

Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Facility Identification Data

Name: DOWNSTATE MEDICAL CENTER Address: 450 CLARKSON AVE BROOKLYN, NY 11203-2098

Owner/Firm

Name: STATE UNIVERSITY OF NEW YORK Address: STATE UNIVERSITY PLAZA 381 BROADWAY ALBANY, NY 12246, USA Owner Classification: State

Permit Contacts

Division of Environmental Permits: Name: ERIN L SHIRKEY Address: NYSDEC - REGION 2 47-40 21ST ST LONG ISLAND CITY, NY 11101-5401 Phone:7184824972

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Permit Description Introduction

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

Summary Description of Proposed Project

Application for renewal of Air Title V Facility.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

The facility is planning a boiler replacement project to replace the five (5) 42 MM Btu/hr natural each gas and # 6 residual fuel oil fired boilers (Emission Sources S0001, S0002, S0003, S0004 and S0005) in Emission Unit 0-U0001 with five (5) 50 MM Btu/hr each natural gas/# 2 distillate fuel oil boilers (Emission Sources S0011, S0012, S0013, S0014 & S0015) in Emission Unit 0-U0007. In order to complete this project, two (2) temporary 50 MM Btu/hr each (Emission Sources TMPB1 & TMPB2) natural gas (Process NGT) and /# 2 distillate fuel oil (Process 2FT) boilers (Emission Sources TMPB1 & TMPB2) will be installed to provide heat load (steam) during the boiler replacement project to ensure the facility has no interruption of services. During the boiler replacement project, five (5) # 2 distillate fuel oil/natural gas boilers in Emission Unit 0-U0007 are being installed to replace the five (5) # 6 residual fuel oil /natural gas boilers in Emission Unit 0-U0001. The five (5) boilers will be replaced in three phases as follow:

Phase 1: Anticipated November, 2015. Two (2) 50 MM Btu/hr each temporary boilers (Emission Sources TMPB1 & TMPB2) dual-fuel fired, operating on natural gas (Process NGT) and # 2 distillate fuel oil (Process 2FT) will be installed in Emission Unit 0-TEMP1.

Phase 2: Anticipated March, 2016. Two of the old 42 MM Btu/hr each boilers (Emission Sources S0001 & S0002) in Emission Unit 0-U0001 will be removed. Then, two (2) 50 MM Btu/hr each new boilers (Emission Sources S0011 & S0012) in Emission Unit 0-U0007 will be installed.

Phase 3: Anticipated December, 2016. The remaining three old 42 MM Btu/hr each boilers (Emission Sources S0003, S0004 & S0005) in Emission Unit 0-U0001 will be removed, and the final three 50 MM Btu/hr each new boilers (Emission Sources S0013, S0014 & S0015) in Emission Unit 0-U0007 will be installed.

Final Phase: Anticipated April, 2017. Once the five (5) new 50 MM Btu/hr each boilers are installed, the two (2) temporary boilers (Emission Sources TMPB1 & TMPB2) in Emission Unit 0-TEMP1 will be removed.

This application also coincides with, and will act as, the 5 year Title V renewal application for the facility, which expires on 10/25/2015.

Any combination of existing, new, and temporary boilers may be operated during the replacement project, however; no more than three (3) boilers will be capable of running at any one time. Therefore, a significant increase in emissions is not expected.

Since the boilers are being added and removed in several phases, the facility will notify NYSDEC when the new emission sources (equipments) are installed, and also when the existing boilers are removed. Once the two (2) temporary boilers (Emission Sources TMPB1 & TMPB2) in Emission Unit 0-TEMP, and the five (5) existing boilers (Emission Sources S0001, S0002, S0003, S0004 and S0005) in Emission Unit 0-U0001 have been removed, the facility will notify the NYSDEC that the emission sources in Emission Unit 0-TEMP, and 0-U0001 have been removed, and request that they be removed from the permit via a modification.

The facility is also installing a 1,000 KW emergency generator in the Basic Science Building that is used for emergency purposes only and will operate less than 500 hours a year, and thus is exempt from permitting.

The facility's current Title V permit expires on October 25, 2015, and the renewal # 3 application is due no later than April 25, 2015. Since the boiler replacement project permit modification is being submitted close to the renewal date, this application also serves as the Title V Permit Renewal Application.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Capping

SUNY Downstate Medical Center maintains a 225 tons/year limit on both NOx and SO2 emissions as stated in their current Title V permit, and in the renewal # 3 application. Based on their current natural gas and fuel oil usage (consumption), and the anticipated # 2 distillate fuel oil use for the new boilers, the facility's wide maximum actual emissions (in tons) from 2009 - 2013 and potential emissions are as follows:

Pollution	Actual	Potential
PM-10	6.26	39.3
PM	6.26	39.3
SO2	5.51	63.7
NOx	33.11	456
СО	19.45	146
Lead	0.00	0.01
VOC	3.22	15.2
Total HAP	0.42	3.07
CO2	28,608	255,410
CH4	74.10	807
N2O	82.60	893
CO2Eq	30,302	272,760
NGD / DGD		

NSR / PSD

New Source Review (NSR) does not apply to the modofication, since the proposed project emission potentials do not exceed the NSR significant project thresholds listed in 6 NYCRR 231-13. The replacement of # 6 residual fuel oil with # 2 distillate fuel oil (0.0015 ppm Sulfur) will result in a decrease of NOx and SO2 emissions potentials as well as actual emissions. Therefore, the project emission potentials (PEP) from the project for these emissions are zero (0).

However; it should be noted that the project emission potential (PEP) for CO emissions will increase by approximately by 16 tons due to the boiler replacement and the new emergency generator, however; the increase is below the 100 ton NSR threshold and therefore will not trigger NSR. Furthermore, the NOx and SOx cappings limit the CO to below the 100 ton Title V threshold and therefore, no CO emission limit is needed (required).



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Attainment Status

DOWNSTATE MEDICAL CENTER is located in the town of BROOKLYN in the county of KINGS. The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria	Pollutant
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Attainment Status

Particulate Matter (PM)	ATTAINMENT
Particulate Matter $< 10\mu$ 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:

SUNY Downstate Medical Center is an academic medical center for health education, research, and patient care.

The facility currently has a Title V permit for the operation of six (6) industrial boilers (five at 42 MM Btu/hr each and one boiler at 10.461 MM Btu/hr), six (6) generators, an Anprolene AN74i ethylene oxide sterilization unit that includes an abator and a 200 lbs/hr crematorium on site.

The facility will be replacing its five (5) 42 MM Btu/hr natural gas and # 6 residual fuel oil fired boilers (Emission Sources S0001, S0002, S0003, S0004 and S0005) in Emission Unit 0-U0001. In order to complete this project, two (2) temporary 50 MM Btu/hr (Emission Sources TMPB1 & TMPB2) natural gas (Process NGT) and # 2 distillate fuel oil (Process 2FT) boilers will be installed to provide steam during the boiler replacement project to ensure the facility has no interruption of services.

The five (5) boilers will be replaced in three phases:

Phase 1: Two (2) 50 MM Btu/hr temporary boilers (Emission Sources TMPB1 & TMPB2) will be installed in Emission unit 0-TEMP1. Anticipated date is November, 2015.

Phase 1: Two (2) of the old 42 MM Btu/hr boilers (Emission Sources S0001 & S0002) in Emission Unit 0-U0001 will be removed, and two (2) of the new boilers (Emission Sources S00011 & S00012) in Emission Unit 0-U0007 will be installed. Anticipated date is March, 2016.

