



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

**Permit ID: 2-6003-00038/00008**

**Renewal Number: 2**

**Modification Number: 1 05/02/2014**

**Facility Identification Data**

Name: RIVERBAY CORP-CO-OP CITY

Address: 2049 BARTOW AVE

BRONX, NY 10475

**Owner/Firm**

Name: RIVERBAY CORP

Address: 2049 BARTOW AVE

BRONX, NY 10475-4613, USA

Owner Classification: Corporation/Partnership

**Permit Contacts**

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**Permit Description**

**Introduction**

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

**Summary Description of Proposed Project**

This project is a major modification for:

1. Adding Clean Air Interstate Rule (CAIR) 6 NYCRR 243 conditions for the two 371 MM Btu/hr each



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Riley Stoker boilers.

2. Re-classifying Emission Source GEN01 in Emission Unit U-00007 from exempt "black start" emergency generator engine to a "peak shaving unit" in the CDRP with a cap operational limit of 1,055 hours annually. Emission Source GEN01 is a MTU Deteroit Diesel Model 12V400 G43 4 cycle unit rated at 1500 KW (2,000 bhp) capable of firing #2 fuel oil. The total displacement of the engine is 57.2 liters for 12 cylinders. Therefore, the displacement per cylinder is 4.77 liters and the engine is rated at 1800 rpm.

3. Applying for a NOx Variance for the non-emergency generator that will be re-classified as a "peak shaving unit" in the CDRP (Emission Source GEN01 in Emission Unit U-00007). The engine's NMHC + NOx emissions is 4.8 grams/bhp-hr. The facility has submitted a NOx RACT Variance application with this modification due to the lack of economic feasibility of \$19,696 per ton of NOx, which is much higher than the threshold of \$5,000 per ton for NOx RACT. The Riverbay Corp-Co-Op City is subject to the requirements of Title V. The facility is required, under the provisions of 6 NYCRR Subpart 201-6, to submit semi-annual compliance reports and an annual Compliance Certification. This facility is required to comply with the following monitoring conditions:

The following is information from the manufacturer for the non-emergency engine (Emission Source ENG01 in Emission Unit U-00007):

Manufacturer - MTU Detroit Diesel, Model 12V4000 G43 4cycle unit rated at 1500 KW (2000 bhp) capable of firing diesel (#2 fuel oil).

Model/Model 3/Type - 1500 KW / 12V4000 G43 (T1238A34) / 4 cycle

Model Year for the engine is 2008

Fuel Type - Diesel #2

Maximum power (standby mode) - 2,328 bhp / 1,736 KW

The engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Total displacement of engine is 57.2 liters for 12 cylinders based upon the engine nameplate data, and the displacement per cylinder is 4.77 liters. The model year for the engine is 2008. Standard Feature - EPA Tier 2 Certified (40 CFR Part 89) - Tier 2 Non-road Diesel Emission Standards for engines greater than 560 KW (750 Hp) power rating and has the following air emissions ratings:

Contaminant	grams/KW-hr	grams/bhp-hr
CO	3.5	2.6
HC	-	-
NMHC + NOx	6.4	4.8
NOx	-	-
PM	0.2	0.15



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The two EPA NSPS regulations applicable to Riverbay Corp's black-start engine are 40 CFR 60 Subpart IIII - Standards of Performance for Compression Ignition Internal Combustion Engines, and 40 CFR 63 Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for stationary Reciprocating Internal Combustion engines (RICE). Subpart IIII, Part 60.4204 (non-emergency engines), stipulates Tier 2 emission rates for 2007 model and later engines with displacement less than 30 liters per cylinders. Riverbay Corp is subject to Subpart ZZZZ as an "area source." According to Subpart 60.6590, the installation of the black start engine is new because construction commenced after June 12, 2006; and meets the requirements of Subpart ZZZZ by meeting the requirements of Subpart IIII.

Since a peak shaving engine unit is not an emergency power engine unit, it is not an exempt source. Subpart 227-2.4, Control Requirements, (f) Stationary internal combustion engines, stipulates the presumptive NOx emission rate limit at 2.3 grams per brake horsepower-hour, for engines with a maximum mechanical output rating equal to or greater than 200 brake horsepower in a severe ozone nonattainment area. Subpart 227-2.5, Compliance options, (c), allows demonstration that the presumptive RACT emission limit is not economically or technically feasible and a request for a higher specific limit. The application includes a NOx RACT analysis, which considers the alternate technology of selective catalytic reduction (SCR) for enhanced NOx emission reduction. Based upon this NOx RACT analysis, Riverbay Corp is not considering the installation of SCR control technology based upon associated economics.

The permit application addresses the requirements of Subpart 231-6 with the inclusion of a "netting analysis" required by Subpart 231-6.2. The non-attainment (NA) contaminants for this facility, which is located in a severe ozone area, are NOx and VOCs. The only NA contaminant for which the project emission potential (PEP) is greater than the significant project threshold (SPT) is NOx. The netting analysis is specific to NOx. The contemporaneous period is October, 2008 thru October, 2013. About January 2010, Riverbay Corp began operation of its combustion gas turbines (emission Units U-00004 and U-00006). The netting analysis includes the NOx PTE emissions from the gas turbines. The netting analysis shows that the reclassification of Emission Unit U-00007 from a black start emergency generator to a peak shaving engine unit, with a 1,055 annual operating hours limit, will not represent a "New Source Review major modification" to the facility. Since the PEP (14.03 tons of NOx) is greater than the SPT (2.5 tons), the reclassification is considered a "significant project". However; since the net emission increase (NEI) for the facility derived from a netting analysis including the recent operation of the combustion gas turbines commencing in 2010 (10.87 tons of NOx) is less than the significant net emission increase threshold (SNEIT) of 25 tons, the re-classification does not represent a New Source Review (NSR) major modification.

The NEI (Net emission Increase) for NOx = PEP + ERCs for Combustion Gas Turbines EU: U-0004 & U-0006 that began operating in January, 2010.

$$\begin{aligned} \text{NOx} &= 14.03 \text{ tpy} + 10.87 \text{ tpy} \\ &= 24.9 \text{ tpy} \end{aligned}$$

The PEP (Project Emission Potential) is associated with 1,055 hours of operation per year at Tier 2 emission level. Since the NEI for NOx is 24.9 tpy, which is < 25 tpy, therefore the modification is not subject to New Source Review (NSR).

The PTEs for the emission units are based upon specific limitations specified in the noted permit conditions.

**Attainment Status**



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RIVERBAY CORP-CO-OP CITY is located in the town of BRONX in the county of BRONX. The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

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

\* Ozone is regulated in terms of the emissions of volatile organic compounds (VOC) and/or oxides of nitrogen (NOx) which are ozone precursors.

\*\* NOx has a separate ambient air quality standard in addition to being an ozone precursor.

**Facility Description:**

Riverbay Co-Op is a housing development consisting of more than 15,000 apartments, 3 shopping centers, and 8 garages. The entire facility is heated and cooled by the Power Plant, which generates steam and chilled water. The facility operates two low pressure (LP) boilers (Emission Sources 00001 & 00002 in Emission Units U-00001 & U-00002; respectively), using # 6 fuel oil (maximum 0.30 % S) - Processes 001 & 003 or natural gas (Processes 002 & 004), rated at 371 MM Btu/hr each. A new High Pressure (HP) boiler # 4 (Emission Source 00003 in Emission Unit U-00003), rated at 212 MM Btu/hr, firing natural gas (Process 006) or ultra low sulfur fuel oil (< 15.0 ppm S) - Process 005) was installed in December 2006 to replace an existing low pressure boiler (rated at 377 MM Btu/hr) which was not operational and beyond reasonable repair cost. Each boiler discharges to a separate stack.

In February, 2007, the facility began the installation of two new combustion gas turbines cogeneration systems. Commissioning began in 2009 and normal operations began in 2010. The installation included two new combustion turbine generating (CTG) trains (Emission Units U-00004 & U-00006). Each CTG train includes a combustion gas turbine (Emission Sources GT004 & GT006), rated at 131 MM Btu/hr with 12 MW power output, firing natural gas (Processes 009 & 14 at 100% load, and Processes P10 & 015 at 70% load) or ultra low sulfur (< 15.0 ppm S) distillate fuel oil (Processes 007 & 012 at 100% load, and Processes 008 & 013 at 70% load), a duct burner (Emission Controls GTC04 & GTC06), rated at 60.7 MM Btu/hr each, firing natural gas only (Processes 011 & 016), and a once through steam generator (OTSG). Each CTG train vents out of a separate stack (Emission Points 0004 & 0006) mounted on top of the OTSG.

High pressure steam is directed through a steam recovery turbine generator rated at 16 MW. Operating restrictions are taken on oil and natural gas usage, and on equipment operating hours such that the allowable incremental increases for NYSDEC NSR and USEPA PSD are not exceeded. For emergency operation, the facility has installed a black start generator, rated at 1500 kilowatts, in 2011.

Processes:



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001& 002 Low Pressure Boiler 00001 (Emission Source 00001) in Emission Unit U-00001 firing # 6 fuel oil & natural gas; respectively.

017 Beginning January, 2015, the High Pressure Boiler 00001 (Emission Source 00001) in Emission Unit U-00001 will replace the Low Pressure Riley Stoker boiler (Emission Source 00001) in Emission Unit U-00001 and the new boiler will be firing of # 2 fuel oil instead of # 6 fuel oil.

003 & 004 Low Pressure Boiler 00002 (Emission Source 00002 in Emission Unit U-00002 firing # 6 fuel oil & natural gas; respectively.

005 & 006 The new High Pressure and low heat release boiler (Rentech Model D Watertube Boiler), rated at 212 MM BTU/hr (Emission Source HPB03 in Emission Unit U-00003) firing # 2 fuel oil & natural gas ; respectively.

007 & 012 Combustion Gas Turbines GTC04 & GTC06 firing # 2 fuel oil at maximum load operation (100%); respectively.

008 & 013 Combustion Gas Turbines GTC04 & GTC06 firing # 2 fuel oil at minimum load operation (70%) ; respectively.

009 & 014 Combustion Gas Turbines GTC04 & GTC06 firing natural gas at maximum load operation (100%); respectively.

P10 & 015 Combustion Gas Turbines GTC04 & GTC06 firing natural gas at minimum load operation (70%) ; respectively.

011 & 016 Duct Burners GTC04 & GTC06 firing natural gas only; respectively.

The operating restrictions on oil and natural gas usage are as follows:

Processes	Limit for both turbines
007 & 012, 008 & 013	4,320 hrs/yr @ any load
008 & 013	2,160 hrs/yr @ 70% load
007 & 012, 008 & 013 009 & 014, P10 & 15, 011&016	14,000 hrs/yr @ all loads
P10 & 15, 008 & 013	7,000 hrs/yr @ 70% load
011 & 016	320 MM CF/yr

The facility's emissions exceed the major source pollutant thresholds listed in 6 NYCRR 201-6 and, as such, the facility is subject to the provisions of Title V air permit regulation. The facility's emissions of Oxides of Nitrogen, Carbon Monoxide and Ammonia will be continuously monitored.

Riverbay Corp Co-Op City consists of six emission units: U-00001, U-00002, U-00003, U-00004 & U-00006. Below is a description of these five emission units:

Emission Unit U-00001 is comprised of a 371 MM Btu/hr low pressure Riley Stoker boiler (Emission



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Source 00001) that was constructed July 1968. The emissions exhaust through a stack, identified as Emission Point 00001. This low pressure boiler is capable of firing either natural gas (Process 002) or # 6 fuel oil (Process 001). The conversion to operating w/dual fuel burners commenced in May 1995.

Emission Unit U-00002 is comprised of a 371 MM Btu/hr low pressure Riley Stoker Model OD-1 boiler (Emission Source 00002) that was constructed July 1968. The emissions exhaust through a stack, identified as Emission Point 00002. This low pressure boiler is capable of firing either natural gas (Process 004) or # 6 fuel oil (Process 003). The conversion to operating w/dual fuel burners commenced in May 1995.

Emission Unit U-00003 is comprised of one state-of-the art new high pressure and low heat release boiler (Rentech Model D Watertube), rated at 212 MM BTU/hr (Emission Source S0003), firing ultra low 15 ppm sulfur by weight distillate oil (Process 005) or natural gas (Process 006), venting to existing stack (Emission Point 00003) for Emission Source ES004 in Emission Unit U-00003. The new boiler is equipped with a low NOx burner and Flue Gas Recirculation - FGR (Emission Control C0003). Potential emissions of all criteria air pollutants is significantly lower for the new boiler. This was a replacement for the previously existing high pressure boiler (Emission Source ES004 in Emission Unit U-00003), which was a Riley-Stoker Model OD-1, rated at 377 MM BTU/hr, firing #6 fuel oil or natural gas and was de-commissioned due to excessive repair needs. The existing boiler, which was installed in 1968, was not operational and was de-commissioned since repair costs were considered excessive. The previously existing boiler was rated at 377 MM BTU/hr and was permitted to burn #6 fuel oil or natural gas.

Emission Unit U-00004 is comprised of a Combustion Gas Turbine (Siemens Model GT-400), rated at 131 MM Btu/hr (Emission Source GT004) firing natural gas (Processes 009 & P10 ) or ultra low 15 ppm sulfur by weight distillate fuel oil (Processes 007 & 008). The CTG is rated to produce 12 MW of electrical power. The CTG exhausts gas is further heated by a natural gas fired (Process 011) duct burner (Emission Control GTC04), rated at 60.7 MM Btu/hr. The duct burner design operating rates are 46 MM Btu/hr at maximum inlet temperature of 55 degrees Fahrenheit, and 53.3 MM Btu/hr at minimum inlet temperature of minus 5 degrees Fahrenheit duct burner. The exhaust gas then passes through an oxidation catalyst to destroy carbon monoxide (CO) and Volatile Organic Compounds (VOC) and then through a Selective Catalytic Oxidation (SCR) system to destroy nitrogen oxides (NOx). The gas then vents out of a stack (Emission Point 00004) mounted on top of a once through steam generator (OTSG). To improve turbine performance, the inlet air is cooled to a maximum of 55 degrees Fahrenheit. The gas turbine is limited to operating a maximum of 2,160 hours/year on distillate fuel oil. In addition, the gas turbine may not operate at low load for more than 50 % of the operating hours.

Emission Unit U-00006 is comprised of a Combustion Gas Turbine (Siemens Model GT-400), rated at 131 MM Btu/hr (Emission Source GT006) firing natural gas (Processes 14 & 15) or ultra low 15 ppm sulfur by weight distillate oil (Processes 012 & 013). The CTG is rated to produce 12 MW of electrical power. The CTG exhausts gas is further heated by a natural gas fired (Process 016) duct burner (Emission Control GTC06), rated at 60.7 MM Btu/hr. The duct burner design operating rates are 46 MM Btu/hr at maximum inlet temperature of 55 degrees Fahrenheit, and 53.3 MM Btu/hr at minimum inlet temperature of minus 5 degrees Fahrenheit duct burner. The exhaust gas then passes through an oxidation catalyst to destroy carbon monoxide (CO) and Volatile Organic Compounds (VOC) and then through a Selective Catalytic Oxidation (SCR) system to destroy nitrogen oxides (NOx). The gas then vents out of a stack (Emission Point 00006) mounted on top of a once through steam generator (OTSG). To improve turbine performance, the inlet air is cooled to a maximum of 55 degrees Fahrenheit. The gas turbine is limited to operating a maximum of 2,160 hours/year on distillate fuel oil. In addition, the gas turbine may not operate at low load for more than 50% of the operating hours.

Emission Unit U-00007 consists of a MTU Detroit Diesel Model 12V400 G43 4-cycle engine generator



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unit, rated at 1,500 KW (2000 bhp), capable of firing #2 fuel oil (diesel fuel). The diesel engine generator unit, identified as Emission Source GEN01. This engine will burn only diesel fuel (Process GEN). The generator/engine exhausts to its own separate stack. The flue gases generated from Emission Source GEN01 vent to the atmosphere via a stack identified as Emission point 00007. The total displacement of the engine generator is 57.2 liters for the 12 cylinders. Therefore, the displacement per cylinder is 4.77 liters and the engine is rated at 1800 rpm. The generator unit is rated for Tier 2 emissions of non-road diesel engines and will operate as a peak shaving unit.

The diesel generator was purchased in February, 2008. The installation date was 2/3/2011, the date the engine was set on its support structure. The operation date was 4/1/2011.

This "black start" emergency generator burns ultra low sulfur fuel with maximum sulfur content of 15 ppm, in accordance with 40 CFR 60.4207(b) and 40 CFR 80.510(b). The emergency generator is 1,500 KW (2000 bhp). The generator has a cylindrical displacement of 4.77 liters/cylinder, which is less than 10 liters per cylinder. The number of cylinders for the engine is 12 (less than 10 liters for the 12 cylinders) for a total of 57.2 liters per engine.

The new 1,500 KW exempt emergency generator (Emission Source GEN01) in Emission Unit U-00007 complies with the EPA standards that applied at the time of purchase (February 2008). It is assumed that the generator is 2008 Model and the displacement is 4.77 liters/cylinder (less than 10 liters per cylinder), and meets the certification standards in 40 CFR 89.113 (in accordance with 40 CFR 60.4202(a)(2)).

The engine associated with this generator is subject to 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary compression Ignition Internal Combustion Engines, and 40 CFR Part 63, subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This emergency generator is exempt from permitting in accordance with 6 NYCRR 201-3.1(b) and 3.2(c)(6).

Riverbay has notified the Department in a letter dated January 5, 2011 regarding the installation of a "black start" emergency diesel generator. The installation date was February 3, 2011, the day it was set on its support structure. The specifications for the "black start" emergency diesel generator are as follows:

Manufacturer - MTU Detroit Diesel, Model 12V4000 G43 4cycle unit rated at 1500 KW (2000 bhp) capable of firing diesel (#2 fuel oil).

Model/Model 3/Type - 1500 KW / 12V4000 G43 (T1238A34) / 4 cycle

Model Year for the engine is 2008

Fuel Type - Diesel #2

Fuel consumption rating (standby mode):

100% power rating - 111.0 gal/hr

75% power rating - 85.3 gal/hr

50% power rating - 59.6 gal/hr

Maximum power (standby mode) - 2,328 bhp / 1,736 KW

Exhaust system rating (standby mode):

Stack Gas Temperature - 815 degrees Fahrenheit

Stack Gas Volumetric Flow rate @ stack temperature - 12,078 CFM



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Maximum Allowable Back pressure - 34.1 inches of H<sub>2</sub>O

Total displacement of engine is 57.2 liters for 12 cylinders; unit is classified as compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Therefore, the displacement per cylinder is 4.77 liters.

Standard Feature - EPA Tier 2 Certified (40 CFR Part 89) - Tier 2 Non-road Diesel Emission Standards for engines greater than 560 KW (750 Hp) power rating:

Contaminant	Grams/KW-hr	grams / bhp-hr
CO	3.5	2.6
HC	-	-
NMHC + NO <sub>x</sub>	6.4	4.8
NO <sub>x</sub>	-	-
PM	0.2	0.15

For compliance with 6 NYCRR Part 227-2, NO<sub>x</sub> RACT, the facility was required to submit a compliance plan before January 1, 2012 for achieving post July 1, 2014 presumptive NO<sub>x</sub> RACT. The facility submitted its NO<sub>x</sub> RACT compliance plan in a letter to the Department Region 2 dated December 28, 2011. The facility's letter outlined the following:

Emission Source 00001 in Emission Unit U-00001: The compliance plan is to upgrade the burners of this very large low pressure Riley Stoker boiler and switch from #6 fuel oil to #2 fuel oil with FGR to attain the post July 1, 2014 presumptive NO<sub>x</sub> RACT limit for dual fuel very large boilers, 0.15 lbs NO<sub>x</sub> per million Btu heat input. In accordance with Part 227-2.3, compliance with the post July 1, 2014 presumptive NO<sub>x</sub> RACT will occur on January 1, 2015.

Emission Source 00002 in Emission Unit U-00002: The compliance plan is to replace this low pressure very large boiler with a new high pressure boiler capable of firing natural gas and #2 fuel oil. The compliance plan is to operate the existing low pressure boiler on natural gas & #6 fuel oil until January 1, 2015 and afterwards begin replacement activities. After January 1, 2015, the 371 MM Btu/hr rated very large low pressure Riley Stoker boiler will be replaced by a new high pressure boiler. The heat input rating of the high pressure boiler has not been decided at this time, but it will fire natural gas and distillate #2 fuel oil. The facility will submit a modification to the permit some time in 2013 to address the replacement of the low pressure boiler with a new high pressure boiler.

