source TURB1) burning # 2 fuel oil without its associated/corresponding HRSG duct burner, where stack testing is required for compliance.

Condition # 129 for 40 CFR 60.4330, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB1 for Monitoring of Process or Control Device Parameters as Surrogate for Sulfur Dioxide for the sulfur content in the fuel oil.

For each fuel delivery, the sulfur content of the #2 fuel oil to be burned in the combustion 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 # 130 for 6 NYCRR 227-2.4 (e) (3): This condition is an emission unit level, an emission point level, process level and emission source/control level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB2 for Intermittent Emission Testing for Oxides of Nitrogen.



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This condition applies to the 5.5 megawatt SOLAR/TAURUS combined cycle combustion turbine # 2 (Emission Source TURB2) firing # 2 fuel oil (Process 005) without its associated/corresponding duct burner, where the combustion turbine fires # 2 fuel oil.

NOx RACT requirements for combustion turbines fired with natural gas or distillate oil on or after July 1, 2014.

The proposed NOx RACT limit is 65 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Sources TURB2) firing # 2 fuel oil (Process 005) without its associated/corresponding duct burner in Emission Unit 1-00000.

Condition # 141 for 40 CFR 60.4325, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB2 for Intermittent Emission Testing for Oxides of Nitrogen.

This condition applies to the 5.5 megawatt SOLAR/TAURUS combustion turbine # 2 for Emission Source TURB2, where the combustion turbine fires # 2 fuel oil without its associated/corresponding HRSG duct burner.

The facility will demonstrate compliance with the NOx standard of 74.0 parts per million by volume (dry, corrected to 15% O₂) for the combustion turbine (Emission Source TURB2) burning # 2 fuel oil without its associated/corresponding HRSG duct burner, where stack testing is required for compliance.

Condition # 142 for 40 CFR 60.4330, NSPS Subpart KKKK: This condition is an emission unit level, an emission point level, process level and emission source level condition that applies to EU: 1-00000, EP: 00001, Process: 005 and Emission Source/Control: TURB2 for Monitoring of Process or Control Device Parameters as Surrogate for Sulfur Dioxide for the sulfur content in the fuel oil.

For each fuel delivery, the sulfur content of the #2 fuel oil to be burned in the combustion 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 # 143 for 6 NYCRR 227-1.3: This condition is an emission unit level, emission point level and process level condition that applies to EU: 1-00000, EP: 00001 and Process: 006 for Record Keeping/Maintenance Procedures for Particulates. The facility is required to observe the stacks for each combustion source (Emission Sources 0BLRA, 0BLRB & 0BLRC) when operating on oil once per day for visible emissions.



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This condition applies to the three mid-size boilers (Emission Sources OBLRA, OBLRB & OBLRC) when operating on # 2 fuel oil (Process 006).

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation: The 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 # 144 for 6 NYCRR 227-1.3 (a): This condition is an emission unit level, an emission point level and a process level condition that applies to EU: 1-00000, EP: 00001 and Process: 006 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates.

This condition applies to the three mid-size boilers (Emission Sources OBLRA, OBLRB & OBLRC) when operating on # 2 fuel oil (Process 006).

This condition 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 when firing # 2 fuel oil (Process 006).

The opacity is limited to 20% at Emission Point 00001 when any of the combustion turbines is firing #2 fuel oil (Process 006).

Condition # 145 for 6 NYCRR 227-1.4 (b): This condition is an emission unit level and an emission point level condition that applies to EU: 2-00000 and EP: 00002 for Particulates for Record Keeping/Maintenance Procedures.

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

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.

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 maintain a voluntary COMS on Emission Point 00002 since COMS is not required for these emission sources (seven engines). Either by voluntary COMS or visible emissions

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observations, NYU will include the excess emission report. The regulation does not require COMS for these emission sources, but NYU has voluntarily installed COMS.

Condition # 146 for 6 NYCRR 227-1.3: This condition is an emission unit level, emission point level, process level and emission source level condition that applies to EU: 2-00000, EP: 00002, Process: 003 for Particulates. This condition is for Monitoring of Process or Control device Parameters as Surrogate.

This condition applies to the seven identical diesel engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) when firing # 2 fuel oil (Process 003).

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation: The 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 # 147 for 6 NYCRR 227-1.3: This condition is an emission unit level, emission point level and process level condition that applies to EU: 2-00000, EP: 00002 and Process: 003 for Record Keeping/Maintenance Procedures for Particulates.

The facility is required to observe the stacks for each combustion source operating on oil once per day for visible emissions.

This is a condition that applies to the seven identical diesel engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) when firing # 2 fuel oil (Process 003).

This condition 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 when firing # 2 fuel oil.

Condition # 148 for 6 NYCRR 227-1.3 (a): This condition is an emission unit level, an emission point level and a process level condition that applies to EU: 2-00000, EP: 00002 and Process: 003 for Monitoring of Process or Control Device Parameters as Surrogate for Particulates.

This condition applies to the seven identical diesel engine generators (Emission Sources ENG01, ENG02, ENG03, ENG04, ENG05, ENG06 & ENG07) when firing # 2 fuel oil (Process 003).



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This condition 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 when firing # 2 fuel oil (Process 003).

The opacity is limited to 20% at Emission Point 00002 when any of the diesel engine generators is firing #2 fuel oil (Process 006).

Condition # 151 for 6 NYCRR 227-1.4 (a): This condition is an emission unit level and an emission point level condition that applies to EU: 1-00000 and EP: 00001 for Monitoring of Process or Control device Parameters as Surrogate for Particulates.

This condition applies to the three mid-size boilers (Emission Sources 0BLRA, 0BLRB & 0BLRC) when operating on # 2 fuel oil (Process 006).

This condition requires a limitation and compliance monitoring for opacity from a stationary combustion installation: The opacity will be limited to 20% except for one six minute period per hour, not to exceed 27%, based upon the six minute average.

As 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 0BLRA, 0BLRB & 0BLRC) @ 65 MMBtu/hr each total 195 MMBtu/hr (< 250 MMBtu/hr), therefore COMS is not required, but the existing continuous opacity monitoring system (COMS) unit will voluntarily remain on the stack of Emission Point 00001.

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