Phase 3: The remaining three (3) old boilers (Emission Sources S0003, S0004 & S0005) in Emission 0-U0001 will be removed, and the final three (3) new boilers (Emission Sources S0013, S0014 & S0015) in Emission Unit 0-U0007 will be installed. Once the five (5) new boilers are installed, the two (2) temporary boilers (Emission Sources TMPB1 & TMPB2) in Emission Unit 0-TEMP1 will be removed. Anticipated date is April, 2017.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

The facility has recently constructed a new building (New Academic Building) which required the addition of three (3) 3.0 MM Btu/hr each boiler (Emission Sources S0008, S0009 & S0010) and a 1,500 kilowatt emergency generator as well as replacing four (4) existing emergency generators with four (4) new 750 KW mergency generators (Emission Sources GEN02, GEN03 & GEN05) in Emission Unit 0-U0005 and a 2000 KW emergency generator (Emission Source TEMPG) in Emission unit 0-U0005. The facility also has installed an Ethylene Oxide sterilization unit that includes an abator, to sterilize medical equipment (Emission Unit 0-U0006).

The facility has also added one exempt emergency generator (1,000 KW) in the Basic Science Building, which will operate less than 500 hours per year.

The facility operates other sources which are considered exempt from permitting in accordance with 6 NYCRR 201-3.2(c), including one small boiler in the HSEB Nurse's Residence (<10 MM Btu/hr), two (2) internal combustion engines in the Garage University Hospital (<225 bhp), one (1) emergency power generator in the Basic Science Building (<500 hours/yr), five (5) emergency power generators in the Power Plant University Hospital HSEB (<500 hours/yr), four (4) non-contact water cooling towers and water treatment systems in the University Hospital Basic Science Study Center HSEB, twenty (20) fuel oil storage tanks in the HSEB University Hospital Basic Science Study Nurse's Residence (<300,000 bbls), and one hundred and twenty (120) ventillating and exhaust systems for laboratory operations campuswide. These exempt units remain unchanged.

Permit Structure and Description of Operations

The Title V permit for DOWNSTATE MEDICAL CENTER

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.

DOWNSTATE MEDICAL CENTER is defined by the following emission unit(s):

Emission unit 0U0007 - Emission Unit 0-U0007 consists of five (5) identical boilers with a maximum heat input of 50 MM Btu/hr each. The boilers are identified as Emission Sources S0011, S0012, S0013, S0014 and S0015. The five (5) boilers are dual-fuel fired, operating on natural gas (Process NG7) and # 2 distillate fuel oil (Process 2F7).

The emissions from these five boilers are exhausted through the existing stack identified as Emission



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Point E0001.

The boilers are being installed to replace the five (5) 42 MM Btu/hr each boilers (Emission Sources S0001, S0002, S0003, S0004 & S0005) in Emission Unit 0-U0001. The boilers will be replaced in three phases as follow:

Phase 1: Anticipated November, 2015. Two (2) 50 MM Btu/hr each temporary boilers (Emission Sources TMPB1 & TMPB2) dual-fuel fired, operating on natural gas (Process NGT) and # 2 distillate fuel oil (Process 2FT) will be installed in Emission Unit 0-TEMP1.

Phase 2: Anticipated March, 2016. Two of the old 42 MM Btu/hr each boilers (Emission Sources S0001 & S0002) in Emission Unit 0-U0001 will be removed. Then, two (2) 50 MM Btu/hr each new boilers (Emission Sources S0011 & S0012) in Emission Unit 0-U0007 will be installed.

Phase 3: Anticipated December, 2016. The remaining three old 42 MM Btu/hr each boilers (Emission Sources S0003, S0004 & S0005) in Emission Unit 0-U0001 will be removed, and the final three 50 MM Btu/hr each boilers (Emission Sources S0013, S0014 & S0015) in Emission Unit 0-U0007 will be installed.

Final Phase: Once the five (5) new 50 MM Btu/hr each boilers are installed, the two (2) temporary boilers (Emission Sources TMPB1 & TMPB2) in Emission Unit 0-TEMP1 will be removed.

Emission unit 0U0007 is associated with the following emission points (EP): E0007

Process: 2F7 is located at Basement/Sub-Base, Building 1 - Process 2F7 consists of five (5) identical boilers with a maximum heat input of 50 MM Btu/hr each, firing on # 2 distillate fuel oil in Emission Unit 0-U0007. The boilers are identified as Emission Sources S0011, S0012, S0013, S0014 and S0015. These five (5) boilers are dual-fuel, they also fire natural gas as the primary fuel, and # 2 distillate fuel oil as the back-up fuel.

The emissions from these five (5) boilers are exhausted through the existing stack identified as Emision Point E0001.

These five (5) boilers are being installed to replace the five (5) boilers in Emiaaion Unit 0-U0001. The boilers will be replaced in three (3) phases. During Phase 1 (anticipated November, 2015), two 50 MM Btu/hr each temporary boilers will be installed (EU: 0-TEMP1). During Phase 2 (anticipated March, 2016), two of the old 42 MM Btu/hr each boilers (EU: 0-U0001) will be removed, then two (2) new boilers (EU: 0-U0007) will be installed. During Phase 3 (anticipated December, 2016), the remaining three (3) old boilers (EU: 0-U0001) will be removed, and the final three (3) new boilers (EU: 0-U0007) will be installed.

Final Phase: Anticipated April, 2017. Once the five (5) new 50 MM Btu/hr each boilers are installed, the two (2) temporary boilers (Emission Sources TMPB1 & TMPB2) in Emission Unit 0-TEMP1 will be removed.

Process: NG7 is located at Basement/Sub-Base, Building 1 - Process NG7 consists of five (5) identical boilers with a maximum heat input of 50 MM Btu/hr each, firing on natural gas in Emission Unit 0-U0007. The five (5) boilers are identified as Emission Sources S0011, S0012, S0013, S0014 and S0015. These five (5) boilers are dual-fuel, they also fire # 2 distillate fuel oil as the back-up fuel, and natural gas as the primary fuel.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

The emissions from these five (5) boilers are exhausted through the existing stack identified as Emision Point E0001.

These five (5) boilers are being installed to replace the five (5) boilers in Emiaaion Unit 0-U0001. The boilers will be replaced in three (3) phases. During Phase 1 (anticipated November, 2015), two 50 MM Btu/hr each temporary boilers will be installed (EU: 0-TEMP1). During Phase 2 (anticipated March, 2016), two of the old 42 MM Btu/hr Combustion Engineering/ Verticle 9 each boilers (EU: 0-U0001) will be removed, then two (2) new boilers (EU: 0-U0007) will be installed. During Phase 3 (anticipated December, 2016), the remaining three (3) old boilers (EU: 0-U0001) will be removed, and the final three (3) new boilers (EU: 0-U0007) will be installed.

Final Phase: Anticipated April, 2017. Once the five (5) new 50 MM Btu/hr each boilers are installed, the two (2) temporary boilers (Emission Sources TMPB1 & TMPB2) in Emission Unit 0-TEMP1 will be removed.

Emission unit 0U0004 - Emission Unit 0-U0004 consists of three 3.0 MM Btu/hr each dual fuel boilers (Emission Sources S0008, S0009 & S0010) burning #2 fuel oil (Process FO2) and natural gas (Process NG1), and one new 1500 KW emergency generator (Emission Source GEN01) burning #2 fuel oil (Process GEN) at the New Academic Building (NAB).

The flue gases from the three boilers (Emission Sources S0008, S0009 & S0010) exit through their individual stack, identified as Emission Points 0NAB1, 0NAB2 & 0NAB3; respectively.

The flue gases from the new 1500 KW emergency generator (Emission Source GEN01) exit through its individual stack, identified as Emission Point 0NAB4.

This new 1500 KW emergency generator (Emission Source GEN01) ia allowed to operate up to 500 hours annually.