Emission Source 00003 in Emission Unit U-00003: This high pressure large boiler, capable of firing natural gas or ultra low sulfur distillate #2 fuel oil (< 15 ppm S) was installed in 2007 equipped with a low NO<sub>x</sub> burner and FGR for NO<sub>x</sub> control. Emission tests previously submitted to the Department confirm that this boiler is capable of sustaining presumptive NO<sub>x</sub> RACT emission limit after July 1, 2014.

The facility submitted a supplemental NO<sub>x</sub> RACT letter in March 2012 providing the results of testing on boiler #1 (Emission Source 00001 in Emission Unit U-00001) concerning fuel switching and burner upgrade to reaffirm its compliance plan.

The facility operates other sources which are considered exempt from permitting in accordance with 6



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NYCRR 201-3.2 (c), including one emergency diesel generator (<500 hours per year each), two distillate and residual fuel oil storage tanks (<300,000 bbls capacity), three storage tanks (<10,000 gallons capacity), and five non-contact water cooling towers and water treatment systems.

**Permit Structure and Description of Operations**

The Title V permit for RIVERBAY CORP-CO-OP CITY

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.

RIVERBAY CORP-CO-OP CITY is defined by the following emission unit(s):

Emission unit U00001 - Emission Unit U-00001 is comprised of a 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00001) that was constructed July 1968. The emissions exhaust through a stack, identified as Emission Point 00001. This low pressure boiler is capable of firing either natural gas (Process 002) or # 6 fuel oil (Process 001). The conversion to operating w/dual fuel burners commenced in May 1995.

Emission unit U00001 is associated with the following emission points (EP):  
00001

Process: 001 is located at FIRST FLOOR, Building PPLANT - Process 001 is the firing of # 6 fuel oil in the Low Pressure Boiler 00001 (Emission Source 00001) in Emission Unit U-00001. The gas emissions are exhausted through a stack identified as Emission Point 00001.

Beginning January 1, 2015, the low pressure Riley Stoker boiler will operate with upgrade low NOx burner (LNB), flue gas recirculation (FGR) and fuel switching from residual #6 fuel oil to distillate #2 fuel oil.

Process 001 will be replaced by Process 017, which is the firing of # 2 fuel oil in the Low Pressure Boiler 00001 (Emission Source 00001) in Emission Unit U-00001. The gas emissions are exhausted through a stack identified as Emission Point 00001.

Process: 002 is located at FIRST FLOOR, Building PPLANT - Process 002 is the firing of natural gas in the Low Pressure Boiler 00001 (Emission Source 00001) in Emission Unit U-00001. The gas emissions



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are exhausted through a stack identified as Emission Point 00001.

Process: 017 is located at FIRST FLOOR, Building PPLANT - Process 017 is the firing of # 2 fuel oil in the Low Pressure Boiler 00001 (Emission Source 00001) in Emission Unit U-00001 beginning January 1, 2015 as per Riverbay's NOx RACT Plan. The gas emissions are exhausted through a stack identified as Emission Point 00001.

Emission unit U00007 - Emission Unit U-00007 consists of a new 1,500 KW (2000 bhp) exempt diesel fuel "black start" emergency diesel generator, identified as Emission Source GEN01. This engine will burn only diesel fuel (Process GEN). The generator/engine exhausts to its own separate stack. The flue gases generated from Emission Source GEN01 vent to the atmosphere via a stack identified as Emission Point 00007.

The "black start" emergency diesel generator was purchased in February, 2008. The installation date was 2/3/2011, the date the engine was set on its support structure. The operation date was 4/1/2011.

This "black start" emergency generator burns ultra low sulfur fuel with maximum sulfur content of 15 ppm, in accordance with 40 CFR 60.4207(b) and 40 CFR 80.510(b). The emergency generator is 1,500 KW (2000 bhp). The generator has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder.

The new 1,500 KW exempt emergency generator (Emission Source GEN01) in Emission Unit U-00007 complies with the EPA standards that apply at the time of purchase (February 2008). It is assumed that the generator is 2008 Model and the displacement is 4.77 liters/cylinder (less than 10 liters per cylinder), and meets the certification standards in 40 CFR 89.113 (in accordance with 40 CFR 60.4202(a)(2)).

The engine associated with this generator is subject to 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary compression Ignition Internal Combustion Engines, and 40 CFR Part 63, subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. The two EPA NSPS regulations applicable to Riverbay Corp's black-start engine are 40 CFR 60 Subpart IIII and 40 CFR 63 Subpart ZZZZ. Subpart IIII, Part 60.4204 (non-emergency engines), stipulates Tier 2 emission rates for 2007 model and later engines with displacement less than 30 liters per cylinders. Riverbay Corp is subject to Subpart ZZZZ as an "area source." According to Subpart 60.6590, the installation of the black start engine is new because construction commenced after June 12, 2006; and meets the requirements of Subpart ZZZZ by meeting the requirements of Subpart IIII.

Manufacturer - MTU Detroit Diesel, Model 12V4000 G43 4cycle unit rated at 1500 KW (2000 bhp) capable of firing diesel (#2 fuel oil).

Model/Model 3/Type - 1500 KW / 12V4000 G43 (T1238A34) / 4 cycle

Model Year for the engine is 2008

Fuel Type - Diesel #2

Fuel consumption rating (standby mode)

100% power rating - 111.0 gal/hr

75% power rating - 85.3 gal/hr

50% power rating - 59.6 gal/hr



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Maximum power (standby mode) - 2,328 bhp / 1,736 KW

Exhaust system rating (standby mode)

Stack Gas Temperature - 815 degrees Fahrenheit

Stack Gas Volumetric Flow rate @ stack temperature - 12,078 CFM

Maximum Allowable Back pressure - 34.1 inches of H2O

Total displacement of engine is 57.2 liters for 12 cylinders; unit is classified as compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Therefore, the displacement per cylinder is 4.77 liters.

Standard Feature - EPA Tier 2 Certified (40 CFR Part 89) - Tier 2 Non-road Diesel Emission Standards for engines greater than 560 KW (750 Hp) power rating and has the following air emissions ratings:

Contaminant	Grams/KW-hr	grams / bhp-hr
CO	3.5	2.6
HC	-	-
NMHC + NOx	6.4	4.8
NOx	-	-
PM	0.2	0.15

Emission unit U00007 is associated with the following emission points (EP):  
00007

Process: GEN is located at Building PPLANT - Process GEN is the combustion of diesel fuel oil in the 1,500 KW diesel fuel engine generator unit in Emission Unit U-00007. The flue gases generated from Emission Source GEN01 will vent to the atmosphere via its individual stack identified as Emission Point 00007.

This 1,500 KW diesel fuel engine generator unit is re-classified from an emergency generator to a "peak shaving unit" in the CDRP with a cap operational limit of 1,055 hours annually. Emission Source GEN01 is a MTU Deteroit Diesel Model 12V400 G43 4 cycle unit rated at 1500 KW (2,000 bhp) capable of firing #2 fuel oil. The total displacement of the engine is 57.2 liters for 12 cylinders. Therefore, the displacement per cylinder is 4.77 liters and the engine is rated at 1800 rpm.

This 1,500 KW diesel engine generator unit burns ultra low sulfur fuel with maximum sulfur content of 15 ppm, in accordance with 40 CFR 60.4207(b) and 40 CFR 80.510(b). The emergency generator is 1,500 KW (2000 bhp). The generator has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder.

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This 1,500 KW diesel engine generator (Emission Source GEN01) in Emission Unit U-00007 complies with the EPA standards that apply at the time of purchase ( February 2008). It is assumed that the generator is 2008 Model and the displacement is 4.77 liters/cylinder (less than 10 liters per cylinder), and meets the certification standards in 40 CFR 89.113 (in accordance with 40 CFR 60.4202(a)(2)).

The engine associated with this generator is subject to 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary compression Ignition Internal Combustion Engines, and 40 CFR Part 63, subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. This generator is a peak shaving engine unit and is not an emergency power engine unit, it is not an exempt source. Subpart 227-2.4(f), Control Requirements for Stationary internal combustion engines, stipulates the presumptive NOx emission rate limit at 2.3 grams per brake horsepower-hour, for engines with a maximum mechanical output rating equal to or greater than 200 brake horsepower in a severe ozone nonattainment area. Subpart 227-2.5, Compliance options, (c), allows demonstration that the presumptive RACT emission limit is not economically or technically feasible and a request for a higher specific limit. The application includes a NOx RACT analysis, which considers the alternate technology of selective catalytic reduction (SCR) for enhanced NOx emission reduction. Based upon this NOx RACT analysis, Riverbay Corp is not considering the installation of SCR control technology based upon associated economics. The facility ia applying for a NOx Variance for this non-emergency generator.

This 1,500 KW diesel fuel engine generator unit is re-classified from an emergency generator to a "peak shaving unit" in the CDRP with a cap operational limit of 1,055 hours annually, and operates on #2 diesel fuel.

Fuel Type - Diesel #2

Fuel consumption rating (standby mode)

100% power rating - 111.0 gal/hr

75% power rating - 85.3 gal/hr

50% power rating - 59.6 gal/hr

Maximum power (standby mode) - 2,328 bhp / 1,736 KW

Exhaust system rating (standby mode)

Stack Gas Temperature - 815 degrees Fahrenheit

Stack Gas Volumetric Flow rate @ stack temperature - 12,078 CFM

Maximum Allowable Back pressure - 34.1 inches of H2O



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Standard Feature - EPA Tier 2 Certified (40 CFR Part 89)

Tier 2 Non-road Diesel Emission Standards for engines greater than 560 KW (750 Hp) power rating.

The diesel fuel engine generator unit is re-classified from an emergency generator to a peak shaving unit and will operate below 219,000 MW-hrs output/year. It burns ultra low sulfur fuel with maximum sulfur content of 15 ppm, in accordance with 40 CFR 60.4207(b) and 40 CFR 80.510(b).

Emission unit U00002 - Emission Unit U-00002 is comprised of a 371 MM Btu/hr low pressure Riley Stoker Model OD-1 boiler (Emission Source 00002) that was constructed July 1968. The emissions exhaust through a stack, identified as Emission Point 00002. This low pressure boiler is capable of firing either natural gas (Process 004) or # 6 fuel oil (Process 003). The conversion to operating w/dual fuel burners commenced in May 1995.

Emission unit U00002 is associated with the following emission points (EP):  
00002

Process: 003 is located at FIRST FLOOR, Building PPLANT - Process 003 is the firing of # 6 fuel oil in the Low Pressure Boiler 00002 (Emission Source 00002 in Emission Unit U-00002. The gas emissions are exhausted through a stack identified as Emission Point 00002.

After January 1, 2015, the Low Pressure Boiler 00002 (Emission Source 00002 in Emission Unit U-00002 will be removed and replaced by a High Pressure Boiler with NOx control technology to achieve compliance with EPA's NSPS Standards Subpart Db and the Department's NOx RACT rule 6 NYCRR 227-2.

Process: 004 is located at FIRST FLOOR, Building PPLANT - Process 004 is the firing of natural gas in the Low Pressure Boiler 00002 (Emission Source 00002 in Emission Unit U-00002. The gas emissions are exhausted through a stack identified as Emission Point 00002.

Emission unit U00006 - Emission Unit U-00006 is comprised of a Combustion Gas Turbine (Siemens Model GT-400), rated at 131 MM Btu/hr (Emission Source GT006) firing natural gas (Processes 14 & 15) or ultra low 15 ppm sulfur by weight distillate oil (Processes 012 & 013). The CTG is rated to produce 12 MW of electrical power. The CTG exhausts gas is further heated by a natural gas fired (Process 016) duct burner (Emission Control GTC06), rated at 60.7 MM Btu/hr. The duct burner design operating rates are 46 MM Btu/hr at maximum inlet temperature of 55 degrees Fahrenheit, and 53.3 MM Btu/hr at minimum inlet temperature of minus 5 degrees Fahrenheit duct burner. The exhaust gas then passes through an oxidation catalyst to destroy carbon monoxide (CO) and Volatile Organic Compounds (VOC) and then through a Selective Catalytic Oxidation (SCR) system to destroy nitrogen oxides (NOx). The gas then vents out of a stack (Emission Point 00006) mounted on top of a once through steam generator (OTSG). To improve turbine performance, the inlet air is cooled to a maximum of 55 degrees Fahrenheit. The gas turbine is limited to operating a maximum of 2,160 hours/year on distillate fuel oil. In addition, the gas turbine may not operate at low load for more than 50 % of the operating hours.



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Emission unit U00006 is associated with the following emission points (EP):  
00006

Process: 012 is located at Building PPLANT - Process 012 is the firing of ultra low sulfur distillate fuel oil (<15 ppm S) in the Siemens Model 400-GT combustion turbine (Emission Source GT006) in Emission Unit U-00006, with maximum heat input rating of 138.5 MM Btu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Process operation at maximum load (100 %). Maximum operating hours on oil is 2,160 hours/year, following approved stack test PM-10 emission test of 15 mg/NM3 or less. Maximum operating hours on oil shall not exceed 720 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Process: 013 is located at Building PPLANT - Process 013 is the firing of ultra low sulfur distillate fuel oil (<15 ppm S) in the Siemens Model 400-GT combustion turbine (Emission Source GT006) in Emission Unit U-00006, with heat input rating of 109.5 MM Btu/hr at 70 % load. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Process operation at minimum load of 70 % (except during start-up or shut-down). Maximum operating hours on oil at low load is 1,080 hours/year, following approved stack test PM-10 emission test of 30 mg/NM3 or less. Maximum operating hours at low load on oil shall not exceed 360 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Process: 014 is located at Building PPLANT - Process 014 is the firing of natural gas in the Siemens Model 400-GT combustion turbine (Emission Source GT006) in Emission Unit U-00006 with maximum heat input rating of 139.6 MM Btu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Process operation at maximum load. Maximum operating hours for both gas turbines (U-00004 and U-00006) is 14,000 hours/year. Maximum operating hours on oil is 2,160 hours/year per turbine, following approved stack test PM-10 emissions test of 15 mg/NM3 or less on oil and 7.5 mg/NM3 on gas. Maximum operating hours on oil shall not exceed 720 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Process: 015 is located at Building PPLANT - Process 015 is the firing of natural gas in the Siemens Model 400-GT combustion turbine (Emission Source GT006) in Emission Unit U-00006 with maximum heat input rating of 110.6 MM Btu/hr at 70 % load. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. Process operation at minimum load is 70 % (except during start-up or shut-down). Maximum total operating hours for both gas turbines (U-00004 and U-00006) at low load is 7000 hours/year. Maximum operating hours on oil at minimum load is 1,080 hours/year per turbine, following approved stack test PM-10 emission test of 30 mg/NM3 or less on oil and 15 mg/NM3 or less on gas. Maximum operating hours on oil at minimum load shall not exceed 360 hours/year prior to approved stack test. Stack test to be



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performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Process: 016 is located at Building PPLANT - Process 016 is the firing of natural gas in the Forney Model 5156-IST duct burner (Emission Control GTC006) in Emission Unit U-00006 with maximum heat input rating of 60.7 MMBtu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Maximum total fuel consumption for both duct burners is 320 MMCF/year.

Emission unit U00004 - Emission Unit U-00004 is comprised of a Combustion Gas Turbine (Siemens Model GT-400), rated at 131 MM Btu/hr (Emission Source GT004) firing natural gas (Processes 009 & P10 ) or ultra low 15 ppm sulfur by weight distillate fuel oil (Processes 007 & 008). The CTG is rated to produce 12 MW of electrical power. The CTG exhausts gas is further heated by a natural gas fired (Process 011) duct burner (Emission Control GTC04), rated at 60.7 MM Btu/hr. The duct burner design operating rates are 46 MM Btu/hr at maximum inlet temperature of 55 degrees Fahrenheit, and 53.3 MM Btu/hr at minimum inlet temperature of minus 5 degrees Fahrenheit duct burner. The exhaust gas then passes through an oxidation catalyst to destroy carbon monoxide (CO) and Volatile Organic Compounds (VOC) and then through a Selective Catalytic Oxidation (SCR) system to destroy nitrogen oxides (NOx). The gas then vents out of a stack (Emission Point 00004) mounted on top of a once through steam generator (OTSG). To improve turbine performance, the inlet air is cooled to a maximum of 55 degrees Fahrenheit. The gas turbine is limited to operating a maximum of 2,160 hours/year on distillate fuel oil. In addition, the gas turbine may not operate at low load for more than 50 % of the operating hours.

Emission unit U00004 is associated with the following emission points (EP):  
00004

Process: 007 is located at Building PPLANT - Process 007 is the firing of ultra low sulfur 15 ppm by weight distillate fuel oil in the Siemens Model 400-GT combustion turbine (Emission Source GT004) in Emission Unit U-00004, with maximum heat input rating of 138.5 MM Btu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00004. Process operation at maximum load (100 %). Maximum operating hours on oil is 2,160 hours/year, following approved stack test PM-10 emission test of 15.0 mg/NM3 or less. Maximum operating hours on oil shall not exceed 720 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Process: 008 is located at Building PPLANT - Process 008 is the firing of ultra low sulfur distillate fuel oil (<15 ppm S) in the Siemens Model 400-GT combustion turbine (Emission Source GT004) in Emission Unit U-00004, with heat input rating of 109.5 MM Btu/hr at 70 % load. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia



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injection. The emission vents out of a stack identified as Emission Point 00004. Process operation at minimum load of 70 % (except during start-up or shut-down). Maximum operating hours on oil at low load is 1,080 hours/year, following approved stack test PM-10 emission test of 30 mg/NM3 or less. Maximum operating hours at low load on oil shall not exceed 360 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Process: 009 is located at Building PPLANT - Process 009 is the firing of natural gas in the Siemens Model 400-GT combustion turbine (Emission Source GT004) in Emission Unit U-00004 with maximum heat input rating of 139.6 MM Btu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00004. Process operation at maximum load (100 %). Maximum operating hours for both gas turbines (U-00004 and U-00006) is 14,000 hours/year. Maximum operating hours on oil is 2,160 hours/year per turbine, following approved stack test PM-10 emissions test of 15 mg/NM3 or less on oil and 7.5 mg/NM3 on gas. Maximum operating hours on oil shall not exceed 720 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Process: 011 is located at Building PPLANT - Process 011 is the firing of natural gas in the Forney Model 5156-IST duct burner (Emission Control GTC04) in Emission Unit U-00004 with maximum heat input rating of 60.7 MMBtu/hr. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00004. Maximum total fuel consumption for both duct burners is 320 MMCF/year.

Process: P10 is located at Building PPLANT - Process P10 is the firing of natural gas in the Siemens Model 400-GT combustion turbine (Emission Source U-GT006) in Emission Unit U-00006 with maximum heat input rating of 110.6 MM Btu/hr at 70 % load. CO and VOC emissions are controlled with an oxidation catalyst. NOx emissions are controlled with SCR using aqueous ammonia injection. The emission vents out of a stack identified as Emission Point 00006. Process operation at minimum load is 70 % (except during start-up or shut-down). Maximum total operating hours for both gas turbines (U-00004 and U-00006) at low load is 7,000 hours/year. Maximum operating hours on oil at minimum load is 1,080 hours/year, following approved stack test PM-10 emission test of 30 mg/NM3 or less on oil and 15 mg/NM3 or less on gas. Maximum operating hours on oil at minimum load shall not exceed 360 hours/year prior to approved stack test. Stack test to be performed within 60 days of achieving full load, or 180 days from start-up, whichever is less.

Emission unit U00003 - Emission Unit U-00003 is comprised of one state-of-the art new high pressure boiler (Rentech Model D Watertube), rated at 212 MM BTU/hr (Emission Source S0003), firing ultra low 15 ppm sulfur by weight distillate oil (Process 005) or natural gas (Process 006), venting to existing stack (Emission Point 00003) for Emission Source ES004 in Emission Unit U-00003. The new boiler will be equipped with a low NOx burner and Flue Gas Recirculation - FGR (Emission Control C0003). Potential emissions of all criteria air pollutants will be significantly lower for the new boiler.