Emission unit 0U0004 is associated with the following emission points (EP): 0NAB1, 0NAB2, 0NAB3, 0NAB4

Process: FO2 is located at Building NAB - Process FO2 consists of the operation of the burning of #2 distillate fuel oil in the three (3) dual-fuel 3.0 MM Btu/hr each boilers (Emission Sources S0008, S0009 & S0010) in Emission Unit 0-U0004 in the New Academic Building (NAB). The flue gases from each of the three boilers exit through their individual stack, identified as Emission Points 0NAB1, 0NAB2 & 0NAB3; respectively.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

In addition to the boiler burning # 2 distillate fuel oil (Process FO2), the three boilers also burn natural gas (Process NG1).

Process: GEN is located at Building NAB - Process GEN consists of the operation of the burning of diesel fuel in the new 1500 KW emergency generator (Emission Source GEN01) in Emission Unit 0-U0004 in the New Academic Building (NAB). The flue gases from this new 1500 KW new emergency generator exit through its individual stack, identified as Emission Point Point 0NAB4. This new 1500 KW emergency generator (Emission Source GEN01) ia allowed to operate up to 500 hours annually.

The Quantity/hr is 1500 Kilowatts. The Quantity/yr is 750,000 Kilowatts. The HRS/day is 1.37, the Days/yr is 365. All of these are based on the 1500 KW only (GEN01).

Process: NG1 is located at Building NAB - Process NG1 consists of the operation of the burning of natural gas in the three (3) dual- fuel 3.0 MM Btu/hr each boilers (Emission Sources S0008, S0009 & S0010) in Emission Unit 0-U0004 in the New Academic Building. The flue gases from each of the three boilers exit through their individual stack, identified as Emission Points 0NAB1, 0NAB2 & 0NAB3; respectively.

In addition to the boilers burning natural gas (Process NG1), the three boilers also burn #2 distillate fuel oil (Process FO2).

Emission unit 0U0006 - Emission Unit 0-U0006 consists of an Anprolene AN74i ethylene oxide sterilization unit (Emission Source ETO01), which will be used to sterilize medical equipment. The sterilizer has an abator (Anptolene EtO Abator, Model AN5100), which is identified as Emission Control ETO1C, and is designed to remove 99% of the ethylene oxide from the exhaust of the sterilization unit (Process ETO). The facility anticipates using about one hundred (100) 17.5 gram ETO capsules per year. Each EtO capsule is 17.5 grams of 100% EtO.

Since the unit requires a twelve (12) hour cycle to use a single 17.5 gram EtO capsule; the unit has a fixed two hour purge time; the 100 capsules take a maximum of 200 hours per year to purge. The hourly emission limit is based on 100 capsules of 17.5 grams each over 200 hours per year, and not 8760 hrs/yr.

Emissions are exhausted through a stack identified as Emission Point 0ETO1.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Emission unit 0U0006 is associated with the following emission points (EP): 0ETO1

Process: ETO is located at Building NAB - Process ETO in Emission Unit 0-U0006 consists of an Anprolene AN74i ethylene oxide gas sterilization unit (Emission Source ETO01), which will be used to sterilize medical equipment. The sterilizer has an abator (Anptolene EtO Abator, Model AN5100), which is identified as Emission Control ETO1C), and is designed to remove 99% of the ethylene oxide from the exhaust of the sterilization unit. The facility anticipates using about one hundred (100) 17.5 gram ETO capsules per year. Each EtO capsule is 17.5 grams of 100% EtO.

Since the unit requires a twelve (12) hour cycle to use a single 17.5 gram EtO capsule, the unit has a fixed two hour purge time, the 100 capsules take a maximum of 200 hours per year to purge. The hourly emission limit is based on 100 capsules of 17.5 grams each over 200 hours per year, and not 8760 hrs/yr.

Emissions are exhausted through a stack identified as Emission Point 0ETO1.

Emission unit 0U0005 - Emission Unit 0-U0005 consists of four 750 KW each replacement emergency generators (Emission Sources GEN02, GEN03, GEN04 & GEN05) and a 2000 KW temporary generator (Emission Source TEMPG). Each of the replacement standby stationary generator is a diesel 2013 Caterpollar Model C27, compression ignition rated at 750 KW (1,141 bHP), EPA Tier II emission level certified, and each is a four-cycle diesel engine. Process GN1 is the combustion of diesel fuel in these 4 replacement emergency engines (Emission Sources GEN02, GEN03, GEN04 & GEN05) and the 2000 KW temporary generator (Emission Source TEMPG).

The flue gases from the four 750 KW each replacement generators (Emission Sources GEN02, GEN03, GEN04 & GEN05) exit through their individual stacks, identified as Emission Points 0GEN2, 0GEN3, 0GEN4 & 0GEN5; respectively. And the flue gases from the 2000 KW temporary generator (Emission Source TEMPG) exit through its own stack identified as Emission Point 0TEMP.

There will also be four (4) identical 275 gallon Day tanks located in the generator room and will be used for the four replacement generators. Each generator is a 4-stroke water-cooled diesel, each with a displacement of 27.03 liter, and with a compression ration of 16.5: 1.0.

All replacement generators meet the emission limitations found in 40 CFR 60 Subpart IIII. Each generator will be operated a maximum of 500 hours/yr.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

The facility has submitted data for the four (4) identical replacement emergency generators. The gaseous emissions data measurements are consistent with those described in EPA 40 CFR Part 89 Subpart D, 40 CFR Part 60 Subpart IIII, and ISO 8178 for measuring HC, CO, PM, and NOx. Gaseous emissions values are weighted cycle averages and are in compliance with the non-road regulations. The maximum limits are as follows:

CO: 3.5 g/bKW-hr

NOx + HC: 6.4 g/bKW-hr

PM: 0.20 g/bKW-hr

Total Potential Emissions for the four (4) 750 KW (1,141 bHP) each generator (GEN02, GEN03, GEN04, and GEN05):

Pollutant Emissions Fuel Consumption @ 100% Load

NOx 5.25 g/HP-hr 202.9 L/hr or 53.6 gal/hr

CO 0.25 g/HP-hr

HC 0.03 g/HP-hr

PM 0.21 g/HP-hr

Pollutant Emissions Emissions (lb/hr)

NOx 5.25 g/HP-hr 15.83

CO 0.25 g/HP-hr

HC 0.03 g/HP-hr 0.12

PM 0.21 g/HP-hr 0.10

Emissions Power Category: 560 < KW < or = 2237

The four 750 KW 2013 Caterpillar each generator engines (Emission Sources GEN02, GEN03, GEN04 & GEN05) and the 2000 kw temporary generator in Emission Unit 0-U0005 are not subject to the Particulates emission limit of 0.10 pounds per million Btu stack testing when operating on # 2 distillate fuel oil (Process 2FT).

1 kw = 3,412 Btu/hr

2000 kw = 6,824,000 Btu/hr

750 kw x [(3412 Btu/hr) / (1 kw)] = 2,559,000 Btu/hr = 2.559 MM Btu/hr

4 generators x 2.559 MM Btu/hr/generator = 10.236 MM Btu/hr

4 generators + temporary generator = (10.236 + 6.824) MM Btu/hr = 17.06 MM Btu/hr, which is < 50



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

MM Btu/hr

Emission unit 0U0005 is associated with the following emission points (EP): 0GEN2, 0GEN3, 0GEN4, 0GEN5, 0TEMP

Process: GN1 is located at Building PPUH - Process GN1 consists of the burning of diesel fuel in the four 750 KW each replacement generators (Emission Sources GEN02, GEN03, GEN04 & GEN05) and the 2000 KW temporary emergency generator (Emission Source TEMPG) in Emission Unit 0-U0005 in the Power Plant University Hospital (PPUH). The flue gases from this 2000 KW temporary emergency generator exit through its individual stack, identified as Emission Point OTEMP.