This is a replacement for the existing high pressure boiler (Emission Source ES004 in Emission Unit U-00003), which is a Riley-Stoker Model OD-1, rated at 377 MM BTU/hr, firing #6 fuel oil or natural gas and is being de-commissioned due to excessive repair needs. The existing boiler, which was installed in 1968, is not operational and will be de-commissioned since repair costs are excessive. The existing boiler is rated at 377 MM BTU/hr and is permitted to burn #6 fuel oil or natural gas.



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Emission unit U00003 is associated with the following emission points (EP):

Process: 005 is located at GROUND FLOOR, Building PPLANT - Process 005 consists of the firing of # 2 fuel oil in the new state-of-the art new high pressure boiler (Rentech Model D Watertube Boiler), rated at 212 MM BTU/hr on natural gas (Emission Source HPB03 in Emission Unit U-00003), venting to existing stack (Emission Point 00003) for Emission Source HPC03 in Emission Unit U-00003. The new boiler will fire either ultra low sulfur # 2 fuel oil (15 ppm maximum by weight) or natural gas. The new boiler is rated at 206 MM BTU/hr on distillate oil with maximum firing rate of 1,490 gallons per hour. The new boiler will be equipped with a low NOx burner and Flue Gas Recirculation - FGR (Emission Control HPC03). Potential emissions of all criteria air pollutants will be significantly lower for the new boiler.

This is a replacement for the existing high pressure boiler (Emission Source ES004 in Emission Unit U-00005) in the ASF DEC ID # 2-6003-00038/00013 that was issued on 7/27/2006, which is a Riley-Stoker Model OD-1, rated at 377 MM BTU/hr, firing #6 fuel oil or natural gas and is being de-commissioned due to excessive repair needs. The existing boiler, which was installed in 1968, is not operational and will be de-commissioned since repair costs are excessive. The existing boiler is rated at 377 MM BTU/hr and is permitted to burn #6 fuel oil or natural gas.

Process: 006 is located at GROUND FLOOR, Building PPLANT - Process 006 consists of the firing of natural gas in the new state-of-the art new high pressure boiler (Rentech Model D Watertube Boiler), rated at 212 MM BTU/hr (Emission Source HPB03 in Emission Unit U-00003), venting to existing stack (Emission Point 00003) for Emission Source HPC03 in Emission Unit U-00003. The new boiler will fire either ultra low sulfur # 2 fuel oil (15 ppm maximum by weight) or natural gas. The new boiler is rated at 212 mmbtu/hr with maximum firing rate of 206,000 cubic feet per hour. The new boiler will be equipped with a low NOx burner and Flue Gas Recirculation - FGR (Emission Control HPC03). Potential emissions of all criteria air pollutants will be significantly lower for the new boiler.

This is a replacement for the existing high pressure boiler (Emission Source ES004 in Emission Unit U-00005), in the ASF DEC ID # 2-6003-00038/00013 that was issued on 7/27/2006, which is a Riley-Stoker Model OD-1, rated at 377 MM BTU/hr, firing #6 fuel oil or natural gas and is being de-commissioned due to excessive repair needs. The existing boiler, which was installed in 1968, is not operational and will be de-commissioned since repair costs are excessive. The existing boiler is rated at 377 MM BTU/hr and is permitted to burn #6 fuel oil or natural gas.

**Title V/Major Source Status**

RIVERBAY CORP-CO-OP CITY is subject to Title V requirements. This determination is based on the following information:

The Riverbay Corp-Co-Op City is a major facility because the potential emissions of carbon monoxide, nitrogen oxides and volatile organic compounds are greater than the major source thresholds (100 tons/year for carbon monoxide, and 25 tons per year for both nitrogen oxides and volatile organic compounds).

**Program Applicability**

The following chart summarizes the applicability of RIVERBAY CORP-CO-OP CITY with regards to the



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principal air pollution  
regulatory programs:

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



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implementation of the acid rain control program for large stationary combustion facilities.

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

RACT Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

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

**Compliance Status**

Facility is in compliance with all requirements.

**SIC Codes**

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the 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**

6513

APARTMENT BUILDING OPERATORS

**SCC Codes**

SCC or Source Classification Code is a code developed and used" by the USEPA to categorize processes which result in air emissions for the purpose of assessing emission factor information.Each SCC represents

a unique process or function within a source category logically associated with a point of air pollution emissions. Any operation that causes air pollution can be represented by one or more SCC's.

**SCC Code**

**Description**

1-03-004-01

EXTERNAL COMBUSTION BOILERS -  
COMMERCIAL/INDUSTRIAL  
COMMERCIAL/INSTITUTIONAL BOILER - RESIDUAL  
OIL  
Grade 6 Oil

1-03-005-02

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



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1-03-006-01	DISTILLATE OIL 10-100MMBTU/HR ** EXTERNAL COMBUSTION BOILERS - COMMERCIAL/INDUSTRIAL COMMERCIAL/INSTITUTIONAL BOILER - NATURAL GAS
2-03-001-07	Over 100 MMBtu/Hr INTERNAL COMBUSTION ENGINES - COMMERCIAL/INSTITUTIONAL COMMERCIAL/INSTITUTIONAL IC ENGINE - DISTILLATE OIL (DIESEL) RECIPROCATING: EXHAUST
2-04-003-01	INTERNAL COMBUSTION ENGINES - ENGINE TESTING INTERNAL COMBUSTION ENGINE: ENGINE TESTING - TURBINE
2-04-003-03	Natural Gas INTERNAL COMBUSTION ENGINES - ENGINE TESTING INTERNAL COMBUSTION ENGINE: ENGINE TESTING - TURBINE DISTILLATE OIL

**Facility Emissions Summary**

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

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
0NY508-00-0	40 CFR 60 SUBPART IIII - NMHC + NOX	2115	
007664-41-7	AMMONIA		>= 10 tpy but < 25 tpy
000630-08-0	CARBON MONOXIDE	518475	
007439-92-1	LEAD	3531	
0NY210-00-0	OXIDES OF NITROGEN	282696	
0NY075-00-0	PARTICULATES	55430	
0NY075-00-5	PM-10	55430	
007446-09-5	SULFUR DIOXIDE	22532	
007664-93-9	SULFURIC ACID		> 0 but < 2.5 tpy
0NY100-00-0	TOTAL HAP		>= 2.5 tpy but < 10

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0NY998-00-0

VOC

15349

tpy

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

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

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

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

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

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

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

**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.



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- Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)**  
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)**  
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)**  
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)**  
It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.
- Item H: Property Rights - 6 NYCRR 201-6.4(a)(6)**  
This permit does not convey any property rights of any sort or any exclusive privilege.
- Item I: Severability - 6 NYCRR Part 201-6.4(a)(9)**  
If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.
- Item J: Permit Shield - 6 NYCRR Part 201-6.4(g)**  
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

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presenting an imminent and substantial endangerment to public health, welfare or the environment to stop the emission of air pollutants causing or contributing to such pollution;

- ii. The liability of a permittee of the Title V facility for any violation of applicable requirements prior to or at the time of permit issuance;
- iii. The applicable requirements of Title IV of the Act;
- iv. The ability of the Department or the Administrator to obtain information from the permittee concerning the ability to enter, inspect and monitor the facility.

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

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

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

Reopenings shall not be initiated before a notice of such intent is provided to 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



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Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

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

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

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

**Item A: General Provisions for State Enforceable Permit Terms and Condition - 6  
NYCRR Part 201-5**

Any person who owns and/or operates stationary sources shall operate and maintain all emission units and any required emission control devices in compliance with all applicable Parts of this Chapter and existing laws, and shall operate the facility in accordance with all criteria, emission limits, terms, conditions, and standards in this permit. Failure of such person to properly operate and maintain the effectiveness of such emission units and emission control devices may be sufficient reason for the Department to revoke or deny a permit.

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

**Regulatory Analysis**

<b>Location Facility/EU/EP/Process/ES</b>	<b>Regulation</b>	<b>Condition</b>	<b>Short Description</b>
-- FACILITY	ECL 19-0301	255	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 52-A.21	29, 31	Prevention of Significant Deterioration
FACILITY	40CFR 52-A.21(j)	30	Best Available Control Technology
U-00004/00004	40CFR 52-A.21(j)	112, 113, 114	Best Available Control Technology
U-00004/00004/007/GT004	40CFR 52-A.21(j)	126, 127, 128, 129, 130, 131	Best Available Control Technology
U-00004/00004/008/GT004	40CFR 52-A.21(j)	135, 136, 137, 138, 139, 140	Best Available Control Technology
U-	40CFR 52-A.21(j)	145, 146, 147, 148,	Best Available



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00004/00004/009/GT004		149, 150	Control Technology
U-	40CFR 52-A.21(j)	152, 153, 154, 155,	Best Available
00004/00004/011/GTC04		156	Control Technology
U-	40CFR 52-A.21(j)	164, 165, 166, 167,	Best Available
00004/00004/P10/GT004		168, 169	Control Technology
U-00006/00006	40CFR 52-A.21(j)	181, 182	Best Available
			Control Technology
U-	40CFR 52-A.21(j)	193, 194, 195, 196,	Best Available
00006/00006/012/GT006		197, 198	Control Technology
U-	40CFR 52-A.21(j)	204, 205, 206, 207,	Best Available
00006/00006/013/GT006		208, 209	Control Technology
U-	40CFR 52-A.21(j)	214, 215, 216, 217,	Best Available
00006/00006/014/GT006		218, 219	Control Technology
U-	40CFR 52-A.21(j)	224, 225, 226, 227,	Best Available
00006/00006/015/GT006		228	Control Technology
U-	40CFR 52-A.21(j)	230, 231, 232, 233,	Best Available
00006/00006/016/GTC06		234	Control Technology
U-	40CFR 60-A.8	83	General provisions -
00003/00003/005/HPB03			Performance tests
U-	40CFR 60-A.8	97	General provisions -
00003/00003/006/HPB03			Performance tests
U-	40CFR 60-Db.42b(j)	84	Exemption from
00003/00003/005/HPB03			Standards for Sulfur
			Dioxide.
U-	40CFR 60-Db.42b(k)(2)	157	February 28, 2005
00004/00004/011/GTC04			Percent Sulfur/Sulfur
			Dioxide Standard
U-	40CFR 60-Db.42b(k)(2)	235	February 28, 2005
00006/00006/016/GTC06			Percent Sulfur/Sulfur
			Dioxide Standard
U-	40CFR 60-Db.43b(b)	85	Standard for
00003/00003/005/HPB03			Particulate Matter
			Firing Oil.
U-	40CFR 60-Db.43b(f)	86	Standard for
00003/00003/005/HPB03			Particulate Matter
			Opacity.
U-	40CFR 60-Db.43b(f)	98	Standard for
00003/00003/006/HPB03			Particulate Matter
			Opacity.
U-	40CFR 60-Db.44b(a)(1)	87, 88	Standard for Nitrogen
00003/00003/005/HPB03			Oxides Firing Natural
			Gas and Distillate
			Oil. (see narrative)
U-	40CFR 60-Db.45b(j)	89	Compliance and
00003/00003/005/HPB03			Performance Test
			Methods and
			Procedures for Sulfur
			Dioxide.
U-	40CFR 60-Db.45b(k)	158	Fuel Supplier Records
00004/00004/011/GTC04			
U-	40CFR 60-Db.45b(k)	236	Fuel Supplier Records
00006/00006/016/GTC06			
U-	40CFR 60-Db.46b(e)	90	Compliance and
00003/00003/005/HPB03			Performance Test
			Methods and
			Procedures for
			Particulate Matter
			and and Nitrogen
			Oxides.
U-	40CFR 60-Db.46b(e)	99	Compliance and
00003/00003/006/HPB03			Performance Test
			Methods and
			Procedures for
			Particulate Matter

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U- 00003/00003/005/HPB03	40CFR 60-Db.47b (f)	91	and and Nitrogen Oxides.
U- 00003/00003/005/HPB03	40CFR 60-Db.48b (b)	92	Exemption from Emission Monitoring for Sulfur Dioxide.
U- 00003/00003/006/HPB03	40CFR 60-Db.48b (b)	100	Emission Monitoring for Particulate Matter and Nitrogen Oxides.
U- 00003/00003/006/HPB03	40CFR 60-Db.49b	101	Emission Monitoring for Particulate Matter and Nitrogen Oxides.
U- 00003/00003/005/HPB03	40CFR 60-Db.49b (a)	93	Reporting and Recordkeeping Requirements.
U- 00004/00004/011/GTC04	40CFR 60-Db.49b (r)	159	Reporting and Recordkeeping Requirements.
FACILITY	40CFR 60-Dc.48c	50, 51	Reporting and Recordkeeping Requirements.
U-00004/00004	40CFR 60-GG.334 (b)	115	Monitoring of Operations: CEMS
U-00006/00006	40CFR 60-GG.334 (b)	183	Monitoring of Operations: CEMS
U-00004/00004	40CFR 60-GG.334 (c)	116	CEMS for turbines without water or steam injection
U-00006/00006	40CFR 60-GG.334 (c)	184	CEMS for turbines without water or steam injection
U-00004/00004	40CFR 60-GG.334 (c) (1)	117, 118, 119	Excess Emission Reports
U-00006/00006	40CFR 60-GG.334 (c) (1)	185, 186, 187	Excess Emission Reports
U-00004/00004	40CFR 60-GG.334 (h) (3)	120	Allowance not to monitor sulfur or nitrogen for natural gas
U-00006/00006	40CFR 60-GG.334 (h) (3)	188	Allowance not to monitor sulfur or nitrogen for natural gas
U-00004/00004	40CFR 60-GG.334 (i) (1)	121	Frequency of Monitoring - Fuel Oil
U-00006/00006	40CFR 60-GG.334 (i) (1)	189	Frequency of Monitoring - Fuel Oil
FACILITY	40CFR 60-IIII	1 -22, 1 -23	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
U- 00007/00007/GEN/GEN01	40CFR 60- IIII.4202 (a) (2)	238	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
U-	40CFR 60-IIII.4204 (b)	1 -30	Emission standards -



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00007/00007/GEN/GEN01				2007 or later Non-emergency Stationary CI-IC Engines Displacing <30 liters/cylinder
U-00007/00007/GEN/GEN01	40CFR 60-IIII.4205 (b)	239		Emission Standards - 2007 or later Emergency Non Fire Pump Stationary CI-IC Engines Displacing < 30 liters/cylinder
FACILITY	40CFR 60-IIII.4206	52		Stationary Compression Ignition IC Engines - Duration of Emission Standards
U-00007/00007/GEN/GEN01	40CFR 60-IIII.4207 (b)	240, 241, 242		Stationary Compression Ignition IC Engines - Fuel Requirements beginning October 1, 2010
FACILITY	40CFR 60-IIII.4208	53		Stationary Compression Ignition IC Engines - Deadlines for installing or importing engines produced in previous model year
FACILITY	40CFR 60-IIII.4209 (a)	1 -24		Monitoring requirement - Emergency stationary CI-IC engine
U-00007/00007/GEN/GEN01	40CFR 60-IIII.4209 (a)	243		Monitoring requirement - Emergency stationary CI-IC engine
U-00007/00007/GEN/GEN01	40CFR 60-IIII.4211 (a)	244		Stationary Compression Ignition Engines - Compliance Requirements
U-00007/00007/GEN/GEN01	40CFR 60-IIII.4211 (c)	245		Stationary Compression Ignition Engines - Compliance Demonstration
FACILITY	40CFR 60-IIII.4211 (e)	1 -25		Stationary Compression Ignition IC Engines - compliance demonstration
U-00007/00007/GEN/GEN01	40CFR 60-IIII.4214	247		Notification, Reporting and Recordkeeping Requirements - Stationary CI-IC engines
FACILITY	40CFR 60-IIII.4218	54		Stationary Compression Ignition IC Engines - applicability of NSPS general provisions
FACILITY	40CFR 63-ZZZZ	1 -26, 1 -27		Reciprocating Internal Combustion Engine (RICE) NESHP



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FACILITY	40CFR 63-ZZZZ.6640 (f)	1 -28	Reciprocating Internal Combustion Engine (RICE) NESHAP - emergency engines
FACILITY	40CFR 68	19	Chemical accident prevention provisions
FACILITY	40CFR 72-A.9	55	Standard requirements
FACILITY	40CFR 75-B.11 (d)	56	Continuous emission monitoring - specific provisions for monitoring SO2 emissions gas-fired units and oil-fired units
FACILITY	40CFR 75-C.20	57	CEM operation and maintenance requirements - certification and recertification procedures
FACILITY	40CFR 82-F	20, 21	Protection of Stratospheric Ozone - recycling and emissions reduction
U- 00007/00007/GEN/GEN01	40CFR 89-B.112	249	Oxides of nitrogen, carbon monoxide, hydrocarbon, and particulate matter exhaust emission standards
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	9	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	256	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	10	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	11	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2 (a)	12	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3 (a)	13	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	22, 58, 59	Title V Permits and the Associated Permit Conditions
U- 00003/00003/005/HPB03	6NYCRR 201-6	78, 79	Title V Permits and the Associated Permit Conditions
U- 00003/00003/006/HPB03	6NYCRR 201-6	94	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4 (a) (4)	14	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4 (a) (7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4 (a) (8)	15	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4 (c)	3	Recordkeeping and



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FACILITY	6NYCRR 201-6.4 (c) (2)	4	Reporting of Compliance Monitoring Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4 (c) (3)	23	Recordkeeping and Reporting of Compliance Monitoring - Reporting Requirements
FACILITY	6NYCRR 201- 6.4 (c) (3) (ii)	1 -1	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4 (d) (4)	24	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4 (e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4 (f) (6)	16	Off Permit Changes
FACILITY	6NYCRR 201-6.4 (g)	25, 1 -2	Permit Shield
FACILITY	6NYCRR 201-7	26, 27, 28, 29, 30, 31, 32, 33, 60	Federally Enforceable Emissions Caps
U- 00003/00003/005/HPB03	6NYCRR 201-7	78, 79	Federally Enforceable Emissions Caps
U- 00003/00003/006/HPB03	6NYCRR 201-7	94	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 201-7.1	1 -3, 1 -4, 1 -29	Emission Capping in Facility Permits
FACILITY	6NYCRR 202-1.1	17, 18	Required emissions tests.
FACILITY	6NYCRR 202-1.2	34	Notification.
FACILITY	6NYCRR 202-1.3	35	Acceptable procedures.
FACILITY	6NYCRR 202-2	36	Emission Statements
FACILITY	6NYCRR 202-2.1	37	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	7	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	38	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	257	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 215.2	8	Open Fires - Prohibitions
U-00004/00004	6NYCRR 225-1.2	102	Sulfur-in-Fuel Limitations
U-00006/00006	6NYCRR 225-1.2	170	Sulfur-in-Fuel Limitations
U- 00001/00001/001/00001	6NYCRR 225-1.2 (b)	63	Sulfur-in-Fuel Limitations
U- 00001/00001/017/00001	6NYCRR 225-1.2 (b)	68	Sulfur-in-Fuel Limitations
U- 00002/00002/003/00002	6NYCRR 225-1.2 (b)	72	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2 (f)	39	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2 (g)	40	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2 (h)	41	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.6	42, 43	Reports, Sampling,



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FACILITY	6NYCRR 227.2 (b) (1)	1 -9	and Analysis
U-00001/00001/017/00001	6NYCRR 227.2 (b) (1)	69	Particulate emissions.
U-00002/00002/003/00002	6NYCRR 227.2 (b) (1)	75	Particulate emissions.
U-00003/00003/005/HPB03	6NYCRR 227.2 (b) (1)	82	Particulate emissions.
U-00001/00001/001/00001	6NYCRR 227-1.2 (a) (1)	64	Particulate Emissions from Liquid Fuels.
U-00002/00002/003/00002	6NYCRR 227-1.2 (a) (1)	73	Particulate Emissions from Liquid Fuels.
U-00004/00004	6NYCRR 227-1.2 (a) (2)	258, 259	Particulate Emissions Firing Liquid Fuels Excluding Distillate Oil. (see narrative)
U-00006/00006	6NYCRR 227-1.2 (a) (2)	260, 261	Particulate Emissions Firing Liquid Fuels Excluding Distillate Oil. (see narrative)
FACILITY	6NYCRR 227-1.3	44	Smoke Emission Limitations.
U-00001/00001	6NYCRR 227-1.3 (a)	61	Smoke Emission Limitations.
U-00002/00002	6NYCRR 227-1.3 (a)	70	Smoke Emission Limitations.
U-00003/00003	6NYCRR 227-1.3 (a)	77	Smoke Emission Limitations.
U-00004/00004	6NYCRR 227-1.3 (a)	103, 104	Smoke Emission Limitations.
U-00006/00006	6NYCRR 227-1.3 (a)	171, 172	Smoke Emission Limitations.
U-00004/00004	6NYCRR 227-1.3 (b)	105, 106	Exempt Smoke Emissions.
U-00006/00006	6NYCRR 227-1.3 (b)	173, 174	Exempt Smoke Emissions.
U-00001/00001	6NYCRR 227-1.4 (b)	62	Stack Monitoring
U-00002/00002	6NYCRR 227-1.4 (b)	71	Stack Monitoring
U-00001/00001/001/00001	6NYCRR 227-2	65	Reasonably available control technology for NOx
U-00001/00001/002/00001	6NYCRR 227-2	67	Reasonably available control technology for NOx
U-00002/00002/003/00002	6NYCRR 227-2	74	Reasonably available control technology for NOx
U-00002/00002/004/00002	6NYCRR 227-2	76	Reasonably available control technology for NOx
FACILITY	6NYCRR 227-2.4 (a) (1) (i)	45	1994 NOx RACT presumptive limits.
U-00001/00001/001/00001	6NYCRR 227-2.4 (a) (1) (i)	66	1994 NOx RACT presumptive limits.
FACILITY	6NYCRR 227-2.4 (a) (1) (ii)	46, 47	2010 NOx RACT presumptive limits.
FACILITY	6NYCRR 227-2.4 (b) (1) (i)	48	1994 NOx RACT presumptive limits.
FACILITY	6NYCRR 227-2.4 (b) (1) (ii)	49	2010 NOx RACT presumptive limits.
FACILITY	6NYCRR 227-2.4 (f) (3)	1 -5, 1 -6, 1 -7	Emission limit for distillate oil fired engines.