The flue gases from the four 750 KW each replacement generators (Emission Sources GEN02, GEN03, GEN04 & GEN05) exit through their individual stacks, identified as Emission Points 0GEN2, 0GEN3, 0GEN4 & 0GEN5; respectively. And the flue gases from the 2000 KW temporary emergency generator (Emission Source TEMPG) exit through its own stack identified as Emission Point 0TEMP.

Each of the four (4) emergency generators combustes 53.6 gal/hr of diesel fuel @ 100% load. Each of the four (4) emergency generators operates a maximum of 500 hours per year.

Each of the emergency generators is allowed to operate up to 500 hours annually.

Emission unit 0U0001 - Emission Unit 0-U0001 consists of five (5) Combustion Engineering boilers, each with a maximum heat input of 42 MM Btu/hr, identified as Emission Sources S0001, S0002, S0003, S0004 & S0005. These five external combustion boilers operate on dual-fuel, natural gas (Process GAS) and #6 fuel oil (Process OIL). The flue gases from these boilers exit through a common stack, identified as Emission Point E0001.

Emission unit 0U0001 is associated with the following emission points (EP): E0001

Process: GAS is located at BOILER ROOM/SUBBASEM, Building 1 - Process GAS consists of the operation of burning natural gas in the five (5) dual-fuel external combustion boilers, Emission Sources S0001, S0002, S0003, S0004 & S0005 in Emission Unit 0-U0001. The flue gases from these boilers exit through a common stack, identified as Emission Point E0001.

Process: OIL is located at BOILER ROOM/SUBBASEM, Building 1 - Process OIL consists of the operation of burning #2 distillate fuel oil in the five (5) dual-fuel external combustion boilers, Emission Sources S0001, S0002, S0003, S0004 & S0005 in Emission Unit 0-U0001. The flue gases from these boilers exit through a common stack, identified as Emission Point E0001.

The main five (5) boilers (Emission Sources S0001, S0002, S0003, S0004 & S0005 in Emission Unit 0-



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

U0001) are limited to burning #2 distillate fuel oil a maximum of 4,900 hours per year, none of which can be during the maximum ozone season (May 1 - September 30) according to 6 NYCRR 227-2.5 (a).

Emission unit 0U0002 - Emission Unit 0-U0002 consists of a 200 lb/hr JK Environmental SP-300 crematorium (Emission Source S0006), which processes cadavers (Process 002). The flue gas from the crematorium exits through a dedicated stack, identified as Emission Point E0002.

Emission unit 0U0002 is associated with the following emission points (EP): E0002

Process: 002 is located at 8TH FLOOR, Building 1 - Process 002 consists of the operation of a 200 lb/hr crematorium (Emission Source S0006) in Emission Unit 0-U0002, processing cadavers generated on-site. The flue gases from this crematorium exit through a stack, identified as Emission Point E0002.

Emission unit 0U0003 - Emission Unit 0-U0003 consists of a 10.46 MM Btu/hr dual fuel fired boiler (Emission Source S0007) to replace the existing exempt low pressure steam boiler and an existing exempt domestic hot water boiler. This new boiler will burn natural gas (Process NAT) as the primary fuel and #2 fuel oil (Process 2FO) as a secondary fuel. The flue gases from this new boiler exit through a stack, identified as Emission Point E0003.

Emission unit 0U0003 is associated with the following emission points (EP): E0003

Process: 2FO is located at Building 1 - Process 2FO consists of the burning of #2 distillate fuel oil (as the secondary fuel) in the new dual fuel external combustion boiler (Emission Source S0007) in Emission Unit 0-U0003. The flue gases from this boiler exit through a stack, identified as Emission Point E0003.

Process: NAT is located at Building 1 - Process NAT consists of the burning of natural gas (as the primary fuel) in the new dual fuel external combustion boiler (Emission Source S0007) in Emission Unit 0-U0003. The flue gases from this boiler exit through a stack, identified as Emission Point E0003.

Emission unit 0TEMP1 - Emission Unit 0-TEMP1 consists of two (2) temporary boilers with a maximum heat input of 50 MM Btu/hr each during the boiler replacement project. The boilers are identified as Emission sources TMPB1 & TMPB2. The two boilers are dual-fuel fired, operating on natural gas (Process NGT) and # 2 distillate fuel oil (Process 2FT).

The emissions from the two temporary boilers are exhausted through a combined stack



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

identified as Emission Point TMPBL.

The two temporary boilers are being installed to provide heat load during the boiler replacement project, in which five (5) # 2 distillate fuel oil/natural gas boilers in Emission Unit 0-U0007 are being installed to replace the five (5) # 6 residual fuel oil /natural gas boilers in Emission Unit 0-U0001. The five (5) boilers will be replaced in three phases as follow:

Phase 1: Anticipated November, 2015. Two (2) 50 MM Btu/hr each temporary boilers (Emission Sources TMPB1 & TMPB2) will be installed in Emission Unit 0-TEMP1.

Phase 2: Anticipated March, 2016. Two of the old 42 MM Btu/hr each boilers (Emission Sources S0001 & S0002) in Emission Unit 0-U0001 will be removed. Then, two (2) 50 MM Btu/hr each new boilers (Emission Sources S0011 & S0012) in Emission Unit 0-U0007 will be installed.

Phase 3: Anticipated December, 2016. The remaining three old 42 MM Btu/hr each boilers (Emission Sources S0003, S0004 & S0005) in Emission Unit 0-U0001 will be removed, and the final three 50 MM Btu/hr each boilers (Emission Sources S0013, S0014 & S0015) in Emission Unit 0-U0007 will be installed.

Final Phase: Once the five (5) new 50 MM Btu/hr each boilers are installed, the two (2) temporary boilers (Emission Sources TMPB1 & TMPB2) in Emission Unit 0-TEMP1 will be removed.

Emission unit 0TEMP1 is associated with the following emission points (EP): TMPBL

Process: 2FT is located at Outside BSB, Building OUTSIDE - Process 2FT is the firing of # 2 distillate fuel oil in the two (2) temporary boilers with a maximum heat input of 50 MM Btu/hr in Emission Unit 0-TEMP1. The two temporary boilers are identified as Emission Sources TMPB1 & TMPB2.

The two temporary boilers are dual fuel, firing natural gas (Process NGT) and # 2 distillate fuel oil (Process 2FT).

The emissions from the two temporary boilers are exhausted through a combined stack identified as Emission Point TMPBL.

The two temporary boilers are being installed to provide heat load during the boiler replacement project. During the project, five (5) dual-fuel natural gas/# 2 distillate fuel oil boilers in Emission Unit 0-U0007 are being installed to replace the five (5) dual-fuel natural gas/# 6 residual fuel oil boilers in Emission Unit 0-U0001. The boilers will be replaced in three phases. During Phase 1 (anticipated November, 2015), two (2) 50 MM Btu/hr temporary dual-fuel boilers operating on natural gas (Process NGT) and # 2 distillate fuel oil (Process 2FT) will be installed in Emission Unit 0-TEMP1. During Phase 2 (anticipated March, 2016), two (2) of the old 42 MM BTU/hr each boilers (Emission Sources S0001 & S0002) in Emission Unit 0-U0001 will be removed. Then, two (2) new 50 MM Btu/hr boilers (Emission Sources



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

S0011 & S0012) in Emission Unit 0-U0007 will be installed. During Phase 3 (anticipated December, 2016), the remaining three (3) old 42 MM Btu/hr boilers (Emission Sources S0003, S0004 & S0005) in Emission Unit 0-U0001 will be removed. Then, the final three (3) new 50 MM Btu/hr each boilers (Emission Sources S0013, S0014 & S0015) in Emission Unit 0-U0007 will be installed.

in the two (2) temporary boilers with a maximum heat input of 50 MM Btu/hr in Emission Unit 0-TEMP1. The two temporary boilers are identified as Emission Sources TMPB1 & TMPB2.

The two temporary boilers are dual fuel, firing natural gas (Process NGT) and # 2 distillate fuel oil (Process 2FT).

The emissions from the two temporary boilers are exhausted through a combined stack identified as Emission Point TMPBL.

The two temporary boilers are being installed to provide heat load during the boiler replacement project. During the project, five (5) dual-fuel natural gas/# 2 distillate fuel oil boilers in Emission Unit 0-U0007 are being installed to replace the five (5) dual-fuel natural gas/# 6 residual fuel oil boilers in Emission Unit 0-U0001. The boilers will be replaced in three phases. During Phase 1 (anticipated November, 2015), two (2) 50 MM Btu/hr temporary dual-fuel boilers operating on natural gas (Process NGT) and # 2 distillate fuel oil (Process 2FT) will be installed in Emission Unit 0-TEMP1. During Phase 2 (anticipated March, 2016), two (2) of the old 42 MM BTU/hr each boilers (Emission Sources S0001 & S0002) in Emission Unit 0-U0001 will be removed. Then, two (2) new 50 MM Btu/hr boilers (Emission Sources S0011 & S0012) in Emission Unit 0-U0007 will be installed. During Phase 3 (anticipated December, 2016), the remaining three (3) old 42 MM Btu/hr boilers (Emission Sources S0003, S0004 & S0005) in Emission Unit 0-U0001 will be removed. Then, the final three (3) new 50 MM Btu/hr each boilers (Emission Sources S00013, S0014 & S0015) in Emission Unit 0-U0001 will be removed. Then, the final three (3) new 50 MM Btu/hr each boilers (Emission Sources S0003, S0004 & S0005) in Emission Unit 0-U0001 will be removed. Then, the final three (3) new 50 MM Btu/hr each boilers (Emission Sources S0013, S0014 & S0015) in Emission Unit 0-U0001 will be removed. Then, the final three (3) new 50 MM Btu/hr each boilers (Emission Sources S0013, S0014 & S0015) in Emission Unit 0-U0007 will be installed.

Title V/Major Source Status

DOWNSTATE MEDICAL CENTER is subject to Title V requirements. This determination is based on the following information:

Downstate Medical Center is a major facility because the potential emissions of nitrogen oxides is greater than the major source thresholds, which is 25 tons per year for nitrogen oxides. All facilities utilizing Title V Permits shall be considered major sources.

Program Applicability

The following chart summarizes the applicability of DOWNSTATE MEDICAL CENTER with regards to the principal air pollution

regulatory programs:

 Regulatory Program
 Applicability

	1
PSD	NO
NSR (non-attainment)	NO
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	YES
NSPS	YES
TITLE IV	NO



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

TITLE V	YES
TITLE VI	NO
RACT	YES
SIP	YES

NOTES:

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

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

for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA)

which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

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

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

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

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

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

RACT Reasonably Available Control Technology (6 NYCRR Parts 212.10, 226, 227-2, 228, 229, 230, 232, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic 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.



Permit ID: 2-6104-00132/00009 **Renewal Number: 3** 08/06/2015

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	
8062	GENERAL MEDICAL & SURGICAL HOSPITALS	
8221	COLLEGES AND UNIVERSITIES, NEC	

SCC Codes

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

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

SCC Code	Description
1-03-004-01	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 -
	DISTILLATE OIL
	10-100MMBTU/HR **
1-03-006-02	EXTERNAL COMBUSTION BOILERS -
	COMMERCIAL/INDUSTRIAL
	COMMERCIAL/INSTITUTIONAL BOILER - NATURAL
	GAS
	10-100 MMBtu/Hr
2-03-001-01	INTERNAL COMBUSTION ENGINES -
	COMMERCIAL/INSTITUTIONAL
	COMMERCIAL/INSTITUTIONAL IC ENGINE -
	DISTILLATE OIL (DIESEL)
2 15 000 01	Reciprocating
3-15-020-01	PHOTOGRAPHIC EQUIPMENT HEALTH CARE - HOSPITALS
	Sterilization w/ Ethylene Oxide
5-01-005-05	SOLID WASTE DISPOSAL - GOVERNMENT
J 01 00J 0J	SOLID WASTE DISPOSAL - GOVERNMENT



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

> SOLID WASTE DISPOSAL: GOVERNMENT - OTHER INCINERATION Pathological

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	РТЕ	
		lbs/yr	Range
0NY508-00-0	40 CFR 60 SUBPART	79660	U
	IIII - NMHC + NOX		
0NY750-00-0	CARBON DIOXIDE	545605729	
	EQUIVALENTS		
000630-08-0	CARBON MONOXIDE	291827	
000075-21-8	ETHYLENE OXIDE	0.28139	
007439-92-1	LEAD	19	
0NY210-00-0	OXIDES OF NITROGEN	913082	
0NY075-00-0	PARTICULATES	46948	
0NY075-00-5	PM-10	78604	
007446-09-5	SULFUR DIOXIDE	127345	
0NY100-00-0	TOTAL HAP	6159	
0NY998-00-0	VOC	30385	

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:



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

 (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.

- 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



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

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 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



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 2 01-6.7 and Part 621.

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

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

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

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

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

Item L: Permit Exclusion - ECL 19-0305

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

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

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

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.

Location Facility/EU/EP/Process/I	Regulation ES	Condition	Short Description
 FACILITY	ECL 19-0301	105	Powers and Duties of the Department with respect to air
FACILITY	40CFR 52-A.21(j)	30	pollution control Best Available Control Technology
0- U0003/E0003/2FO/S0007	40CFR 60-A	84	General provisions
0-U0003	40CFR 60-A.4	81	General provisions - Address
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.40c	85	Steam generators 10- 100 million Btu per hour
0-U0003/-/2FO/S0007	40CFR 60-Dc.42c(d)	82	Standard for Sulfur Dioxide Firing Oil. (see narrative)
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.42c(h)	86	Exemption from Averaging Requirements
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.42c(i)	87	Standard for Sulfur Dioxide Period of Requirements.
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.44c(g)	88	Alternative Compliance and Performance Test Methods and Procedures for Sulfur Dioxide.
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.44c(h)	89, 90	Alternative Compliance and Performance Test Methods and Procedures for Sulfur Dioxide.
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.46c(e)	91	Exemption from Emission Monitoring

Regulatory Analysis



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

0- U0003/E0003/2FO/S0007	40CFR 60-Dc.48c(d)	92	for Sulfur Dioxide. Reporting and Recordkeeping Requirements.
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.48c(e)(1)	93	Requirementes.
0- U0003/E0003/2FO/S0007	40CFR 60- Dc.48c(e)(11)	96	Reporting and Recordkeeping requirements - fuel supplier certifications
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.48c(e)(2)	94	
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.48c(e)(3)	95	
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.48c(g)	97	Reporting and Recordkeeping Requirements.
0- U0003/E0003/2FO/S0007	40CFR 60-Dc.48c(i)	98	Reporting and Recordkeeping Requirements.
FACILITY	40CFR 60-IIII	51	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
FACILITY	40CFR 60- IIII.4202(a)(2	52	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
FACILITY	40CFR 60-IIII.4205(b)	53	Emission Standards - 2007 or later Emergency Non Fire Pump Stationary CI-IC Engines Displacing < 30 liters/cylinder
FACILITY	40CFR 60-IIII.4206	54	Stationary Compression Ignition IC Engines - Duration of Emission Standards
0- U0004/0NAB4/GEN/GEN01	40CFR 60-IIII.4207(b)	99, 100, 101	Stationary Compression Ignition IC Engines - Fuel Requirements beginning October 1, 2010
FACILITY	40CFR 60-IIII.4208	55	Stationary Compression Ignition IC Engines - Deadlines for installing or importing engines produced in previous model year
0- U0004/0NAB4/GEN/GEN01	40CFR 60-IIII.4209(a)	102	Monitoring requirement - Emergency stationary CI-IC engine
0- U0004/0NAB4/GEN/GEN01	40CFR 60-IIII.4211(a)	103	Stationary Compression Ignition Engines - Compliance