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FACILITY	6NYCRR 227-2.5 (c)	1 -8	Alternative RACT option.
U-00003/00003/005/HPB03	6NYCRR 227-2.6 (b)	80	CEMS requirements
U-00003/00003/006/HPB03	6NYCRR 227-2.6 (b)	95	CEMS requirements
U-00004/00004	6NYCRR 227-2.6 (b)	107, 108	CEMS requirements
U-00004/00004/009/GT004	6NYCRR 227-2.6 (b)	141	CEMS requirements
U-00004/00004/011/GTC04	6NYCRR 227-2.6 (b)	151	CEMS requirements
U-00004/00004/P10/GT004	6NYCRR 227-2.6 (b)	160	CEMS requirements
U-00006/00006	6NYCRR 227-2.6 (b)	175, 176	CEMS requirements
U-00006/00006/014/GT006	6NYCRR 227-2.6 (b)	210	CEMS requirements
U-00006/00006/015/GT006	6NYCRR 227-2.6 (b)	220	CEMS requirements
U-00006/00006/016/GTC06	6NYCRR 227-2.6 (b)	229	CEMS requirements
U-00003/00003/005/HPB03	6NYCRR 227-2.6 (c)	81	Stack Test Requirements.
U-00003/00003/006/HPB03	6NYCRR 227-2.6 (c)	96	Stack Test Requirements.
FACILITY	6NYCRR 231-2	28, 32, 33, 1 -4	New Source Review in Nonattainment Areas and Ozone Transport Region
FACILITY	6NYCRR 231-2.7 (b)	27	Net emission increase determination
U-00004/00004	6NYCRR 231-2.7 (b)	109, 110, 111	Net emission increase determination
U-00004/00004/007/GT004	6NYCRR 231-2.7 (b)	122, 123, 124, 125	Net emission increase determination
U-00004/00004/008/GT004	6NYCRR 231-2.7 (b)	132, 133, 134	Net emission increase determination
U-00004/00004/009/GT004	6NYCRR 231-2.7 (b)	142, 143, 144	Net emission increase determination
U-00004/00004/P10/GT004	6NYCRR 231-2.7 (b)	161, 162, 163	Net emission increase determination
U-00006/00006	6NYCRR 231-2.7 (b)	177, 178, 179, 180	Net emission increase determination
U-00006/00006/012/GT006	6NYCRR 231-2.7 (b)	190, 191, 192	Net emission increase determination
U-00006/00006/013/GT006	6NYCRR 231-2.7 (b)	199, 200, 201, 202, 203	Net emission increase determination
U-00006/00006/014/GT006	6NYCRR 231-2.7 (b)	211, 212, 213	Net emission increase determination
U-00006/00006/015/GT006	6NYCRR 231-2.7 (b)	221, 222, 223	Net emission increase determination
FACILITY	6NYCRR 243-1.6 (a)	1 -10	Permit Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (b)	1 -11	Monitoring Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (c)	1 -12	NOx Ozone Season Emission Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (d)	1 -13	Excess Emission Requirements - CAIR



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FACILITY	6NYCRR 243-1.6 (e)	1	-14	NOx Ozone Season Trading Program Recordkeeping and reporting requirements - CAIR
FACILITY	6NYCRR 243-2.1	1	-15	NOx Ozone Season Trading Program Authorization and responsibilities - CAIR Designated Representative
FACILITY	6NYCRR 243-2.4	1	-16	Certificate of representation - CAIR Designated Representative
FACILITY	6NYCRR 243-8.1	1	-17, 1 -18	General Requirements - Monitoring and Reporting
FACILITY	6NYCRR 243-8.3	1	-19	Out of control periods - Monitoring and Reporting
FACILITY	6NYCRR 243-8.5 (d)	1	-20	Quarterly reports re: recordkeeping and reporting - Monitoring and Reporting
FACILITY	6NYCRR 243-8.5 (e)	1	-21	Compliance certification re: recordkeeping and reporting - Monitoring and Reporting

**Applicability Discussion:**

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

ECL 19-0301

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

6 NYCRR 200.6

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

6 NYCRR 200.7

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

6 NYCRR 201-1.4

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

6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical



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6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

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

6 NYCRR 201-3.3 (a)

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

6 NYCRR Subpart 201-6

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

6 NYCRR 201-6.4 (a) (4)

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

6 NYCRR 201-6.4 (a) (7)

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

6 NYCRR 201-6.4 (a) (8)

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

6 NYCRR 201-6.4 (c)

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



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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)

This regulation specifies that the permit incorporate all reporting requirements associated with an applicable federal rule, the submittal of any required monitoring reports at least every 6 months, and 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 (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.



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6 NYCRR 202-2.5

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

6 NYCRR 211.2

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

6 NYCRR 215.2

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

40 CFR Part 68

This Part lists the regulated substances and 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, RIVERBAY CORP-CO-OP CITY has been determined to be subject to the following regulations:

40 CFR 52.21

This citation applies to facilities that are subject to Prevention of Significant Deterioration provisions;

ie: facilities that are located in an attainment area and that emit pollutants which are listed in 40 CFR 52.21(b)(23)(i).

40 CFR 52.21 (j)

BACT determinations are made on a case-by-case basis and can be no less stringent than any requirement that exists in the current State Implementation Plan (SIP) or 40 CFR 60 and 61. Emission and operational limitations required from a BACT determination will have to be entered into the special permit conditions, separately by the permit reviewer.

40 CFR 60.334 (b)

This regulation allows the owner/operator of a gas turbine to use a CEMS to monitor NOx emissions instead of monitoring fuel and water/steam usage.



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40 CFR 60.334 (c)

This regulation allows the owner or operator of a gas turbine that commenced construction, reconstruction or modification after October 3, 1977, but before July 8, 2004, and which does not use steam or water injection to control NOX emissions, for purposes of determining excess emissions, use a CEMS that meets the requirements of paragraph (b) of 40 CFR 60.334.

40 CFR 60.334 (c) (1)

This regulation requires the owner or operator of a gas turbine to report any excess emissions of oxides of nitrogen (NOx) on a quarterly basis.

40 CFR 60.334 (h) (3)

This regulation allows the owner or operator of a gas turbine to not monitor the fuel for sulfur or nitrogen content if the fuel meets the 40 CFR 60.331(u) definition of natural gas.

40 CFR 60.334 (i) (1)

This regulation specifies the frequency of monitoring the sulfur and nitrogen content of the fuel burned in a gas turbine. The owner or operator must sample the fuel oil based on the requirements of 40 CFR Part 75, Appendix D.

40 CFR 60.4202 (a) (2)

This regulation states that for engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.

40 CFR 60.4204 (b)

This regulation requires owners and/or operators of 2007 model year or later non-emergency stationary compression ignition internal combustion engines displacing less than 30 liters per cylinder to purchase engines that meet the emission standards referenced in 40 CFR 60.4201 and maintain those engines according to manufacturer's specifications.

40 CFR 60.4205 (b)

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

40 CFR 60.4206



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

40 CFR 60.4207 (b)

These conditions states the fuel requirements for compression ignition stationary engines with a displacement of less than 30 liters per cylinder

40 CFR 60.4208

This requirement establishes deadlines dates beyond which owners and/or operators of affected stationary compression ignition IC engines are prohibited from importing or installing engines manufactured in a previous model year.

40 CFR 60.4209 (a)

The owner and/or operator of an emergency stationary compression ignition internal combustion engine subject to this subpart is required to install a non-resettable hour meter.

40 CFR 60.4211 (a)

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

40 CFR 60.4211 (c)

This regulation is a NSPS general provision and states that the owners or operators of a 2007 model year and later stationary Compression Ignition internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power.

The engine must be installed and configured according to the manufacturer's specifications.

The manufacturer's certification of compliance with the emission standards specified in



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40 CFR 60 Subpart IIII for major pollutants will be sent to the Department prior to commencement of operatino of the engines.

40 CFR 60.4211 (e)

This citation lists the compliance options for modified and reconstructed compression ignition engines that must comply with emission standards.

40 CFR 60.4214

This notification, reporting and recordkeeping requirement applies to non-emergency stationary compression ignition internal combustion engines greater than 2237 kW, or those having a displacement greater than or equal to 10 liters per cylinder or are pre-2007 model year engines exceeding 130 kW and not certified or are emergency stationary CI-IC engines listed in Table 5 of Subpart IIII of Part 60.

40 CFR 60.4218

This regulation is a NSPS general provision and states that the owners or operators of a 2007 model year and later stationary Compression Ignition internal combustion engine and must comply with the emission standards specified in §60.4204(b) or §60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in §60.4205(c), must comply by purchasing an engine certified to the emission standards in §60.4204(b), or §60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power.

The engine must be installed and configured according to the manufacturer's specifications.

The manufacturer's certification of compliance with the emission standards specified in 40 CFR 60 Subpart IIII for major pollutants will be sent to the Department prior to commencement of operation of the engines.

40 CFR 60.42b (j)

This subdivision contains an exemption from the percent reduction requirements if the affected facility fires very low sulfur content oil.



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40 CFR 60.42b (k) (2)

Percent sulfur-in-fuel/sulfur dioxide standards for coal and oil fired boilers, located in noncontinental areas, constructed or modified on or after February 28, 2005.

40 CFR 60.43b (b)

40 CFR 60.43b (f)

This regulation specifies maximum allowable opacity for affected affected sources. The opacity of the emission may not exceed 20%, except for one six minute period when the maximum opacity may not exceed 27%.

40 CFR 60.44b (a) (1)

These standards apply to all boilers firing natural gas and/or distillate oil except as provided in 40 CFR 60.44b(a)(4) Duct Burners Used in a Combined Cycle System.

40 CFR 60.45b (j)

This regulation specifies that owner or operators that combust very low sulfur oil are not subject to compliance and performance testing requirements for Sulfur Dioxide if they obtain fuel receipts as described in 40 CFR 60.49b(r).

40 CFR 60.45b (k)

Oil only fired boilers that combust oil with a sulfur content of 0.3% by weight or less may certify compliance using fuel supplier certifications.

40 CFR 60.46b (e)

This regulation specifies compliance and performance test methods and procedures for particulate matter and nitrogen oxides.

40 CFR 60.47b (f)

Facilities combusting very low sulfur oil are not subject to emission monitoring requirements of the section if they obtain fuel receipts as described in 40 CFR 60-Db.49b(r).

40 CFR 60.48b (b)

This regulation requires the owner or operator of the facility to install and operate a continuous emissions monitor to monitor emissions of oxides of nitrogen from the facility.

40 CFR 60.48c

This regulation requires that the facility maintain reports and records in accordance with the provisions of this section 40 CFR 60-Dc.48c.



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40 CFR 60.49b

This rule specifies the reporting and recordkeeping requirements for affected steam generating units.

40 CFR 60.49b (a)

This subdivision requires reporting and recordkeeping for affected steam generating units - initial notification.

40 CFR 60.49b (r)

This regulation specifies that owner or operators that combust very low sulfur oil are required to obtain fuel receipts. The oil need not meet the fuel nitrogen content specification in the definition of distillate oil. Reports shall be submitted to the Administrator certifying that only very low sulfur oil meeting this definition was combusted

40 CFR 60.8

This general provision of the New Source Performance Standards or NSPS, sets forth the performance test requirements for all NSPS applicable sources. Basically, all performance tests must be conducted within 60 days after achieving the maximum production rate but no later than 180 days after initial startup using procedures consistent with methods and procedures approved by the Administrator.

40 CFR 63.6640 (f)

This condition states the operation requirements for emergency engines.

40 CFR 72.9

A designated representative of each source of air contamination affected by the acid rain program must submit a complete Acid Rain permit application (including a compliance plan) in accordance with the deadlines specified in § 72.30.

40 CFR 75.11 (d)

This section deals with the measurements of SO<sub>2</sub> in gas-fired and oil-fired systems only. It specifies requirements in addition to the general operating requirements in § 75.10 and provides for alternative methods for estimating hourly SO<sub>2</sub> mass emissions.

40 CFR 75.20

This section requires the facility to ensure that each emission or opacity monitoring system, including automated data acquisition and handling systems, meet the initial certification requirements of this section. It requires that all applicable initial certification tests are completed by the deadlines specified in § 75.4 and prior to use in the Acid Rain Program.



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40 CFR 89.112

This regulation sets forth the limits for oxides of nitrogen, carbon monoxide, hydrocarbon, and particulate matter from the exhaust of compression-ignition nonroad engines.

40 CFR Part 60, Subpart IIII

This regulation is for the Applicability of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Facilities that have stationary compression ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart IIII.

40 CFR Part 63, Subpart ZZZZ

This requirement is for internal combustion engines, constructed or re-constructed on or after June 12, 2006, that meet the requirements of 40 CFR 60 Subpart IIII or Subpart JJJJ meet the requirements of 40 CFR 63 Subpart ZZZZ.

Facilities that have reciprocating internal combustion engines must comply with applicable portions of 40 CFR 63 subpart ZZZZ.

6 NYCRR 201-6.4 (a) (4)

This mandatory requirement applies to all Title V facilities. It requires the permittee to provide any 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



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monitoring, as necessary.

6 NYCRR 201-6.4 (c)

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

6 NYCRR 201-6.4 (c) (2)

This requirement applies to all facilities subject to Title V requirements and 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 (d) (4)

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

6 NYCRR 201-6.4 (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 201-7.1

This section of Part 201-7 specifies the criteria that need to be met in order to restrict emissions to avoid Title V or other applicable requirements using federally enforceable permit conditions permit.

6 NYCRR 202-1.2

This regulation specifies that the department is to be notified at least 30 days in advance of any required stack test. The notification is to include a list of the procedures to be used that are acceptable to the department. Finally, free access to observe the stack test is to be provided to the department's representative.



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6 NYCRR 202-1.3

This regulation requires that any emission testing, sampling and analytical determination used to determine compliance must use methods acceptable to the department. Acceptable test methods may include but are not limited to the reference methods found in 40 CFR Part 60 appendix A and Part 61, appendix B. Alternate methods may also be used provided they are determined to be acceptable by the department. Finally, unless otherwise specified, all emission test reports must be submitted within 60 days after completion of testing.

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 225-1.2

This section of the regulation establishes sulfur-in-fuel limitations for coal, residual oil, distillate oil, and waste oil.

6 NYCRR 225-1.2 (b)

Sulfur-in-fuel limitations for oil or solid fuel fired facilities effective through June 30, 2014.

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.



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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 227-1.2 (a) (2)

This rule limits particulate emissions to 0.20 pound per million Btu heat input from any stationary combustion installation with a maximum heat input capacity exceeding 50 million Btu per hour but no greater than 250 million Btu per hour using oil (other than distillate oil), coal tar, or any liquid fuel derived from coal.

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 227-1.3 (b)

This regulation may exempt any person from operating a stationary combustion installation which emits smoke exceeding the opacity limits from periods of start up and emergency if it shown that the exceedences were not preventable.



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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 227-2.4 (a) (1) (i)

Existing NO<sub>x</sub> RACT presumptive limits that will expire on 6/30/14.

6 NYCRR 227-2.4 (a) (1) (ii)

Future NO<sub>x</sub> RACT presumptive limits effective 7/1/14.

6 NYCRR 227-2.4 (b) (1) (i)

Existing NO<sub>x</sub> RACT presumptive limits that expire on 6/30/14.

6 NYCRR 227-2.4 (b) (1) (ii)

Future NO<sub>x</sub> RACT presumptive limits effective 7/1/14.

6 NYCRR 227-2.4 (f) (3)

Presumptive NO<sub>x</sub> RACT emission limit for distillate oil fired stationary internal combustion engines.

6 NYCRR 227-2.5 (c)

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

6 NYCRR 227-2.6 (b)



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Any owner or operator of a combustion source subject to reasonably available control technology (RACT) requirements, under this subdivision, for NO<sub>x</sub> and either is required or opts to employ a continuous emissions monitoring system (CEMS) must:

- 1) Submit a CEMS monitoring plan for approval by the Department,
- 2) Submit a CEMS certification protocol,
- 3) Meet CEMS monitoring requirements as detailed in this paragraph of this subdivision, and
- 4) Meet CEMS recordkeeping and reporting requirements as detailed in this paragraph of this subdivision.

6 NYCRR 227-2.6 (c)

This regulation is a SIP regulation. This citation is for stack test requirements. The owner or operator of the facility is required to test for NO<sub>x</sub> emission and follow monitoring and reporting requirements. The stack testing for NO<sub>x</sub> emission requires the facility to:

- (1) Submit a compliance test protocol to the department for approval at least 30 days prior to emission testing. The condition of the testing and the locations of the sampling devices must be acceptable to the department; and
- (2) Utilize procedures set forth in 40 CFR Part 60, Appendix A or any other method acceptable to the department and EPA for determining compliance with the appropriate NO<sub>x</sub> limit in section 227-2.4 of this Subpart, and shall follow the procedures set forth in Part 202 of this Title.
  - (i) For large and mid-size boilers, utilize Method 7, 7E, or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
  - (ii) For simple cycle combustion turbines, utilize Method 20 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
  - (iii) For combined cycle combustion turbines, utilize Method 7, 7E, or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.
  - (iv) For internal combustion engines, utilize Method 7, 7E or 19 from 40 CFR Part 60, Appendix A or another reference method approved by the department.

6 NYCRR 231-2.7 (b)

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 the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

Pursuant to section 231-2.7, existing major facilities may avoid the requirements of Subpart 231-2 by conducting a netting analysis. This is done by utilizing the following equation:

$$NEI = PEP + CEI - ERCs$$

where:



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NEI = net emission increase

PEP = project emission potential for the proposed source project

CEI = creditable emission increases

ERCs = emission reduction credits

All of the creditable emission increases and emission reduction credits must have occurred at the facility for which the netting analysis is being conducted and must have occurred during the contemporaneous period for the proposed project. If the net emission increase is less than the threshold values incorporated into sections 231-2.12 and 231-2.13, then the the proposed source project is not subject to the requirements of Subpart 231-2.

6 NYCRR 243-1.6 (a)

This condition requires the facility to acknowledge that they are subject to this CAIR regulation and provide owner and contact information. It also requires them to update this information as it changes or provide supplemental information at the Departments request.

6 NYCRR 243-1.6 (b)

This condition obligates the owners and operators of the facility to comply with the monitoring and reporting requirements of the CAIR regulations.

6 NYCRR 243-1.6 (c)

This citation explains the general provisions of the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season Trading Program. This ozone season NO<sub>x</sub> cap and trade program runs from May 1 through September 30 each year, starting in 2009. Each source shall hold a tonnage equivalent in CAIR NO<sub>x</sub> Ozone Season allowances that is not less than the total tons of NO<sub>x</sub> emissions for the ozone season.

6 NYCRR 243-1.6 (d)

This citation for the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season Trading Program explains some of the penalties that can be imposed on a CAIR NO<sub>x</sub> Ozone Season source that does not surrender enough CAIR NO<sub>x</sub> Ozone Season allowances to cover their NO<sub>x</sub> Ozone Season emissions.

6 NYCRR 243-1.6 (e)

This citation for the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season Trading Program requires that all reports be submitted as required by this program, and that copies of all records and submissions made for this program be kept on site for at least five years.

6 NYCRR 243-2.1

This citation of the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season Trading Program explains that a CAIR NO<sub>x</sub> Ozone Season designated representative must be selected to submit, sign and certify each submission on behalf of the source for this program.

6 NYCRR 243-2.4

This condition describes the required elements of the "Certificate of Representation" for the CAIR



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program and the certifying language required with submissions to the Department.

6 NYCRR 243-8.1

This citation of the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season Trading Program explains that CAIR NO<sub>x</sub> Ozone Season Trading Program sources must install, certify and operate monitoring systems that meet the monitoring, recordkeeping, and reporting requirements in Subpart 6 NYCRR 243-8 and in Subpart H of 40 CFR Part 75.

6 NYCRR 243-8.3

This citation of the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season Trading Program explains what to do when an emission monitoring system fails quality assurance, quality control, or data validation requirements.

6 NYCRR 243-8.5 (d)

This citation of the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season Trading Program explains what requirements the quarterly reports must meet.

6 NYCRR 243-8.5 (e)

This citation of the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season Trading Program explains the compliance certification requirements the source must follow for each quarterly report.

6 NYCRR Subpart 201-7

This regulation sets forth an emission caps that cannot be exceeded by the facility. In this permit the emission caps are:

1. For the two combustion turbines (Emission Sources GTC04 & GTC06), operating on combined Processes 007, 008, 012 & 013 (ultra low sulfur # 2 fuel oil <15 ppm S), the limit is **4,320 hours/year**. Processes 007 & 012 is at 100% maximum load, while Processes 008 & 013 at minimum load (70 %).
2. For the two combustion turbines (Emission Sources GTC04 & GTC06), operating on combined Processes 008 & 013 at 70% load (ultra low sulfur # 2 fuel oil < 15 ppm ), and on Processes P10 & 015 at 70 % load (natural gas), the limit is 7,000 hours/year.
3. For the two combustion turbines (Emission Sources GTC04 & GTC06), operating on combined Processes 008 & 013 (ultra low sulfur # fuel oil <15 ppm S) at minimum load after conducting the stack test, the limit is 2,160 hours/year.
4. For the two combustion turbines (Emission Sources GTC04 & GTC06), operating on combined Processes 007, 008, 009, P10, 012 & 013, and 011 & 016 at all loads, on # 2 fuel oil and on natural gas, the limit is 14,000 hours per year.
5. For the two combustion turbines (Emission Sources GTC04 & GTC06), operating on Processes 011 & 016 (natural gas with the duct burners), the limit is 320 MM cubic feet/year.



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6. For the two low pressure boilers (Emission Sources 00001 & 00002), operating on Processes 001 & 003 (#6 fuel oil), the limit is 1.3 MM gal/yr. Allowed natural gas use will be reduced by the amount of # 2 fuel oil used, by the ratio of 370 cubic feet of natural gas to one gallon of # 2 fuel oil burned.

7. For the two low pressure boilers (Emission Sources 00001 & 00002), operating on Processes 002 & 004 (natural gas), the limit is 1,040,000, 000 cubic feet/year. Allowed natural gas use shall be reduced by any # 6 fuel oil consumed by the ratio of 370 cubic feet of natural gas per gallon of oil burned.

8. For the high pressure boiler & low release boiler (Emission Source HPB03), operating on natural gas (Process 006), the limit is 1,800,000,000 cubic feet/year minus 320 CF/Gal oil. Allowed natural gas use shall be reduced by any # 2 fuel oil consumed by the ratio of 320 cubic feet of natural gas per gallon of oil burned.

9. For the high pressure boiler & low release boiler (Emission Source HPB03), operating on Process 005, 15 ppm maximum sulfur by weight distillate oil (fuel oil # 2), the boiler is limited to 2.5 million gallons per year based on stack test for PM-10 = 0.02 lbs/MM Btu. Until stack test, the distillate oil use is limited to 0.8 MM gallons per year based on PM-10 = 0.03 lbs/MM Btu. Natural gas use will be reduced by the amount of # 2 fuel oil used.

Until stack test is conducted and the PM-10 emission is proven to be 0.02 lbs/MM Btu, # 2 fuel oil is limited to 0.8 MM gal/yr based on PM-10 emissions of 0.03 lbs/MM Btu.

6 NYCRR Subpart 202-2

This subpart of Part 202 sets forth the general requirements for submitting an annual statement or emissions.

6 NYCRR Subpart 227-2

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

6 NYCRR Subpart 231-2

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
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Significant  
Deterioration

Reason: The new high pressure & low release rate boiler to be installed is a replacement of an emission source with similar equipment using the same emission stack, with lower input heat rating 212 MM BTU/hr vs. 377 MM BTU/hr), and a decrease in the Maximum Annual Potential (MAP) emissions of all pollutants compared to the existing boiler. Therefore, the projected actual annual emissions of the new boiler are less than the baseline actual emissions of the existing boiler and, therefore, are not subject to PSD regulations in accordance with 40 CFR 52.21 (a) (2) (iv) (c).

The replacement HP boiler is not subject to PSD regulations 40 CFR 52. To obtain internal emission offsets for PM, PM-10, CO and SO2, however, limitations will be taken in this permit to limit the emissions by restricting the amount of # 2 fuel oil and natural gas which can be used in the boiler. The total amount of # 2 fuel oil consumption in Emission Unit U-00003 will not exceed 2.5 MM gallons/year. The amount of natural gas consumption in Emission Unit U-00003 will not exceed 1,800 MM CF/year, reduced by 320 cubic feet per gallon of oil burned.

U-00004	40 CFR 60.42c	Standard for Sulfur Dioxide
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Reason: Since this facility is located in a severe ozone non-attainment area and ozone transport region, the only non-attainment contaminants to be reviewed for Part 231 are NOx and VOC. The new high pressure boiler was installed in 2006 and was a replacement of an emission source with similar equipment using the same emission stack, with lower input heat rating 212 MM BTU/hr vs. 377 MM BTU/hr), and a decrease in the Maximum Annual Potential (MAP) emissions of all pollutants compared to the installed boiler. Therefore, the projected actual annual emissions of the installed boiler are less than the baseline actual emissions of the old boiler and, therefore, the new emission source is not subject to Part 231 New Source Review for either NOx or VOC in accordance with 6 NYCRR 231-2.2(d) (6) exemptions and 6 NYCRR 231-2.1(b) (40) definitions of a source project.

The replacement HP boiler is not subject to NSR regulations 6 NYCRR 231-2. To obtain internal emission offsets for NOx and VOC, however, limitations will be taken in this permit to limit the emissions by restricting the amount of # 2 fuel oil and natural gas which can be used in the boiler. The total amount of # 2 fuel oil consumption in Emission Unit U-00003 will not exceed 2.5 MM gallons/year. The amount of natural gas consumption in Emission Unit U-00003 will not exceed 1,800 MM CF/year, reduced by 320 cubic feet per gallon of oil burned.

U-00004	40 CFR 60.42c	Standard for Sulfur Dioxide
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Reason: The Duct Burners (Emission Sources GT004 & GTC04) are only natural gas fired and, as a result, are not subject to any regulation on









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analysis including the recent operation of the combustion gas turbines commencing in 2010 (10.87 tons of NOx) is less than the significant net emission increase threshold (SNEIT) of 25 tons, the re-classification does not represent a NSR major modification.

The PTEs for the emission units are based upon specific limitations specified in the noted permit conditions.

The contemporaneous period is October, 2008 thru October, 2013.

The PEP is associated with 1,055 hours of operation per year at Tier 2 emission level.

The PTEs for the emission units are based upon specific limitations specified in the noted permit conditions.

The NEI (Net emission Increase) for NOx = PEP + ERCs for Combustion Gas Turbines EU: U-0004 & U-0006

= 14.03 tpy + 10.87 tpy

= 24.90 tpy, which is < 25 tpy

The PEP (Project Emission Potential) is associated with 1,055 hours of operation per year at Tier 2 emission level.

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 RIVERBAY CORP-CO-OP CITY:**

<b>Location Facility/EU/EP/Process/ES</b>	<b>Cond No.</b>	<b>Type of Monitoring</b>
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U-00004/00004	112	work practice involving specific operations
U-00004/00004	113	work practice involving specific operations
U-00004/00004	114	work practice involving specific operations
U-00004/00004/007/GT004	126	intermittent emission testing
U-00004/00004/007/GT004	127	intermittent emission testing
U-00004/00004/007/GT004	128	monitoring of process or control device parameters



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U-00004/00004/007/GT004	129	as surrogate
U-00004/00004/007/GT004	130	intermittent emission testing
U-00004/00004/007/GT004	131	intermittent emission testing
U-00004/00004/008/GT004	135	continuous emission monitoring (cem)
U-00004/00004/008/GT004	136	intermittent emission testing
U-00004/00004/008/GT004	137	intermittent emission testing
U-00004/00004/008/GT004	138	work practice involving specific operations
U-00004/00004/008/GT004	139	intermittent emission testing
U-00004/00004/008/GT004	140	intermittent emission testing
U-00004/00004/009/GT004	145	continuous emission monitoring (cem)
U-00004/00004/009/GT004	146	intermittent emission testing
U-00004/00004/009/GT004	147	intermittent emission testing
U-00004/00004/009/GT004	148	work practice involving specific operations
U-00004/00004/009/GT004	149	intermittent emission testing
U-00004/00004/009/GT004	150	intermittent emission testing
U-00004/00004/011/GTC04	152	continuous emission monitoring (cem)
U-00004/00004/011/GTC04	153	intermittent emission testing
U-00004/00004/011/GTC04	154	intermittent emission testing
U-00004/00004/011/GTC04	155	intermittent emission testing
U-00004/00004/011/GTC04	156	intermittent emission testing
U-00004/00004/P10/GT004	164	continuous emission monitoring (cem)
U-00004/00004/P10/GT004	165	intermittent emission testing
U-00004/00004/P10/GT004	166	intermittent emission testing
U-00004/00004/P10/GT004	167	intermittent emission testing
U-00004/00004/P10/GT004	168	monitoring of process or control device parameters as surrogate
U-00004/00004/P10/GT004	169	continuous emission monitoring (cem)
U-00006/00006	181	work practice involving specific operations
U-00006/00006	182	work practice involving specific operations
U-00006/00006/012/GT006	193	work practice involving specific operations
U-00006/00006/012/GT006	194	intermittent emission testing
U-00006/00006/012/GT006	195	intermittent emission testing
U-00006/00006/012/GT006	196	work practice involving specific operations
U-00006/00006/012/GT006	197	intermittent emission testing
U-00006/00006/012/GT006	198	intermittent emission testing
U-00006/00006/013/GT006	204	continuous emission monitoring (cem)
U-00006/00006/013/GT006	205	intermittent emission testing
U-00006/00006/013/GT006	206	intermittent emission testing
U-00006/00006/013/GT006	207	work practice involving specific operations
U-00006/00006/013/GT006	208	intermittent emission testing
U-00006/00006/013/GT006	209	intermittent emission testing
U-00006/00006/014/GT006	214	continuous emission monitoring (cem)
U-00006/00006/014/GT006	215	work practice involving specific operations
U-00006/00006/014/GT006	216	intermittent emission testing
U-00006/00006/014/GT006	217	intermittent emission testing
U-00006/00006/014/GT006	218	intermittent emission testing
U-00006/00006/014/GT006	219	intermittent emission testing
U-00006/00006/015/GT006	224	continuous emission monitoring (cem)
U-00006/00006/015/GT006	225	intermittent emission testing
U-00006/00006/015/GT006	226	intermittent emission testing
U-00006/00006/015/GT006	227	intermittent emission testing
U-00006/00006/015/GT006	228	intermittent emission testing
U-00006/00006/016/GTC06	230	continuous emission monitoring (cem)
U-00006/00006/016/GTC06	231	intermittent emission testing
U-00006/00006/016/GTC06	232	intermittent emission testing
U-00006/00006/016/GTC06	233	intermittent emission testing
U-00006/00006/016/GTC06	234	intermittent emission testing
U-00003/00003/005/HPB03	83	continuous emission monitoring (cem)
U-00003/00003/006/HPB03	97	record keeping/maintenance procedures
U-00003/00003/005/HPB03	84	record keeping/maintenance procedures
U-00004/00004/011/GTC04	157	work practice involving specific operations
U-00006/00006/016/GTC06	235	work practice involving specific operations
U-00003/00003/005/HPB03	85	intermittent emission testing



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U-00003/00003/005/HPB03	86	continuous emission monitoring (cem)
U-00003/00003/006/HPB03	98	continuous emission monitoring (cem)
U-00003/00003/005/HPB03	87	continuous emission monitoring (cem)
U-00003/00003/005/HPB03	88	work practice involving specific operations
U-00003/00003/005/HPB03	89	record keeping/maintenance procedures
U-00004/00004/011/GTC04	158	work practice involving specific operations
U-00006/00006/016/GTC06	236	work practice involving specific operations
U-00003/00003/005/HPB03	90	continuous emission monitoring (cem)
U-00003/00003/006/HPB03	99	continuous emission monitoring (cem)
U-00003/00003/005/HPB03	91	work practice involving specific operations
U-00003/00003/005/HPB03	92	continuous emission monitoring (cem)
U-00003/00003/006/HPB03	100	continuous emission monitoring (cem)
U-00003/00003/006/HPB03	101	record keeping/maintenance procedures
U-00003/00003/005/HPB03	93	record keeping/maintenance procedures
U-00004/00004/011/GTC04	159	record keeping/maintenance procedures
FACILITY	50	work practice involving specific operations
FACILITY	51	work practice involving specific operations
U-00004/00004	115	continuous emission monitoring (cem)
U-00006/00006	183	continuous emission monitoring (cem)
U-00004/00004	116	continuous emission monitoring (cem)
U-00006/00006	184	continuous emission monitoring (cem)
U-00004/00004	117	continuous emission monitoring (cem)
U-00004/00004	118	continuous emission monitoring (cem)
U-00004/00004	119	continuous emission monitoring (cem)
U-00006/00006	185	continuous emission monitoring (cem)
U-00006/00006	186	continuous emission monitoring (cem)
U-00006/00006	187	continuous emission monitoring (cem)
U-00004/00004	120	work practice involving specific operations
U-00006/00006	188	work practice involving specific operations
U-00004/00004	121	work practice involving specific operations
U-00006/00006	189	work practice involving specific operations
FACILITY	1-23	record keeping/maintenance procedures
U-00007/00007/GEN/GEN01	238	record keeping/maintenance procedures
U-00007/00007/GEN/GEN01	1-30	record keeping/maintenance procedures
U-00007/00007/GEN/GEN01	239	record keeping/maintenance procedures
U-00007/00007/GEN/GEN01	240	work practice involving specific operations
U-00007/00007/GEN/GEN01	241	work practice involving specific operations
U-00007/00007/GEN/GEN01	242	work practice involving specific operations
FACILITY	1-24	record keeping/maintenance procedures
U-00007/00007/GEN/GEN01	243	record keeping/maintenance procedures
U-00007/00007/GEN/GEN01	244	record keeping/maintenance procedures
U-00007/00007/GEN/GEN01	245	record keeping/maintenance procedures
FACILITY	1-25	work practice involving specific operations
U-00007/00007/GEN/GEN01	247	record keeping/maintenance procedures
FACILITY	1-27	record keeping/maintenance procedures
FACILITY	1-28	record keeping/maintenance procedures
FACILITY	55	work practice involving specific operations
FACILITY	56	record keeping/maintenance procedures
FACILITY	57	record keeping/maintenance procedures
U-00007/00007/GEN/GEN01	249	record keeping/maintenance procedures
FACILITY	23	record keeping/maintenance procedures
FACILITY	1-1	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	27	monitoring of process or control device parameters as surrogate
FACILITY	28	work practice involving specific operations
FACILITY	29	monitoring of process or control device parameters as surrogate
FACILITY	30	monitoring of process or control device parameters as surrogate
FACILITY	31	monitoring of process or control device parameters as surrogate
FACILITY	32	work practice involving specific operations
FACILITY	33	work practice involving specific operations

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U-00003/00003/005/HPB03	78	work practice involving specific operations
U-00003/00003/005/HPB03	79	work practice involving specific operations
U-00003/00003/006/HPB03	94	work practice involving specific operations
FACILITY	1-4	work practice involving specific operations
FACILITY	34	record keeping/maintenance procedures
FACILITY	35	record keeping/maintenance procedures
FACILITY	36	record keeping/maintenance procedures
FACILITY	37	record keeping/maintenance procedures
U-00004/00004	102	work practice involving specific operations
U-00006/00006	170	work practice involving specific operations
U-00001/00001/001/00001	63	work practice involving specific operations
U-00001/00001/017/00001	68	work practice involving specific operations
U-00002/00002/003/00002	72	work practice involving specific operations
FACILITY	39	work practice involving specific operations
FACILITY	40	work practice involving specific operations
FACILITY	41	work practice involving specific operations
FACILITY	42	work practice involving specific operations
FACILITY	43	record keeping/maintenance procedures
FACILITY	1-9	intermittent emission testing
U-00001/00001/017/00001	69	intermittent emission testing
U-00002/00002/003/00002	75	intermittent emission testing
U-00003/00003/005/HPB03	82	intermittent emission testing
U-00001/00001/001/00001	64	continuous emission monitoring (cem)
U-00002/00002/003/00002	73	continuous emission monitoring (cem)
U-00004/00004	258	intermittent emission testing
U-00004/00004	259	intermittent emission testing
U-00006/00006	260	intermittent emission testing
U-00006/00006	261	intermittent emission testing
FACILITY	44	monitoring of process or control device parameters as surrogate
U-00001/00001	61	monitoring of process or control device parameters as surrogate
U-00002/00002	70	monitoring of process or control device parameters as surrogate
U-00003/00003	77	monitoring of process or control device parameters as surrogate
U-00004/00004	103	continuous emission monitoring (cem)
U-00004/00004	104	monitoring of process or control device parameters as surrogate
U-00006/00006	171	continuous emission monitoring (cem)
U-00006/00006	172	monitoring of process or control device parameters as surrogate
U-00004/00004	105	continuous emission monitoring (cem)
U-00004/00004	106	continuous emission monitoring (cem)
U-00006/00006	173	continuous emission monitoring (cem)
U-00006/00006	174	continuous emission monitoring (cem)
U-00001/00001	62	record keeping/maintenance procedures
U-00002/00002	71	record keeping/maintenance procedures
U-00001/00001/001/00001	65	continuous emission monitoring (cem)
U-00001/00001/002/00001	67	continuous emission monitoring (cem)
U-00002/00002/003/00002	74	continuous emission monitoring (cem)
U-00002/00002/004/00002	76	continuous emission monitoring (cem)
FACILITY	45	continuous emission monitoring (cem)
U-00001/00001/001/00001	66	continuous emission monitoring (cem)
FACILITY	46	continuous emission monitoring (cem)
FACILITY	47	continuous emission monitoring (cem)
FACILITY	48	continuous emission monitoring (cem)
FACILITY	49	continuous emission monitoring (cem)
FACILITY	1-5	record keeping/maintenance procedures
FACILITY	1-6	intermittent emission testing
FACILITY	1-7	record keeping/maintenance procedures
FACILITY	1-8	monitoring of process or control device parameters as surrogate
U-00003/00003/005/HPB03	80	continuous emission monitoring (cem)