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

FACILITY	40CFR 60-IIII.4211(c)	56	Requirements Stationary Compression Ignition Engines - Compliance
FACILITY	40CFR 60-IIII.4211(e)	57	Demonstration Stationary Compression Ignition IC Engines - compliance demonstration
FACILITY	40CFR 60-IIII.4214	58	Notification, Reporting and Recordkeeping Requirements - Stationary CI-IC engines
FACILITY	40CFR 60-IIII.4218	59	Stationary Compression Ignition IC Engines - applicability of NSPS general provisions
FACILITY	40CFR 63-ZZZZ	60	Reciprocating Internal Combustion Engine (RICE) NESHAP
FACILITY	40CFR 63-ZZZZ.6585	61	Reciprocating Internal Combustion Engine (RICE) NESHAP - Applicability
FACILITY	40CFR 63-ZZZZ.6603(a)	62, 63	Reciprocating Internal Combustion Engine (RICE) NESHAP - requirements for existing engines at area sources of HAP emissions
FACILITY	40CFR 63-ZZZZ.6625(e)	64	Reciprocating Internal Combustion Engine (RICE) NESHAP - maintenance of engine and control device
FACILITY	40CFR 63-ZZZZ.6640(f)	65, 66	Reciprocating Internal Combustion Engine (RICE) NESHAP - emergency engines
FACILITY	40CFR 63-ZZZZ.6665	67, 68	Reciprocating Internal Combustion Engine (RICE) NESHAP - General provisions
FACILITY	40CFR 68	20	Chemical accident prevention provisions
FACILITY	40CFR 80-I.510(b)	69	Motor vehicle diesel fuel: non road, locomotive and marine diesel fuel
FACILITY	40CFR 82-F	21	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	40CFR 89-B.112	70, 71, 72, 73, 74	Oxides of nitrogen, carbon monoxide, hydrocarbon, and particulate matter exhaust emission



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

			standards
FACILITY	40CFR 89-B.113	75	Smoke emission
		_	standard
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of
	CNN/CDD 001 1 4	100	equipment.
FACILITY	6NYCRR 201-1.4	106	Unavoidable noncompliance and
			violations
FACILITY	6NYCRR 201-1.7	11	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	12	Prohibition of reintroduction of
			collected
			contaminants to the
FACILITY	6NYCRR 201-3.2(a)	13, 14	air Exempt Activities -
			Proof of eligibility
FACILITY	6NYCRR 201-3.2(c)	22	Exempt Activities -
FACILITY	6NYCRR 201-3.3(a)	15	exempt activity list Trivial Activities -
			proof of eligibility
FACILITY	6NYCRR 201-6	23, 76, 77	Title V Permits and the Associated Permit
			Conditions
FACILITY	6NYCRR 201-	24	Application Content -
	6.2(d)(3)(i)		Regulated Air Pollutant Emissions
0 -	6NYCRR 201-	104	Application Content -
U0006/0ETO1/ETO/ETO01	6.2(d)(3)(i)		Regulated Air
FACILITY	6NYCRR 201-6.4(a)(4)	16	Pollutant Emissions General Conditions -
FACILITI	6NICRR 201-0.4(a)(4)	10	Requirement to
			Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	17	General Conditions -
			Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of
			Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	Records of
			Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-	5	Reporting
	6.4(c)(3)(ii		Requirements - Deviations and
			Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	25	Compliance Schedules
FACILITY	6NYCRR 201-6.4(e)	6	- Progress Reports Compliance
FACILITI	6NICKR 201-0.4(e)	0	Certification
FACILITY	6NYCRR 201-6.4(f)(6)	18	Off Permit Changes
FACILITY	6NYCRR 201-6.4(g)	26	Permit Shield
FACILITY	6NYCRR 201-7.1	27, 28, 29, 30, 78, 79	Emission Capping in Facility Permits
FACILITY	6NYCRR 202-1.1	19	Required emissions
FACILITY	6NYCRR 202-2.1	7	tests. Emission Statements -
	011 CIII 202-2.1	,	Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements -
			record keeping requirements.
FACILITY	6NYCRR 211.1	31	General Prohibitions



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

			- air pollution
			prohibited
FACILITY	6NYCRR 211.2	107	General Prohibitions
			- visible emissions
			limited.
FACILITY	6NYCRR 212.2	32, 33	Determination of
	(NXGDD 212 2(z))	34	environmental rating
FACILITY	6NYCRR 212.3(a)	34	General Process Emission Sources -
			emissions from
			existing emission
			sources
FACILITY	6NYCRR 212.6(a)	35	General Process
FACIBITI	UNICIA ZIZ. U(a)	55	Emission Sources -
			opacity of emissions
			limited
FACILITY	6NYCRR 212.9(b)	36	General Process
Inciditi		50	Emission Sources -
			tables
FACILITY	6NYCRR 215.2	9	Open Fires -
		-	Prohibitions
0 -	6NYCRR 219-4	108	ALL NEW AND MODIFIED
U0002/E0002/002/S0006			INCINERATORS, CREMATOR
,,,,			IES
0 -	6NYCRR 219-4.11	114	Inspection and
U0002/E0002/002/S0006			reporting.
0 -	6NYCRR 219-4.5(a)	109	Operating
U0002/E0002/002/S0006			requirements.
0 -	6NYCRR 219-4.5(b)	110, 111	Operating
U0002/E0002/002/S0006			requirements.
0 -	6NYCRR 219-4.7	112, 113	Continuous emission
U0002/E0002/002/S0006			monitoring.
FACILITY	6NYCRR 225-1.2(f)	37	Sulfur-in-Fuel
			Limitations
FACILITY	6NYCRR 225-1.2(g)	38	Sulfur-in-Fuel
			Limitations
FACILITY	6NYCRR 225-1.2(h)	39	Sulfur-in-Fuel
			Limitations
FACILITY	6NYCRR 225-1.6	40	Reports, Sampling,
	/_ / / /		and Analysis
FACILITY	6NYCRR 227.2(b)(1)	48, 49, 50	Particulate
		4.7	emissions.
FACILITY	6NYCRR 227-1.3(a)	41	Smoke Emission
	(NYCDD 227 1 2(2))	8.0	Limitations. Smoke Emission
0-U0001/E0001/OIL	6NYCRR 227-1.3(a)	80	Limitations.
0 -	6NYCRR 227-1.3(a)	83	Smoke Emission
U0003/E0003/2FO/S0007	6NICRR 227-1.5(a)	85	Limitations.
FACILITY	6NYCRR 227-	28, 42, 43	2010 NOX RACT
THEFT I	2.4(c)(1)(ii	20, 12, 13	presumptive limit.
FACILITY	6NYCRR 227-2.4(d)	44, 45	Small boilers, small
	01110101 22, 211(d)	11, 10	combustion turbines,
			and small stationary
			internal combustion
			engines.
FACILITY	6NYCRR 227-2.5(a)	28, 46, 47	Fuel switching
			option.
FACILITY	6NYCRR 231-2	29	New Source Review in
			Nonattainment Areas
			and Ozone Transport
			Region

Applicability Discussion:



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

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

ECL 19-0301

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

6 NYCRR 200.6

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

6 NYCRR 200.7

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

6 NYCRR 201-1.4

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

6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

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

6 NYCRR 201-3.3 (a)

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

6 NYCRR Subpart 201-6

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



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6 NYCRR 201-6.4 (a) (4)

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

6 NYCRR 201-6.4 (a) (7)

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

6 NYCRR 201-6.4 (a) (8)

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

6 NYCRR 201-6.4 (c)

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

6 NYCRR 201-6.4 (c) (2)

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

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

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

6 NYCRR 201-6.4 (d) (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



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

6 NYCRR 201-6.4 (g)

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

6 NYCRR 202-1.1

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

6 NYCRR 202-2.1

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

6 NYCRR 202-2.5

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

6 NYCRR 211.2

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

6 NYCRR 215.2

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

40 CFR Part 68

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

40 CFR Part 82, Subpart F

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

Facility Specific Requirements

In addition to Title V, DOWNSTATE MEDICAL CENTER has been determined to be subject to the following regulations: 40 CFR 52.21 (j)



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

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 60.4

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

40 CFR 60.40c

This regulation requires the source owner or operator to comply with the applicable General Provisions of 40 CFR 60 Subpart Dc. The facility owner is responsible for reviewing these general provisions in detail and complying with all applicable technical, administrative and reporting requirements.