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U-00003/00003/006/HPB03	95	continuous emission monitoring (cem)
U-00004/00004	107	continuous emission monitoring (cem)
U-00004/00004	108	continuous emission monitoring (cem)
U-00004/00004/009/GT004	141	continuous emission monitoring (cem)
U-00004/00004/011/GTC04	151	continuous emission monitoring (cem)
U-00004/00004/P10/GT004	160	continuous emission monitoring (cem)
U-00006/00006	175	continuous emission monitoring (cem)
U-00006/00006	176	continuous emission monitoring (cem)
U-00006/00006/014/GT006	210	continuous emission monitoring (cem)
U-00006/00006/015/GT006	220	continuous emission monitoring (cem)
U-00006/00006/016/GTC06	229	continuous emission monitoring (cem)
U-00003/00003/005/HPB03	81	intermittent emission testing
U-00003/00003/006/HPB03	96	intermittent emission testing
U-00004/00004	109	record keeping/maintenance procedures
U-00004/00004	110	record keeping/maintenance procedures
U-00004/00004	111	record keeping/maintenance procedures
U-00004/00004/007/GT004	122	continuous emission monitoring (cem)
U-00004/00004/007/GT004	123	record keeping/maintenance procedures
U-00004/00004/007/GT004	124	intermittent emission testing
U-00004/00004/007/GT004	125	continuous emission monitoring (cem)
U-00004/00004/008/GT004	132	intermittent emission testing
U-00004/00004/008/GT004	133	continuous emission monitoring (cem)
U-00004/00004/008/GT004	134	continuous emission monitoring (cem)
U-00004/00004/009/GT004	142	intermittent emission testing
U-00004/00004/009/GT004	143	continuous emission monitoring (cem)
U-00004/00004/009/GT004	144	continuous emission monitoring (cem)
U-00004/00004/P10/GT004	161	intermittent emission testing
U-00004/00004/P10/GT004	162	continuous emission monitoring (cem)
U-00004/00004/P10/GT004	163	continuous emission monitoring (cem)
U-00006/00006	177	record keeping/maintenance procedures
U-00006/00006	178	record keeping/maintenance procedures
U-00006/00006	179	record keeping/maintenance procedures
U-00006/00006	180	record keeping/maintenance procedures
U-00006/00006/012/GT006	190	intermittent emission testing
U-00006/00006/012/GT006	191	continuous emission monitoring (cem)
U-00006/00006/012/GT006	192	continuous emission monitoring (cem)
U-00006/00006/013/GT006	199	record keeping/maintenance procedures
U-00006/00006/013/GT006	200	record keeping/maintenance procedures
U-00006/00006/013/GT006	201	intermittent emission testing
U-00006/00006/013/GT006	202	continuous emission monitoring (cem)
U-00006/00006/013/GT006	203	continuous emission monitoring (cem)
U-00006/00006/014/GT006	211	intermittent emission testing
U-00006/00006/014/GT006	212	continuous emission monitoring (cem)
U-00006/00006/014/GT006	213	continuous emission monitoring (cem)
U-00006/00006/015/GT006	221	intermittent emission testing
U-00006/00006/015/GT006	222	continuous emission monitoring (cem)
U-00006/00006/015/GT006	223	continuous emission monitoring (cem)

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**Basis for Monitoring**

This Riverbay Corp CO-Op City 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:

- 1. Condition # 1-1 for 6 NYCRR 201-6.4 ( c) (3) (ii):** This is a facility-wide Record Keeping/Maintenance Procedures condition. This condition specifies any reporting requirements incorporated into the permit must include provisions



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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.

**2. Condition # 27 for 6 NYCRR 201-7, Capping out of 6 NYCRR 231-2.7(b) for**

**Particulates:** The two Siemens combustion turbines (Emission Sources GT004 & GT006) and their two duct burners (Emission Controls GTC004 & GTC006) are limited to operating 7,000 hours per year combined on # 2 fuel oil at 70% load for Processes 008 & 013, and on natural gas at 70% load for Processes P10 & 015.

**3. Condition # 28 for NYCRR 201-7, Capping out of 6 NYCRR 231-2 for**

**Oxides of Nitrogen:** The two boilers (Emission Sources 00001 & 00002) are limited to 1.3 million gallons of # 6 fuel oil combined operating on #6 fuel oil for Processes 001 & 003.

**4. Condition # 29 for 6 NYCRR 201-7, Capping out of 40 CFR 52-A.21 for**

**Particulates:** The two Siemens combustion turbines (Emission Sources GT004 & GT006) and their two duct burners (Emission Controls GTC004 & GTC006) are limited to operating 4,320 hours per year on combined # 2 fuel oil at 100% load for Processes 007 & 012, and # 2 fuel oil at 70% load for Processes 008 & 013.

**5. Condition # 30 for 6 NYCRR 201-7, Capping out of 40 CFR 52-A.21 for**

**Particulates:** The two Siemens combustion turbines (Emission Sources GT004 & GT006) and their two duct burners (Emission Controls GTC004 & GTC006) are limited to operating 14,000 hours per year combined on # 2 fuel oil for Processes 007, 008 012 & 013, and on natural gas for Processes 009, P10, 011, 014, 015 & 016.

**6. Condition # 31 for 6 NYCRR 201-7, Capping out of 40 CFR 52-A.21 for**

**Particulates:** The two Siemens combustion turbines (Emission Sources GT004 & GT006) and their two duct burners (Emission Controls GTC004 & GTC006) are limited to operating 2,160 hours per year combined on # 2 fuel oil for Processes 008 & 013.

**7. Condition # 32 for 6 NYCRR 201-7, Capping out of 6 NYCRR 231-2 for**

**Oxides of Nitrogen:** The two 371 MM Btu/hr each low pressure Riley Stoker boilers (Emission Source 00001 in Emission Unit U-00001 and Emission Source 00002 in Emission Unit U-00002) are limited to 1,040,000 cubic feet of natural gas combined for Processes 002 & 004. Allowed natural gas use shall be reduced by any #6 fuel oil consumed by the ratio of 370 cubic feet of natural gas per gallon of oil burned.



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**8. Condition # 33 for 6 NYCRR 201-7, Capping out of 6 NYCRR 231-2 for Oxides of Nitrogen:** The two duct burners (Emission Controls GTC004 & GTC006) for the two Siemens combustion turbines are limited to 320 million cubic feet per year combined operating on natural gas for Processes 011 & 016.

**9. Condition # 1-4 for 6 NYCRR 201-7.1, Capping out of 6 NYCRR 231-2 for Oxides of Nitrogen:** This condition is Work Practice Involving Specific Operations for Oxides of Nitrogen for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines. The facility will operate this engine as a “peak shaving unit” in the CDRP with a cap operational limit of 1,055 hours annually in order not to trigger New Source Review (6 NYCRR 231-2).

The NEI (Net emission Increase) for NO<sub>x</sub> = PEP + ERCs for Combustion Gas Turbines EU: U-0004 & U-0006 that began operating in January, 2010.

$$\begin{aligned} \text{NO}_x &= 14.03 \text{ tpy} + 10.87 \text{ tpy} \\ &= 24.9 \text{ tpy} \end{aligned}$$

The PEP (Project Emission Potential) is associated with 1,055 hours of operation per year at Tier 2 emission level. Since the NEI for NO<sub>x</sub> is 24.9 tpy, which is < 25 tpy, therefore the modification is not subject to New Source Review (NSR).

**10. Condition # 39 for 6 NYCRR 225-1.2 (f) for Sulfur Content:** 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

**11. Condition # 40 for 6 NYCRR 225-1.2 (g) for Sulfur Content:** 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.

**12. Condition # 41 for 6 NYCRR 225-1.2 (h) for Sulfur Content:** 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.

**13. Condition # 42 for 6 NYCRR 225-1.6 for Sulfur Dioxide:** The facility shall provide semi-annual reports to NYSDEC on fuel burned, and results of any furl analysis, stack sampling, stack monitoring, or any procedures required to assure compliance with 6



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NYCRR 225-1. The facility shall not use distillate fuel oil with greater than 15 ppm by weight sulfur. Fuel suppliers shall provide certification that sulfur is less than 15 ppm for all fuel deliveries.

**14. Condition # 44 for 6 NYCRR 227-1.3 for Particulates:** This condition requires a 20 percent Opacity limitation and compliance monitoring for opacity from a stationary combustion installation. The facility will demonstrate compliance with the 20 % opacity limit with a COMS.

**15. Condition # 45 for 6 NYCRR 227-2.4 (a) (1) (i) for Oxides of Nitrogen:** This condition is for the existing NOx RACT presumptive limit until June 30<sup>th</sup>, 2014 for very large boilers, Boilers 00001 & 00002. Compliance with the NOx emission of 0.25 pounds per million Btus will be demonstrated by the use of CEMS.

**16. Condition # 46 for 6 NYCRR 227-2.4 (a) (1) (ii) for Oxides of Nitrogen:** This condition is for the future NOx RACT presumptive limit effective July 1, 2014 for very large boilers, Boiler 00002. Compliance with the NOx emission of 0.15 pounds per million Btus will be demonstrated by the use of CEMS.

**17. Condition # 47 for 6 NYCRR 227-2.4 (a) (1) (ii) for Oxides of Nitrogen:** This condition is for the future NOx RACT presumptive limit effective July 1, 2014 for very large boilers, Boiler 00001. Compliance with the NOx emission of 0.15 pounds per million Btus will be demonstrated by the use of CEMS.

**18. Condition # 48 for 6 NYCRR 227-2.4 (b) (1) (i) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NOx RACT emission limit of 0.30 pounds per million Btus until June 30<sup>th</sup>, 2014 for the 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) operating on distillate oil (Process 005) using the 24-hour average method and continuous emission monitoring.

**19. Condition # 49 for 6 NYCRR 227-2.4 (b) (1) (ii) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NOx RACT emission limit of 0.15 pounds per million Btus beginning July 1, 2014 for the 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) operating on distillate oil (Process 005) using the 24-hour average method and continuous emission monitoring.

**20. Condition # 1-5 for 6 NYCRR 227-2.4 (f) (3) for Oxides of Nitrogen:** This condition is Record Keeping/Maintenance Procedures for Oxides of Nitrogen for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total



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displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines. This condition is for the presumptive NO<sub>x</sub> RACT emission limit for distillate oil fired stationary internal combustion engines of 2.3 grams per brake horsepower-hour for engines.

The NYSDEC's new NO<sub>x</sub> RACT rule that became effective July 8, 2010 states that for a Stationary internal combustion engines, 6 NYCRR 227-2.4 (f) control requirements, that the [presumptive NO<sub>x</sub> emission rate limit is 2.3 grams per brake horsepower-hour for engines with a maximum mechanical output rating equal to or greater than 200 brake horsepower in a severe ozone nonattainment area. 6 NYCRR 227-2.5 (c), Compliance options, allows demonstration that the presumptive emission limit is not economically or technically feasible and a request for a higher specific limit.

The manufacturer's specification sheets includes "nominal emission rates" for this engine, specifically NO<sub>x</sub> at 5.19 grams/bhp-hr (7.0 grams per kW-hr). This nominal emission rate is used as the base line emission for the NO<sub>x</sub> RACT analysis.

**21. Condition # 1-6 for 6 NYCRR 227-2.4 (f) (3) for Oxides of Nitrogen:** This condition is Intermittent Emission Testing for Oxides of Nitrogen for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines. This condition is for the presumptive NO<sub>x</sub> RACT emission limit for distillate oil fired stationary internal combustion engines of 2.3 grams per brake horsepower-hour for engines.

The NYSDEC's new NO<sub>x</sub> RACT rule that became effective July 8, 2010 states that for a Stationary internal combustion engines, 6 NYCRR 227-2.4 (f) control requirements, that the [presumptive NO<sub>x</sub> emission rate limit is 2.3 grams per brake horsepower-hour for engines with a maximum mechanical output rating equal to or greater than 200 brake horsepower in a severe ozone nonattainment area. 6 NYCRR 227-2.5 (c), Compliance options, allows demonstration that the presumptive emission limit is not economically or technically feasible and a request for a higher specific limit.

The manufacturer's specification sheets includes "nominal emission rates" for this engine, specifically NO<sub>x</sub> at 5.19 grams/bhp-hr (7.0 grams per kW-hr). This nominal emission rate is used as the base line emission for the NO<sub>x</sub> RACT analysis.



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A variance from full compliance with NO<sub>x</sub> emission limits of 5.19 grams per brake horsepower-hr (7.0 grams/kW-hr) is relevant to Compliance Certification for 6 NYCRR 227-2.4(f)(2)(ii) and applies to the engine-generators (Emission Sources ENG01) in Emission Unit U-00007.

Stack testing will be required in order to demonstrate compliance with the 5.19 grams per brake horsepower-hour (grams/kW-hr) NO<sub>x</sub> emission limit as per the NO<sub>x</sub> variance. The owner or operator must submit a stack test protocol to the Department for approval prior to testing. The owner or operator shall submit stack test results, to the Department for approval, within 60 days of stack test completion.

**22. Condition # 1-7 for 6 NYCRR 227-2.4 (f) (3) for Oxides of Nitrogen:** This condition is Record Keeping/Maintenance Procedures for Oxides of Nitrogen for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines. This condition is for the presumptive NO<sub>x</sub> RACT emission limit for distillate oil fired stationary internal combustion engines of 2.3 grams per brake horsepower-hour for engines.

To ensure that the unit runs at optimum conditions and stays in compliance with the NO<sub>x</sub> RACT emission limit, periodic maintenance will be performed in accordance with manufacturer's specifications. These specific procedures are outlined in the manufacturer's specification manual for the unit. Other components of the periodic maintenance program for the unit include those actions necessitated by the results of monitoring the following data: diagnostic data obtained after a set number of operating hours, engine gas analysis, and fuel consumption versus power output of the unit.

**23. Condition # 1-8 for 6 NYCRR 227-2.5 (c) for Oxides of Nitrogen:** This condition is Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines. This condition is for the presumptive NO<sub>x</sub> RACT emission limit for distillate oil fired stationary internal combustion engines of 2.3 grams per brake horsepower-hour for engines.



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

On October 7, 2013, the facility has submitted a NO<sub>x</sub> RACT variance analysis based on Air-Guide 20 (i.e. when emitting NO<sub>x</sub> above 2.3 gm/bhp-hr, but below 9.0 gm/bhp-hr) to be approved for a Title V permit to operate the 1500 KW engine (Emission Source ENG01) at the EPA Tier 2 certified NMHC + NO<sub>x</sub> emissions of 4.8 grams/bhp-hr for ENG01 (i.e. when emitting NO<sub>x</sub> above 2.3 gm/bhp-hr, but below 9.0 gm/bhp-hr). The facility is requesting a variance on the engine based on the lack of economic feasibility of \$19,696 per ton of NO<sub>x</sub>, which is much higher than the threshold of \$5,000 per ton for NO<sub>x</sub> RACT. The variance is based on the EPA Tier 2 certified NO<sub>x</sub> emissions of 5.19 grams/bhp-hr (7.0 grams/kW-hr) for ENG01.

The facility has submitted a NO<sub>x</sub> RACT Variance application with this modification due to the lack of economic feasibility of \$19,696 per ton of NO<sub>x</sub>, which is much higher than the threshold of \$5,000 per ton for NO<sub>x</sub> RACT.

**24. Condition # 1-9 for 6 NYCRR 227.2 (b) (i) for Oxides of Nitrogen:** This condition is Intermittent Emission Testing for Particulates for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines. This condition is for the presumptive NO<sub>x</sub> RACT emission limit for distillate oil fired stationary internal combustion engines of 2.3 grams per brake horsepower-hour for engines.

This condition 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.

**25. Condition # 50 for 40 CFR 60.48c, NSPS Subpart Dc for Sulfur Dioxide:** The facility will demonstrate compliance with the Sulfur Dioxide emission limit for the 60.7 MM Btu/hr duct burner (Emission Control GTC06 in Emission Unit U-



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00006) in the natural gas process (Process 016) by maintaining the sulfur content limit of 20 grains per 100 dsc gas is in the “natural gas” from Consolidate Edison, which is less than the 0.54 pounds per million Btus required by 40 CFR 60.47c(c), NSPS Subpart Dc. BACT is required. This condition requires that the facility maintains reports and records in accordance with the provisions of this section 40 CFR 60-Dc.48c.

**26. Condition # 51 for 40 CFR 60.48c, NSPS Subpart Dc for Sulfur Dioxide:**

The facility will demonstrate compliance with the Particulates emission limit for the 60.7 MM Btu/hr duct burner (Emission Control GTC04 in Emission Unit U-00004) in the natural gas process (Process 011) by maintaining the sulfur content limit of 20 grains per 100 dsc gas is in the “natural gas” from Consolidate Edison, which is less than the 0.54 pounds per million Btus required by 40 CFR 60.47c(c), NSPS Subpart Dc. BACT is required. This condition requires that the facility maintains reports and records in accordance with the provisions of this section 40 CFR 60-Dc.48c.

**27. Condition # 1-23 for 40 CFR 60, NSPS Subpart III:** This condition is Record Keeping/Maintenance Procedures for Oxides of Nitrogen for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines.

This condition is for the Applicability of Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Facilities that have stationary compression ignition internal combustion engines must comply with applicable portions of 40 CFR 60 Subpart III.

**28. Condition # 1-24 for 40 CFR 60.4209 (a), NSPS Subpart III:** This condition is Record Keeping/Maintenance Procedures for Oxides of Nitrogen for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines.



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The owner and/or operator of an emergency or peak shaving stationary compression ignition internal combustion engine subject to this subpart is required to install a non-resettable hour meter.

**29. Condition # 1-25 for 40 CFR 60.4211 (e), NSPS Subpart IIII:** This condition is Work Practice Involving Specific Operations for hours per year operation for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines.

This condition lists the compliance options for modified and reconstructed compression ignition engines that must comply with emission standards.

**30. Condition # 1-27 for 40 CFR 63, Subpart ZZZZ:** This condition is Record Keeping/Maintenance Procedures for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines.

This requirement is for internal combustion engines, constructed or re-constructed on or after June 12, 2006, that meet the requirements of 40 CFR 60 Subpart IIII or Subpart JJJJ meet the requirements of 40 CFR 63 Subpart ZZZZ.

Facilities that have reciprocating internal combustion engines must comply with applicable portions of 40 CFR 63 subpart ZZZZ.

**31. Condition # 1-28 for 40 CFR 63.6640 (f), Subpart ZZZZ:** This condition is Record Keeping/Maintenance Procedures for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines.

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This condition states the operation requirements for emergency or peak shaving engines.

**32. Condition # 55 for 40 CFR 72.9, Subpart A for Sulfur Dioxide:** The facility will calculate the hourly Sulfur Dioxide emissions based on fuel usage and sulfur content in accordance with 40 CFR Subpart GG, 40 CFR 72, and 40 CFR 75. The two gas turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006) will be exempt from 40 CFR 72, as long as the combined two gas turbines supply 'equal to or less than 219,000 MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale'. If the facility exceeds the limit of 219,000 megawatt hour electrical output, then the facility is required to continuously monitor the Sulfur Dioxide using 1-hour average and submit quarterly reports.

**33. Condition # 61 for 6 NYCRR 227-1.3 (a) for Opacity:** The facility will demonstrate compliance with the 20 % opacity limit for the 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00001 in Emission Unit U-00001) with a COMS.

**34. Condition # 63 for 6 NYCRR 225-1.2 (b) for Sulfur Dioxide:** Sulfur-in-fuel limitations for #6 residual fuel oil fired facilities effective through June 30, 2014 is 0.30 percent by weight. This condition is for the 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00001 in Emission Unit U-00001).

**35. Condition # 64 for 6 NYCRR 227-1.2 (a) (1) for Particulates:** The facility would rely on continuous opacity monitoring (COM) as surrogate for an indication of compliance with the 0.1 pounds per million Btus for the 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00001 in Emission Unit U-00001) burning # 6 fuel oil (Process 001).

**36. Condition # 65 for 6 NYCRR 227-2 for Oxides of Nitrogen:** The facility will demonstrate compliance with the 0.25 pounds per million Btus NOx emission limit for the 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00001 in Emission Unit U-00001) for # 6 fuel oil (Process 001) with a Continuous Emission Monitoring.

**37. Condition # 66 for 6 NYCRR 227-2.4(a) (1) (i) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NOx RACT emission limit of 0.25 MM Btu/hr for the two 371 MM Btu/hr each low pressure Riley Stoker boilers (Emission Source 00001 in Emission Unit U-00001 & Emission Source 00002 in Emission Unit U-00002) operating on gas/oil using a continuous emissions monitoring system (CEMS).



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38. **Condition # 67 for 6 NYCRR 227-2 for Oxides of Nitrogen:** The facility will demonstrate compliance with the 0.25 pounds per million Btus NO<sub>x</sub> emission limit for the 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00001 in Emission Unit U-00001) for natural gas (Process 002) with a Continuous Emission Monitoring.

39. **Condition # 68 for 6 NYCRR 225-1.2 (b) for Sulfur Dioxide:** Sulfur-in-fuel limitations for #2 distillate fuel oil fired facilities effective through June 30, 2014 is 0.20 percent by weight.

40. **Condition # 69 for 6 NYCRR 227.2 (b) (1) for Particulates:** This rule 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, the 371 MM Btu/hr low pressure Riley Stoker boilers (Emission Source 00001 in Emission Unit U-00001) by performing an intermittent emission testing (a stack test).

41. **Condition # 70 for 6 NYCRR 227-1.3 (a) for Opacity:** The facility will demonstrate compliance with the 20 % opacity limit for the 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00002 in Emission Unit U-00002) with a COMS.

42. **Condition # 72 for 6 NYCRR 225-1.2 (b) for Sulfur Dioxide:** Sulfur-in-fuel limitations for #6 residual fuel oil fired facilities effective through June 30, 2014 is 0.20 percent by weight.

43. **Condition # 73 for 6 NYCRR 227-1.2 (a) (1) for Particulates:** The facility would rely on continuous opacity monitoring (COM) as surrogate for an indication of compliance with the 0.1 pounds per million Btus for the 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00002 in Emission Unit U-00002) burning # 6 fuel oil (Process 003).

44. **Condition # 74 for 6 NYCRR 227-2 for Oxides of Nitrogen:** The facility will demonstrate compliance with the 0.25 pounds per million Btus NO<sub>x</sub> emission limit for the 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00002 in Emission Unit U-00002) for #6 fuel oil (Process 003) with a Continuous Emission Monitoring.

45. **Condition # 75 for 6 NYCRR 227.2 (b) (1) for Particulates:** This rule 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



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any oil fired stationary combustion installation, the 371 MM Btu/hr low pressure Riley Stoker boilers (Emission Source 00002 in Emission Unit U-00002).

**46. Condition # 76 for 6 NYCRR 227-2 for Oxides of Nitrogen:** The facility will demonstrate compliance with the 0.25 pounds per million Btus NO<sub>x</sub> emission limit for the 371 MM Btu/hr low pressure Riley Stoker boiler (Emission Source 00002 in Emission Unit U-00002) for natural gas (Process 004) with a Continuous Emission Monitoring.

**47. Condition # 77 for 6 NYCRR 227-1.3 (a) for Opacity:** The facility will demonstrate compliance with the 20 % opacity limit for the 212MM Btu/hr Rentech Model D Watertube (High Pressure Boiler) boiler (Emission Source HPB03 in Emission Unit U-00003) with a COMS.

**48. Condition # 78 for 6 NYCRR 201-7, Capping Out of 6 NYCRR 201-6 for Oxides of Nitrogen:** The 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) is limited to 0.8 million gallons per year of # 2 fuel oil for Process 005 prior to approved stack. For PM-10 = 0.03 lbs/MM Btu. Natural gas will be reduced by the amount of # 2 fuel oil used.

**49. Condition # 79 for 6 NYCRR 201-7, Capping out of 6 NYCRR 201-6 for Oxides of Nitrogen:** The 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) is limited to 2.5 million gallons per year of # 2 fuel oil for Process 005. For PM-10 = 0.03 lbs/MM Btu. Natural gas will be reduced by the amount of # 2 fuel oil used.

**50. Condition # 80 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> RACT emission limit of 0.30 MM Btu/hr for the 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) operating on distillate oil (Process 005) using continuous emissions monitoring system (CEMS).

**51. Condition # 81 for 6 NYCRR 227-2.6 (c) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 0.30 pounds per million Btus for the 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) operating on distillate oil (Process 005) by performing an intermittent emission testing (a stack test).

**52. Condition # 82 for 6 NYCRR 227.2 (b) (1) for Particulates:** This rule 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, the 212 MM Btu/hr high



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pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) operating on distillate oil (Process 005) by performing an intermittent emission testing (a stack test).

**53. Condition # 84 for 40 CFR 60.42b (j), NSPS Subpart Db for Sulfur Dioxide:**

The facility will monitor the sulfur content in the distillate fuel oil to be a maximum of 15.0 parts per million by weight. This will limit the Sulfur Dioxide emissions to 0.3 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). This ultra low sulfur content distillate fuel oil is to be used in the 212 MM Btu/hr high pressure boiler (Emission Source HPB03 in Emission Unit U-00003) firing # 2 fuel oil (Process 005).

**54. Condition # 85 for 40 CFR 60.43b (b), NSPS Subpart Db for Particulates:**

The facility will demonstrate compliance with the Particulates emission limit of 0.1 pounds per million Btus by performing a stack testing for the 212 MM Btu/hr high pressure boiler (Emission Source HPB03 in Emission Unit U-00003) firing # 2 fuel oil (Process 005).

**55. Condition # 86 for 40 CFR 60.43b (f), NSPS Subpart Db for Particulates:**

The facility will demonstrate compliance with the 20 % opacity limit for the 212 MM Btu/hr high pressure boiler (Emission Source HPB03 in Emission Unit U-00003) firing # 2 fuel oil (Process 005) with a COMS.

**56. Condition # 87 for 40 CFR 60.44b (a) (1), NSPS Subpart Db for Oxides of Nitrogen:**

The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 0.10 pounds per million Btus for the 212 MM Btu/hr high pressure boiler (Emission Source HPB03 in Emission Unit U-00003) firing # 2 fuel oil (Process 005) by using a continuous emissions monitoring system (CEMS).

**57. Condition # 88 for 40 CFR 60.44b (a) (1), NSPS Subpart Db for Sulfur Dioxide:**

The facility will monitor the sulfur content in the distillate fuel oil to be a maximum of 15.0 parts per million by weight. This will limit the Sulfur Dioxide emissions to 0.3 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). This ultra low sulfur content distillate fuel oil is to be used in the 212 MM Btu/hr high pressure boiler (Emission Source HPB03 in Emission Unit U-00003) firing # 2 fuel oil (Process 005).

**58. Condition # 90 for 40 CFR 60.46b (e), NSPS Subpart Db for Oxides of Nitrogen:**

The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 0.10 pounds per million Btus for the 212 MM Btu/hr high pressure boiler (Emission Source HPB03 in Emission Unit U-00003) firing #2 fuel oil (Process 005) by using a continuous emissions monitoring system (CEMS).

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**59. Condition # 91 for 40 CFR 60.47b (f), NSPS Subpart Db for Sulfur Dioxide:**

The facility will monitor the sulfur content in the distillate fuel oil to be a maximum of 15.0 parts per million by weight. This will limit the Sulfur Dioxide emissions to 0.3 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). This ultra low sulfur content distillate fuel oil is to be used in the 212 MM Btu/hr high pressure boiler (Emission Source HPB03 in Emission Unit U-00003) firing # 2 fuel oil (Process 005).

**60. Condition # 92 for 40 CFR 60.48b (b), NSPS Subpart Db for Oxides of**

**Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 0.10 pounds per million Btus for the 212 MM Btu/hr high pressure boiler (Emission Source HPB03 in Emission Unit U-00003) firing # 2 fuel oil (Process 005) by using a continuous emissions monitoring system (CEMS).

**61. Condition # 94 for 6 NYCRR 201-7, Capping out of 6 NYCRR 201-6,**

**Capping out of 6 NYCRR 201-6 for Oxides of Nitrogen:** The new 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003 is limited to 1,800 million cubic feet of natural gas for Process 006 minus 320 CF/Gal oil. Allowed natural gas use shall be reduced by any # 2 fuel oil consumed by the ratio of 320 cubic feet of natural gas per gallon of oil burned.

**62. Condition # 95 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> RACT emission limit of 0.30 MM Btu/hr for the new 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) operating on natural gas (Process 006) using continuous emissions monitoring system (CEMS).

**63. Condition # 96 for 6 NYCRR 227-2.6 (c) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 0.30 pounds per million Btus for the new 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) operating on natural gas (Process 006) by performing an intermittent emission testing (a stack test).

**64. Condition # 98 for 40 CFR 60.43b(f), NSPS Subpart Db for Particulates:**

The facility will demonstrate compliance with the Particulates and the Opacity limit of 20% for the 212 MM Btu/hr high pressure Rentech boiler (Emission Source HPB03 in Emission Unit U-00003) operating on natural gas (Process 006) by using a Continuous Opacity Monitor (COMS).

**65. Condition # 99 for 40 CFR 60.46b (e), NSPS Subpart Db for Oxides of**

**Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 0.10 pounds per million Btus for the 212 MM Btu/hr high pressure boiler (Emission



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Source HPB03 in Emission Unit U-00003) firing natural gas (Process 006) by using a continuous emissions monitoring system (CEMS).

**66. Condition # 100 for 40 CFR 60.48b (b), NSPS Subpart Db for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 0.10 pounds per million Btus for the 212 MM Btu/hr high pressure boiler (Emission Source HPB03 in Emission Unit U-00003) firing natural gas (Process 006) by using a continuous emissions monitoring system (CEMS).

**67. Condition # 102 for 6 NYCRR 225-1.2 for Sulfur Dioxide:** Sulfur-in-fuel limitations for distillate fuel oil is 15.0 parts per million by weight for the Siemens Model GT-400 Combustion Gas Turbine (Emission Source GT004) in Emission Unit 00004.

**68. Condition # 103 for 6 NYCRR 227-1.3 (a) for Particulates:** The facility will demonstrate compliance with the 27 % opacity limit for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with a COMS.

**69. Condition # 104 for 6 NYCRR 227-1.3 (a) for Opacity:** The facility will demonstrate compliance with the 20 % opacity limit for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with a COMS and exhausting the flue gas through Emission Point 00004.

**70. Condition # 105 for 6 NYCRR 227-1.3 (b) for Particulates:** By using a Continuous Emission Monitoring, the facility will demonstrate compliance with the 27 % opacity limit for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with a COMS in accordance with 40 CFR Part 60, Appendix A.

**71. Condition # 106 for 6 NYCRR 227-1.3 (b) for Particulates:** By using a Continuous Emission Monitoring, the facility will demonstrate compliance with the 20 % opacity limit for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with a COMS in accordance with 40 CFR Part 60, Appendix A.

**72. Condition # 107 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> standard of 42.0 ppmvd for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) burning natural gas at all loads using a continuous emissions monitoring system (CEMS).



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73. **Condition # 108 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> standard of 65.0 ppmvd for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) burning distillate fuel oil at all loads using a continuous emissions monitoring system (CEMS).
74. **Condition # 112 for 40 CFR 52.21(j) for Sulfur Dioxide:** The facility will certify that the sulfur content limit of 20 grains per 100 dscf is in the “natural gas” from Consolidate Edison. This 20 grains per 100 dscf sulfur content limit is in the natural gas and is to be used in the two combustion turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006). As a result, the sulfur dioxide emissions will be limited to 0.060 pounds per million Btus.
75. **Condition # 113 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will certify that the sulfur content limit of 15.0 parts per million by weight in the distillate oil for each delivery to the bulk storage tank from the fuel oil supplier. The 15.0 parts per million by weight sulfur content limit in the distillate oil is to be used in the two combustion turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006).
76. **Condition # 114 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will certify that the sulfur content limit of 20 grains per 100 dscf is in the pipeline natural gas from Consolidate Edison. This 20 grains per 100 dscf sulfur content limit is in the “natural gas” and is to be used in the two combustion turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006).
77. **Condition # 115 for 40 CFR 60.334 (b), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) by using a continuous emissions monitoring system (CEMS).
78. **Condition # 116 for 40 CFR 60.334 (c), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) by using a continuous emissions monitoring system (CEMS).
79. **Condition # 117 for 40 CFR 60.334 (c) (1), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of



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3.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) firing natural gas at 70% load (Process P10) by using a continuous emissions monitoring system (CEMS).

**80. Condition # 118 for 40 CFR 60.334 (c) (1), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) under normal operating conditions firing fuel oil from 70% to 100% load by using a continuous emissions monitoring system (CEMS).

**81. Condition # 119 for 40 CFR 60.334 (c) (1), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 2.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) firing natural gas at 100% load (Process 009) by using a continuous emissions monitoring system (CEMS).

**82. Condition # 120 for 40 CFR 60.334 (h) (3), NSPS Subpart GG for Sulfur Dioxide:** The facility will certify that the sulfur content limit of 20 grains per 100 dscf is in the “natural gas” from Consolidate Edison. This 20 grains per 100 dscf sulfur content limit is in the natural gas and is to be used in the two combustion turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006). As a result, the sulfur dioxide emissions will be limited to 0.060 pounds per million Btus.

**83. Condition # 121 for 40 CFR 60.334 (i) (1), NSPS Subpart GG for Sulfur Dioxide:** The facility will monitor the sulfur content in the distillate fuel oil to be a maximum of 15.0 parts per million by weight. This will limit the Sulfur Dioxide emissions to 0.3 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). This ultra low sulfur content distillate fuel oil is to be used in the 131 MM Btu/hr Siemens combustion turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006).

**84. Condition # 122 for 6 NYCRR 231-2.7 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 007) by using a continuous emissions monitoring system (CEMS). LAER is required.

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85. **Condition # 124 for 6 NYCRR 231-2.7 (b) for VOC:** The facility will demonstrate compliance with the VOC emission limit of 5.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 007) by performing an intermittent emission testing (a stack test). LAER is required.

86. **Condition # 125 for 6 NYCRR 231-2.7 (b) for Carbon Monoxide:** The facility will demonstrate compliance with the CO emission limit of 5.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 007) by using a continuous emissions monitoring system (CEMS). LAER is required.

87. **Condition # 126 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.212 pounds per hour for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 007) by performing an intermittent emission testing (a stack test). BACT is required.

88. **Condition # 127 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.00161 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 007) by performing an intermittent emission testing (a stack test). BACT is required.

89. **Condition # 128 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will monitor the sulfur content in the distillate fuel oil to be a maximum of 15.0 parts per million by weight. This will limit the Sulfur Dioxide emissions to 0.3 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). This ultra low sulfur content distillate fuel oil is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 007). BACT is required.

90. **Condition # 129 for 40 CFR 52.21(j), Subpart A for PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 15.0 milligrams per normal

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cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 007) prior to approved stack test. Prior to the approved stack testing that has to be performed, the facility is limited to PM-10 emissions of 15.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>). BACT is required.

**91. Condition # 130 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 15.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 007). Prior to approved stack test that has to be performed, the facility is limited to Particulates emissions of 15.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>). BACT is required.

**92. Condition # 131 for 40 CFR 52.21(j), Subpart A for Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 007) by using a continuous emissions monitoring system (CEMS). BACT is required.

**93. Condition # 132 for 6 NYCRR 231-2.7 (b) for VOC:** The facility will demonstrate compliance with the VOC emission limit of 5.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 008) by performing an intermittent emission testing (a stack test). LAER is required.

**94. Condition # 133 for 6 NYCRR 231-2.7 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 008) by using a continuous emissions monitoring system (CEMS). LAER is required.

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**95. Condition # 134 for 6 NYCRR 231-2.7 (b) for Carbon Monoxide:** The facility will demonstrate compliance with the CO emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 008) by using a continuous emissions monitoring system (CEMS). LAER is required.

**96. Condition # 135 for 40 CFR 52.21(j) Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.00161 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 008) by performing an intermittent emission testing (a stack test). BACT is required.

**97. Condition # 136 for 40 CFR 52.21(j), Subpart A for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.148 pounds per hour. This ultra low sulfur content distillate fuel oil is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 008). Compliance will be demonstrated by performing an intermittent emission testing (a stack test). BACT is required.

**98. Condition # 137 for 40 CFR 52.21(j) ,Subpart A for Sulfur Dioxide:** The facility will monitor the sulfur content in the distillate fuel oil to be a maximum of 15.0 parts per million by weight. This will limit the Sulfur Dioxide emissions to 0.3 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). This ultra low sulfur content distillate fuel oil is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 008). BACT is required.

**99. Condition # 138 for 40 CFR 52.21(j), Subpart A for PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 30.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 008) by performing an intermittent emission testing (a stack test). BACT is required.

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100. **Condition # 139 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 30.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 008) by performing an intermittent emission testing (a stack test). BACT is required.

101. **Condition # 140 for 40 CFR 52.21(j), Subpart A for Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 008) by using a continuous emissions monitoring system (CEMS). BACT is required.

102. **Condition # 141 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> standard of 42.0 ppmvd for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009) by meeting the combustion turbine emission guarantee of 2.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). Performance will be confirmed with a continuous emissions monitoring system (CEMS).

103. **Condition # 142 for 6 NYCRR 231-2.6 (b) for VOC:** The facility will demonstrate compliance with the VOC emission limit of 2.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009) by performing an intermittent emission testing (a stack test). LAER is required.

104. **Condition # 143 for 6 NYCRR 231-2.7 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 2.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009) by using a continuous emissions monitoring system (CEMS). LAER is required.

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**105. Condition # 144 for 6 NYCRR 231-2.7 (b) for Carbon Monoxide:** The facility will demonstrate compliance with the CO emission limit of 1.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009) by using a continuous emissions monitoring system (CEMS). LAER is required.

**106. Condition # 145 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 8.30 pounds per hour. This 20 grains per 100 dscf sulfur content limit in natural gas is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009). Compliance will be demonstrated by performing an intermittent emission testing (a stack test). BACT is required.

**107. Condition # 146 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.063 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009) by performing an intermittent emission testing (a stack test). BACT is required.

**108. Condition # 147 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will demonstrate compliance with the Sulfur Dioxide emission limit of 0.060 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009). BACT is required.

**109. Condition # 148 for 40 CFR 52.21(j), Subpart A for PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 7.5 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009) prior to approved stack test. Prior to approved stack test that has to be performed, the facility is limited to PM-10 emissions of 10.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>). BACT is required.

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**110. Condition # 149 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 7.5 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009). Prior to approved stack test that has to be performed, the facility is limited to Particulates emissions of 10.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>). BACT is required.

**111. Condition # 150 for 40 CFR 52.21(j), Subpart A for Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 009) by using a continuous emissions monitoring system (CEMS). BACT is required.

**112. Condition # 151 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 0.1 pounds per million Btus for the 60.7 MM Btu/hr duct burner (Emission Control GTC04 in Emission Unit U-00004) operating on natural gas (Process 011) using a continuous emissions monitoring system (CEMS).

**113. Condition # 152 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will certify that the sulfur content limit of 20 grains per 100 scf gas is in the “natural gas” from Consolidate Edison. This 0.065 pounds per million Btus sulfur content limit is in the natural gas and is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) and in the duct burner (Emission Source GTC04 in Emission Unit GTC04) burning natural gas (Process 011). As a result, the Sulfuric Acid emissions will be limited to 0.065 pounds per million Btus. Compliance will be demonstrated by performing an intermittent emission testing (a stack test).

**114. Condition # 153 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will certify that the sulfur content limit of 20 grains per 100 scf gas in the “natural gas” from Consolidate Edison corresponds to 11.96 pounds per hour of Sulfuric Acid. This 20 grains per 100 scf gas sulfur content limit is in the natural gas and is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) and in the duct burner (Emission Source GTC04 in Emission Unit GTC04) burning natural gas (Process 011). As a result, the



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Sulfuric Acid emissions will be limited to 11.96 pounds per hour. Compliance will be demonstrated by performing an intermittent emission testing (a stack test).

**115. Condition # 154 for 40 CFR 52.21(j), Subpart A for PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 0.01 pounds per million Btus after stack testing for the 60.7 MM Btu/hr duct burner (Emission Control GTC04 in Emission Unit U-00004) operating on natural gas (Process 011). BACT is required.

**116. Condition # 155 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 0.01 pounds per million Btus after stack testing for the 60.7 MM Btu/hr duct burner (Emission Control GTC04 in Emission Unit U-00004) operating on natural gas (Process 011). BACT is required.

**117. Condition # 156 for 40 CFR 52.21(j), Subpart A Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 60.7 MM Btu/hr duct burner (Emission Control GTC04 in Emission Unit U-00004) operating on natural gas (Process 011) by using a continuous emissions monitoring system (CEMS). BACT is required. BACT is required.