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 60.4205 (b)

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

40 CFR 60.4206

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

40 CFR 60.4207 (b)

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

40 CFR 60.4208



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

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 40 CFR 60.4204 (b) or 40 CFR 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 40 CFR 60.4205 (c), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204 (b), or 40 CFR 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 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 60.4211 (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



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

This requirement is for Stationary Compression Ignition IC Engines - applicability of NSPS general provisions.

Table 8 of Subpart IIII shows which parts of the general provisions in 40 CFR 60.1 - 60.19 (Subpart A) apply to any facility that is subject to 40 CFR 60, Subpart IIII.

40 CFR 60.42c (d)

This regulation requires that on or after the date on which the initial performance test is completed or required to be completed under section 60.8 of 40 CFR 60 Subpart A, no owner or operator of an affected facility that combusts oil, shall combust oil with a sulfur content in excess of 0.5 percent by weight.

40 CFR 60.42c (h)

This regulation requires that compliance with emission limits and/or fuel oil sulfur limitations be based on a certification from the fuel supplier as stated in paragraph 40 CFR 60-Dc.48c(f)(1), (2), or (3) as applicable

40 CFR 60.42c (i)

This regulation requires that the sulfur dioxide emission limits, percentage reductions, and fuel oil sulfur limitations apply at all times, including periods of startup, shutdown, and malfunction.

40 CFR 60.44c (g)

This regulation requires that oil fired facilities, demonstrating compliance with the sulfur dioxide standard through sampling and analysis, must test every shipment of oil after the initial approval of the sampling plan.

40 CFR 60.44c (h)

This regulation requires facilities demonstrating compliance through vender certification to follow the compliance procedures listed in the appropriate paragraphs of 40 CFR 60-Dc.48c.

40 CFR 60.46c (e)

This regulation allows facilities subject to paragraphs 40 CFR 60-Dc.42c(h)(1), (2), or (3) who show compliance through vendor certification, to be exempt from the monitoring requirements of section 40 CFR 60-Dc.46c

40 CFR 60.48c (d)

This regulation requires the owner or operator of the facility subject to the SO₂ emission limits, fuel oil



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

sulfur limits, or percent reduction requiremnts under §60.42c, to submit semi-annual reports to the EPA

40 CFR 60.48c (e) (1)

Reporting and recordkeeping provisions for facilities subject to a sulfur-in-fuel standard, sulfur dioxide emission limit, or percent reduction of sulfur dioxide emissions.

40 CFR 60.48c (e) (11)

If fuel supplier certifications are used to demonstrate compliance with the distillate oil specifications under 40 CFR 60-Dc.41c, then reports shall include a certified statement signed by the owner or operator that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

40 CFR 60.48c (e) (2)

Reporting and recordkeeping provisions for facilities subject to a sulfur-in-fuel standard, sulfur dioxide emission limit, or percent reduction of sulfur dioxide emissions.

40 CFR 60.48c (e) (3)

Reporting and recordkeeping provisions for facilities subject to a sulfur-in-fuel standard, sulfur dioxide emission limit, or percent reduction of sulfur dioxide emissions.

40 CFR 60.48c (g)

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

40 CFR 60.48c (i)

This regulation requires the source owner or operator to retain all records for a minimum of two years for compliance with the NSPS. This does not supercede any requirement that is more stringent, including the Title V requirement to maintain records for for a minimum of 5 years.

40 CFR 63.6585

This condition details what criteria are used to determine if a reciprocating internal combustion engine is subject to the provisions of this NESHAP rule. If the engine is meets the rule's definition of reciprocating internal combustion engine, and is located at a facility that emits at least 10 tons of a single hazardous air pollutant or 25 tons of all hazardous air pollutants, then the engine will need to meet the provisions in this rule.

40 CFR 63.6603 (a)

These conditions list the emission limits, operating limits, and work practices that existing engines located at an area source of HAP emissions must meet.

The engines must meet work practices, emission limits, and operating limits on carbon monoxide or formaldehyde for the specific type of engine listed in table 2d of subpart ZZZZ.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

40 CFR 63.6625 (e)

This regulation requires the owners or operator of an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

40 CFR 63.6640 (f)

This condition states the operation requirements for emergency engines.

40 CFR 63.6665

This regulation specifies which provisions of the General provisions (Subpart A of 40 CFR 63) apply to the owner or operators of stationary internal combustion engines at facilities with emissions of hazardous air pollutants.

40 CFR 80.510 (b)

This regulation is for motor vehicle diesel fuel: non-road, locomotive and marine diesel fuel.

This regulation requires that beginning June 1, 2010: Except as otherwise specifically provided in 40 CFR 80 Subpart I, all nonroad and locomotive marine diesel fuel is subject to the following per-gallon standards for sulfur content:

15 ppm maximum for NR diesel fuel.

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 89.113

This regulation sets the opacity standard for non road compression ignition engines. The opacity standard is 20% when the engine is accelerating, 15% when the engine is in lugging mode and 50% dyring the peaks f either acceleration or lugging.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

40 CFR Part 60, Subpart A

This regulation contains the General Provisions of 40 CFR 60. The facility owner is responsible for reviewing these general provisions in detail and complying with all applicable technical, administrative and reporting requirements

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 regulation is for the Applicability of Reciprocating Internal Combustion Engine (RICE) NESHAP.

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

6 NYCRR 201-3.2 (c)

This section lists the specific activities which may be exempt from the permitting provisions of this Part.

6 NYCRR 201-6.2 (d) (3) (i)

This section refers to the following emissions-related information:

(i) All emissions of pollutants for which the facility is major, all emissions of regulated air pollutants, and all emissions of persistent, bioaccumulative and toxic compounds listed in Table 1 of Subpart 201-9 of this Part. The permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, emission point and process, except where such units are listed as exempt or trivial under Subpart 201-3 of this Part. The applicant shall submit additional information related to the emissions of regulated air pollutants sufficient to verify which Federal requirements are applicable to the facility.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

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.

The facility is capping its NOx emissions to 225 tpy, and its SO2 emissions to 225 tpy. The facility is also capping its main main five boilers (Emission Sources S0001, S0002, S0003, S0004 & S0005 in Emission Unit 0-U0001) to burning #6 fuel oil to a maximum of 4,900 hours per year.

6 NYCRR 211.1

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

6 NYCRR 212.2

This regulation is a SIP regulation, which specifies determination of environmental rating. When an application is made for a permit to construct or for a certificate to operate for a process emission source, the commissioner will issue an environmental rating for each air contaminant from each emission point in accordance with Table 1 of 6 NYCRR 212.2.