**118. Condition # 157 for 40 CFR 60.42b(k)(2), NSPS Subpart Db for Sulfur Dioxide:** The facility will demonstrate compliance with the Sulfur Dioxide emission limit for the 60.7 MM Btu/hr duct burner (Emission Control GTC04 in Emission Unit U-00004) in the natural gas process (Process 011) by maintaining the sulfur content limit of 20 grains per 100 scf gas is in the “natural gas” from Consolidate Edison, which corresponds to 0.060 pounds per million Btus. .BACT is required.

**119. Condition # 158 for 40 CFR 60.45b(k), NSPS Subpart Db for Sulfur Dioxide:** The facility will demonstrate compliance with the Sulfur Dioxide emission limit for the 60.7 MM Btu/hr duct burner (Emission Control GTC04 in Emission Unit U-00004) in the natural gas process (Process 011) by maintaining the sulfur content limit of 0.03 pounds per million Btus is in the “natural gas” from Consolidate Edison, which is less than the 0.54 pounds per million Btus required by 40 CFR 60.47c(c), NSPS Subpart Dc. .BACT is required.

**120. Condition # 160 for 6 NYCRR 227-2.6 (b)for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> standard of 42.0 ppmvd for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10) by meeting the combustion turbine



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emission guarantee of 3.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). Performance will be confirmed with a continuous emissions monitoring system (CEMS).

**121. Condition # 161 for 6 NYCRR 231-2.7 (b) for VOC:** The facility will demonstrate compliance with the VOC emission limit of 5.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10) by performing an intermittent emission testing (a stack test). LAER is required.

**122. Condition # 162 for 6 NYCRR 231-2.7 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 3.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10) by using a continuous emissions monitoring system (CEMS). LAER is required.

**123. Condition # 163 for 6 NYCRR 231-2.7 (b) for Carbon Monoxide:** The facility will demonstrate compliance with the CO emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10) by using a continuous emissions monitoring system (CEMS). LAER is required.

**124. Condition # 164 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 5.81 pounds per hour for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10) by performing an intermittent emission testing (a stack test). BACT is required.

**125. Condition # 165 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.063 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10) by performing an intermittent emission testing (a stack test). BACT is required.

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126. **Condition # 166 for 40 CFR 52.21(j), Subpart A for PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 15.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10) by performing an intermittent emission testing (a stack test). BACT is required.

127. **Condition # 167 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 15.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10) by performing an intermittent emission testing (a stack test). BACT is required.

128. **Condition # 168 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will certify that the sulfur content limit of 0.0301 pounds per million Btus is in the “natural gas” from Consolidate Edison. This 0.0301 pounds per million Btus sulfur content limit is in the pipeline natural gas and is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10). As a result, the sulfur dioxide emissions will be limited to 0.06 pounds per million Btus. BACT is required.

129. **Condition # 169 for 40 CFR 52.21(j), Subpart A for Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process P10) by using a continuous emissions monitoring system (CEMS). BACT is required.

130. **Condition # 170 for 6 NYCRR 225-1.2 for Sulfur Dioxide:** Sulfur-in-fuel limitations for distillate fuel oil is 15.0 parts per million by weight for the Siemens Model GT-400 Combustion Gas Turbine (Emission Source GT006) in Emission Unit 00006.

131. **Condition # 171 for 6 NYCRR 227-1.3 (a) for Particulates:** The facility will demonstrate compliance with the 27 % opacity limit for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with a COMS.

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132. **Condition # 172 for 6 NYCRR 227-1.3 (a) for Opacity:** The facility will demonstrate compliance with the 20 % opacity limit for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with a COMS.

133. **Condition # 173 for 6 NYCRR 227-1.3 (b) for Particulates:** By using a Continuous Emission Monitoring, the facility will demonstrate compliance with the 27 % opacity limit for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with a COMS in accordance with 40 CFR Part 60, Appendix A.

134. **Condition # 174 for 6 NYCRR 227-1.3 (b) for Particulates:** By using a Continuous Emission Monitoring, the facility will demonstrate compliance with the 20 % opacity limit for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with a COMS in accordance with 40 CFR Part 60, Appendix A.

135. **Condition # 175 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> standard of 65.0 ppmvd for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) burning distillate fuel oil at all loads using a continuous emissions monitoring system (CEMS).

136. **Condition # 176 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> standard of 42.0 ppmvd for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) burning natural gas at all loads using a continuous emissions monitoring system (CEMS).

137. **Condition # 181 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will certify that the sulfur content limit of 20 grains per 100 dscf is in the “natural gas” from Consolidate Edison. This 20 grains per 100 dscf sulfur content limit is in the natural gas and is to be used in the two combustion turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006). As a result, the sulfur dioxide emissions will be limited to 0.060 pounds per million Btus.

138. **Condition # 182 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will certify that the sulfur content limit of 15.0 parts per million by weight in the distillate oil for each delivery to the bulk storage tank from the fuel oil supplier. The 15.0 parts per million by weight sulfur content limit in the distillate oil is to be used

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in the two combustion turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006).

**139. Condition # 183 for 40 CFR 60.334 (b), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) by using a continuous emissions monitoring system (CEMS). LAER is required.

**140. Condition # 184 for 40 CFR 60.334 (c), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) by using a continuous emissions monitoring system (CEMS). LAER is required.

**141. Condition # 185 for 40 CFR 60.334 (c)(1), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 3.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) firing natural gas at 70% load (Process 015) by using a continuous emissions monitoring system (CEMS). LAER is required.

**142. Condition # 186 for 40 CFR 60.334 (c)(1), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 2.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) firing natural gas at 100% load (Process 014) by using a continuous emissions monitoring system (CEMS). LAER is required.

**143. Condition # 187 for 40 CFR 60.334 (c)(1), NSPS Subpart GG for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) under normal operating conditions firing fuel oil from 70% to 100% load by using a continuous emissions monitoring system (CEMS). LAER is required.

**144. Condition # 188 for 40 CFR 60.334 (h)(3), NSPS Subpart GG for Sulfur Dioxide:** The facility will certify that the sulfur content limit of 20 grains per 100 dscf is in the “natural gas” from Consolidate Edison. This 20 grains per 100 dscf sulfur content limit is in the natural gas and is to be used in the two combustion turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source



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GT006 in Emission Unit U-00006). As a result, the sulfur dioxide emissions will be limited to 0.060 pounds per million Btus.

**145. Condition # 189 for 40 CFR 60.334 (i)(1), NSPS Subpart GG for Sulfur Dioxide:** The facility will monitor the sulfur content in the distillate fuel oil to be a maximum of 15.0 parts per million by weight. This will limit the Sulfur Dioxide emissions to 0.3 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). This ultra low sulfur content distillate fuel oil is to be used in the 131 MM Btu/hr Siemens combustion turbines (Emission Source GT004 in Emission Unit U-00004 and Emission Source GT006 in Emission Unit U-00006).

**146. Condition # 190 for 6 NYCRR 231-2.7 (b) for VOC:** The facility will demonstrate compliance with the VOC emission limit of 5.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 012) by performing an intermittent emission testing (a stack test). LAER is required.

**147. Condition # 191 for 6 NYCRR 231-2.7 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 012) by using a continuous emissions monitoring system (CEMS). LAER is required.

**148. Condition # 192 for 6 NYCRR 231-2.7 (b) for Carbon Monoxide:** The facility will demonstrate compliance with the CO emission limit of 5.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 012) by using a continuous emissions monitoring system (CEMS). LAER is required.

**149. Condition # 193 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.212 pounds per hour for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 012) by performing an intermittent emission testing (a stack test). BACT is required.

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**150. Condition # 194 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.00161 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 012) by performing an intermittent emission testing (a stack test). BACT is required.

**151. Condition # 195 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will monitor the sulfur content in the distillate fuel oil to be a maximum of 15.0 parts per million by weight. This will limit the Sulfur Dioxide emissions to 0.3 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). This ultra low sulfur content distillate fuel oil is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 012). BACT is required.

**152. Condition # 196 for 40 CFR 52.21(j), Subpart A for PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 15.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 012) prior to approved stack test. Prior to the approved stack testing that has to be performed, the facility is limited to PM-10 emissions of 15.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>). BACT is required.

**153. Condition # 197 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 15.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 012). Prior to approved stack test that has to be performed, the facility is limited to Particulates emissions of 15.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>). BACT is required.

**154. Condition # 198 for 40 CFR 52.21(j), Subpart A for Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning



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distillate fuel oil (Process 012) by using a continuous emissions monitoring system (CEMS). BACT is required.

**155. Condition # 201 for 6 NYCRR 231-2.7 (b) for VOC:** The facility will demonstrate compliance with the VOC emission limit of 5.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 013) by performing an intermittent emission testing (a stack test). LAER is required.

**156. Condition # 202 for 6 NYCRR 231-2.7 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 6.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 013) by using a continuous emissions monitoring system (CEMS). LAER is required.

**157. Condition # 203 for 6 NYCRR 231-2.7 (b) for Carbon Monoxide:** The facility will demonstrate compliance with the CO emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 013) by using a continuous emissions monitoring system (CEMS). LAER is required.

**158. Condition # 204 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.00161 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 013) by performing an intermittent emission testing (a stack test). BACT is required.

**159. Condition # 205 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.148 pounds per hour. This ultra low sulfur content distillate fuel oil is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 013). Compliance will be demonstrated by performing an intermittent emission testing (a stack test). BACT is required.

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160. **Condition # 206 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will monitor the sulfur content in the distillate fuel oil to be a maximum of 15.0 parts per million by weight. This will limit the Sulfur Dioxide emissions to 0.3 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). This ultra low sulfur content distillate fuel oil is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 013). BACT is required.

161. **Condition # 207 for 40 CFR 52.21(j), Subpart A for PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 30.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 013) by performing an intermittent emission testing (a stack test). BACT is required.

162. **Condition # 208 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 30.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning distillate fuel oil (Process 013) by performing an intermittent emission testing (a stack test). BACT is required.

163. **Condition # 209 for 40 CFR 52.21(j), Subpart A for Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning distillate fuel oil (Process 013) by using a continuous emissions monitoring system (CEMS). BACT is required.

164. **Condition # 210 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 2.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014) by using a continuous emissions monitoring system (CEMS). LAER is required.

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**165. Condition # 211 for 6 NYCRR 231-2.7 (b) for VOC:** The facility will demonstrate compliance with the VOC emission limit of 2.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014) by performing an intermittent emission testing (a stack test). LAER is required.

**166. Condition # 212 for 6 NYCRR 231-2.7 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 2.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014) by using a continuous emissions monitoring system (CEMS). LAER is required.

**167. Condition # 213 for 6 NYCRR 231-2.7 (b) for Carbon Monoxide:** The facility will demonstrate compliance with the CO emission limit of 1.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014) by using a continuous emissions monitoring system (CEMS). LAER is required.

**168. Condition # 214 for 40 CFR 52.21(j), Subpart A for Sulfur Dioxide:** The facility will monitor the sulfur content in the natural gas to be a maximum of 20 grains per 100 standard cubic feet.

This will limit the Sulfur Dioxide emission limit of 0.060 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014). BACT is required.

**169. Condition # 215 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.063 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014) by performing an intermittent emission testing (a stack test). BACT is required.

**170. Condition # 216 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 8.30

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pounds per hour. This 20 grains per 100 dscf sulfur content limit in natural gas is to be used in the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014). Compliance will be demonstrated by performing an intermittent emission testing (a stack test). BACT is required.

**171. Condition # 217 for 40 CFR 52.21(j), Subpart A for PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 7.5 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014) prior to approved stack test. Prior to approved stack test that has to be performed, the facility is limited to PM-10 emissions of 10.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>). BACT is required.

**172. Condition # 218 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 7.5 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014). Prior to approved stack test that has to be performed, the facility is limited to Particulates emissions of 10.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>). BACT is required.

**173. Condition # 219 for 40 CFR 52.21(j), Subpart A for Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 139.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 014) by using a continuous emissions monitoring system (CEMS). BACT is required.

**174. Condition # 220 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> standard of 42.0 ppmvd for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process 015) by meeting the combustion turbine emission guarantee of 3.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>). Performance will be confirmed with a continuous emissions monitoring system (CEMS).



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175. **Condition # 221 for 6 NYCRR 231-2.7 (b) for VOC:** The facility will demonstrate compliance with the VOC emission limit of 5.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process 015) by performing an intermittent emission testing (a stack test). LAER is required.

176. **Condition # 222 for 6 NYCRR 231-2.7 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 3.5 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process 015) by using a continuous emissions monitoring system (CEMS). LAER is required.

177. **Condition # 223 for 6 NYCRR 231-2.7 (b) for Carbon Monoxide:** The facility will demonstrate compliance with the CO emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process 015) by using a continuous emissions monitoring system (CEMS). LAER is required.

178. **Condition # 224 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 5.81 pounds per hour for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process 015). Compliance will be demonstrated by performing an intermittent emission testing (a stack test). BACT is required.

179. **Condition # 225 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.063 pounds per million Btus for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process 015) by performing an intermittent emission testing (a stack test). BACT is required.

180. **Condition # 226 for 40 CFR 52.21(j), Subpart A PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 15.0 parts per million by

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volume (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process 015) by performing an intermittent emission testing (a stack test). BACT is required.

**181. Condition # 227 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 15.0 milligrams per normal cubic meter (dry, corrected to 15% O<sub>2</sub>) after stack testing for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process 015) by performing an intermittent emission testing (a stack test). BACT is required.

**182. Condition # 228 for 40 CFR 52.21(j), Subpart A for Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 131 MM Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at minimum load (70%) burning natural gas (Process 015) by using a continuous emissions monitoring system (CEMS). BACT is required.

**183. Condition # 229 for 6 NYCRR 227-2.6 (b) for Oxides of Nitrogen:** The facility will demonstrate compliance with the NO<sub>x</sub> emission limit of 0.1 pounds per million Btus for the 60.7 MM Btu/hr duct burner (Emission Control GTC06 in Emission Unit U-00006) operating on natural gas (Process 016) using a continuous emissions monitoring system (CEMS).

**184. Condition # 230 for 40 CFR 52.21(j), Subpart A for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 11.96 pounds per hour for the 53 MM Btu/hr duct burner (Emission Source GTC06 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 016). Compliance will be demonstrated by performing an intermittent emission testing (a stack test). BACT is required.

**185. Condition # 231 for 40 CFR 52.21(j), Subpart A for Sulfuric Acid:** The facility will demonstrate compliance with the Sulfuric Acid emission limit of 0.065 pounds per million Btus for the 53 MM Btu/hr duct burner (Emission Source GTC06 in Emission Unit U-00006) with maximum heat input rating of 110.6 MM Btu/hr at maximum load (100%) burning natural gas (Process 016). Compliance will be



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demonstrated by performing an intermittent emission testing (a stack test). BACT is required.

**186. Condition # 232 for 40 CFR 52.21(j), Subpart A for PM-10:** The facility will demonstrate compliance with the PM-10 emission limit of 0.01 pounds per million Btus after stack testing for the 60.7 MM Btu/hr duct burner (Emission Control GTC06 in Emission Unit U-00006) operating on natural gas (Process 016). BACT is required.

**187. Condition # 233 for 40 CFR 52.21(j), Subpart A for Particulates:** The facility will demonstrate compliance with the Particulates emission limit of 0.01 pounds per million Btus after stack testing for the 60.7 MM Btu/hr duct burner (Emission Control GTC06 in Emission Unit U-00006) operating on natural gas (Process 016). BACT is required.

**188. Condition # 234 for 40 CFR 52.21(j), Subpart A for Ammonia:** The facility will demonstrate compliance with the Ammonia emission limit of 10.0 parts per million by volume (dry, corrected to 15% O<sub>2</sub>) for the 60.7 MM Btu/hr duct burner (Emission Control GTC06 in Emission Unit U-00006) operating on natural gas (Process 016) by using a continuous emissions monitoring system (CEMS). BACT is required.

**189. Condition # 235 for 40 CFR 60.42b(k)(2), NSPS Subpart Db for Sulfur Dioxide:** The facility will demonstrate compliance with the Sulfur Dioxide emission limit for the 60.7 MM Btu/hr duct burner (Emission Control GTC06 in Emission Unit U-00006) in the natural gas process (Process 016) by maintaining the sulfur content limit of 20 grains per 100 scf gas is in the “natural gas” from Consolidate Edison, which corresponds to 0.060 pounds per million Btus. .BACT is required.

**190. Condition # 236 for 40 CFR 60.45b(k), NSPS Subpart Db for Sulfur Dioxide:** The facility will demonstrate compliance with the Sulfur Dioxide emission limit for the 60.7 MM Btu/hr duct burner (Emission Control GTC06 in Emission Unit U-00006) in the natural gas process (Process 016) by maintaining the sulfur content limit of 0.03 pounds per million Btus is in the “natural gas” from Consolidate Edison, which is less than the 0.54 pounds per million Btus required by 40 CFR 60.47c(c), NSPS Subpart Dc. .BACT is required.

**191. Condition # 1-30 for 40 CFR 60.4204 (b), NSPS Subpart III:** This condition is Record Keeping/Maintenance Procedures for Oxides of Nitrogen for the 1500 kW generator/engine (Emission Source GEN01 in Emission Unit U-00007). This non-emergency generator is 1,500 KW (2000 bhp). This engine has 12 cylinders with a total displacement of 57.2 liters, 4.77 liters per cylinder. This engine is

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classified as a compression ignition (CI) 4-stroke lean-burn stationary reciprocating internal combustion engine - CI 4S LB RICE. Based upon the engine nameplate data, the model year for the engine is 2008. The engine is rated for Tier 2 emissions of non-road dies engines.

This condition requires owners and/or operators of 2007 model year or later non-emergency stationary compression ignition internal combustion engines displacing less than 30 liters per cylinder to purchase engines that meet the emission standards referenced in 40 CFR 60.4201 and maintain those engines according to manufacturer's specifications.

**192. Condition # 240 for 40 CFR 60.4207(b), NSPS Subpart III for the Aromatic Content in the diesel oil:** This condition is for the new 1500 KW diesel fuel emergency generator (EU: 00007, EP: 00007, Proc: GEN & ES: GEN01). This condition states that the Aromatic Content in the diesel oil will have a limit of 35 percent for compression ignition stationary engines with a displacement of less than 30 liters per cylinder.

**193. Condition # 241 for 40 CFR 60.4207(b), NSPS Subpart III for the Cetane Index in the diesel oil:** This condition is for the new 1500 KW diesel fuel emergency generator (EU: 00007, EP: 00007, Proc: GEN & ES: GEN01). This condition states that the Cetane Index in the diesel oil will have a limit of 40 ratio for compression ignition stationary engines with a displacement of less than 30 liters per cylinder.

**194. Condition # 242 for 40 CFR 60.4207(b), NSPS Subpart III for the Sulfur Content in the diesel oil:** This condition is for the new 1500 KW diesel fuel emergency generator (EU: 00007, EP: 00007, Proc: GEN & ES: GEN01). This condition states that the Sulfur Content in the diesel oil will have a limit of 15 parts per million by weight for compression ignition stationary engines with a displacement of less than 30 liters per cylinder.

**190. Condition # 258 for 6 NYCRR 227-1.2 (a) (2) for Particulates:** The facility will demonstrate compliance with the 0.1 pounds per million BTUs for 131 MM Btu/hr the Siemens combustion turbine (Emission Source GT004 in Emission Unit U-00004) with a stack testing in accordance with 40 CFR Part 60, EPA Method 5.

**195. Condition # 259 for 6 NYCRR 227-1.2 (a) (2) for Particulates:** The facility will demonstrate compliance with the 0.1 pounds per million BTUs for the duct burner (Emission Control GTC04 in Emission Unit U-00004) with a stack testing in accordance with 40 CFR Part 60, EPA Method 5.

**196. Condition # 260 for 6 NYCRR 227-1.2 (a) (2) for Particulates:** The facility will demonstrate compliance with the 0.1 pounds per million BTUs for the 131 MM



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Btu/hr Siemens combustion turbine (Emission Source GT006 in Emission Unit U-00006) with a stack testing in accordance with 40 CFR Part 60, EPA Method 5.

**197. Condition # 261 for 6 NYCRR 227-1.2 (a) (2) for Particulates:** The facility will demonstrate compliance with the 0.1 pounds per million BTUs for the duct burner (Emission Control GTC06 in Emission Unit U-00006) with a stack testing in accordance with 40 CFR Part 60, EPA Method 5.