Ethylene oxide is listed in Table II of Air Guide 1 as a high toxicity air contaminant due to the high potential for causing adverse effects on receptors or the environment as a result of exposure. As such, according to the criteria of Table 1 of 6 NYCRR 212.2, an "A" environmental rating is assigned. Therefore, the owner or the operator of the affected facility must control ethylene oxide emissions to achieve 99% contaminant capture. This is usually achieved by the installation and use of an abator.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

<u>6 NYCRR 212.3 (a)</u>

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

6 NYCRR 212.6 (a)

This rule specifies an opacity limitation of less than 20% for any six consecutive minute period for all process emission sources.

6 NYCRR 212.9 (b)

This section refers to Table 2 which specifies the degree of control required for Gases and Liquid Particulate Emissions (Environmental Rating of A, B, C or D) and Solid Particulate Emissions (Environmental Rating A or D) but excluding Volatile Organic Compound Emissions in the New York City Metropolitan Area.

6 NYCRR 219-4.11

This section sets forth the Inspection and Reporting requirements for the crematories. Each owner or operator must inspect the facility annually and submit a report to the commissioner, certifying that the condition and operation of that facility, including the calibration of all instrumentation, meet manufacturer's specifications.

6 NYCRR 219-4.5 (a)

This section sets forth the emission standards of six-minute average opacity for the crematories, which is less than 10 percent.

6 NYCRR 219-4.5 (b)

This section sets forth the primary combustion chamber temperature of the crematories and pathological incinerator(s), which is described in section 219-4.4 of this subpart.

6 NYCRR 219-4.7

This section sets forth the continuous emission monitoring (CEMs) requirements for the crematories, which are primary and secondary (or last) combustion chamber exit temperatures.

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.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

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

6 NYCRR 225-1.6

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

6 NYCRR 227.2 (b) (1)

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

6 NYCRR 227-1.3 (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.

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

6 NYCRR 227-2.4 (d)

This section includes NOx RACT requirements for small boilers, small combustion turbines, and small stationary internal combustion engines.

<u>6 NYCRR 227-2.5 (a)</u> Fuel switching NOx RACT compliance option.

6 NYCRR Subpart 219-4

This subpart sets forth the emission standards and requirements for all new and modified (after January 1, 1989) crematories and pathological waste incinerators.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

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
FACILITY	Best Available Control Technology	

Reason: With the addition of the three 3.0 MM Btu/hr dual fuel each boilers and the 1,500 kilowatt exempt emergency generator in the new Academic Building (Emission Unit 0-U0004), Prevention of Significant Deterioration (PSD), 40 CFR 52.21(j) is not applicable to this facility becasue Downstate Medical Center will keep maintaining the 225 tons/year cap on both NOx and SOx emissions.

The replacement of # 6 residual fuel oil with # 2 ultra low distillate fuel oil (0.0015 percent bt weight Sulfur) will result in a decrease of NOx and SO2 emissions potentials as well as actual emissions. Therefore, the project emission potentials (PEP) from the project for these emissions are zero (0).

FACILITY	40 CFR 89.112	Oxides of nitrogen, carbon monoxide, hydrocarbon, and particulate matter exhaust emission standards
FACILITY	40 CFR 89.113	Smoke emission standard
FACILITY	6 NYCRR Subpart 231-2	New Source Review in Nonattainment Areas and Ozone Transport Region

Reason: With the addition of the three 3.0 MM Btu/hr dual fuel each boilers and the 1,500 kilowatt exempt emergency generator in the new Academic Building (Emission Unit 0-U0004), New Source Review, 6 NYCRR



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

231-2 is not applicable to this facility becasue Downstate Medical Center will keep maintaining the 225 tons/year cap on both NOx and SOx emissions.

New Source Review (NSR) does not apply since the proposed project emission potentials do not exceed the NSR significant project thresholds listed in 6 NYCRR 231-13. The replacement of # 6 residual fuel oil with # 2 ultra low distillate fuel oil (0.0015 percent by weight Sulfur) will result in a decrease of NOx and SO2 emissions potentials as well as actual emissions. Therefore, the project emission potentials (PEP) from the project for these emissions are zero (0).

However; it should be noted that the project emission potential (PEP) for CO emissions will increase by approximately 16 tons due to the boiler replacement and the new emergency generator, however; the increase is below the 100 ton NSR threshold and therefore will not trigger NSR. Furthermore, the NOx and SOx cappings limit the CO to below the 100 ton Title V threshold and therefore, no CO emission limit is needed (required).

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 DOWNSTATE MEDICAL CENTER:

Location Facility/EU/EP/Process/ES	Cond N	Type of Monitoring
0-U0003/-/2FO/S0007	82	work practice involving specific operations
0-U0003/E0003/2FO/S0007	90	monitoring of process or control device parameters as surrogate
0-U0003/E0003/2FO/S0007	92	record keeping/maintenance procedures
0-U0003/E0003/2FO/S0007	93	record keeping/maintenance procedures
0-U0003/E0003/2FO/S0007	96	record keeping/maintenance procedures
0-U0003/E0003/2FO/S0007	94	record keeping/maintenance procedures
0-U0003/E0003/2FO/S0007	95	record keeping/maintenance procedures
0-U0003/E0003/2FO/S0007	97	record keeping/maintenance procedures
0-U0003/E0003/2FO/S0007	98	record keeping/maintenance procedures
FACILITY	52	record keeping/maintenance procedures
FACILITY	53	record keeping/maintenance procedures
0-U0004/0NAB4/GEN/GEN01	99	work practice involving specific operations
0-U0004/0NAB4/GEN/GEN01	100	work practice involving specific operations
0-U0004/0NAB4/GEN/GEN01	101	work practice involving specific operations
0-U0004/0NAB4/GEN/GEN01	102	record keeping/maintenance procedures



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

0-U0004/0NAB4/GEN/GEN01	103	record keeping/maintenance procedures
FACILITY	56	record keeping/maintenance procedures
FACILITY	57	monitoring of process or control device parameters as surrogate
FACILITY	58	record keeping/maintenance procedures
FACILITY	61	record keeping/maintenance procedures
FACILITY	62	record keeping/maintenance procedures
FACILITY	63	record keeping/maintenance procedures
FACILITY	64	record keeping/maintenance procedures
FACILITY	65	record keeping/maintenance procedures
FACILITY	66	record keeping/maintenance procedures
FACILITY	68	record keeping/maintenance procedures
FACILITY	69	monitoring of process or control device parameters
		as surrogate
FACILITY	70	work practice involving specific operations
FACILITY	71	work practice involving specific operations
FACILITY	72	work practice involving specific operations
FACILITY	73	record keeping/maintenance procedures
FACILITY	74	work practice involving specific operations
FACILITY	75	work practice involving specific operations
FACILITY	14	work practice involving specific operations
FACILITY	22	work practice involving specific operations
FACILITY	24	record keeping/maintenance procedures
0-U0006/0ETO1/ETO/ETO01	104	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
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	7	record keeping/maintenance procedures
FACILITY	32	intermittent emission testing
FACILITY	33	work practice involving specific operations
FACILITY	34	monitoring of process or control device parameters
		as surrogate
FACILITY	35	record keeping/maintenance procedures
FACILITY	36	record keeping/maintenance procedures
0-U0002/E0002/002/S0006	108	record keeping/maintenance procedures
0-U0002/E0002/002/S0006	114	record keeping/maintenance procedures
0-U0002/E0002/002/S0006	109	monitoring of process or control device parameters
		as surrogate
0-U0002/E0002/002/S0006	110	monitoring of process or control device parameters
		as surrogate
0-U0002/E0002/002/S0006	111	monitoring of process or control device parameters
		as surrogate
0-U0002/E0002/002/S0006	112	monitoring of process or control device parameters
		as surrogate
0-U0002/E0002/002/S0006	113	monitoring of process or control device parameters
		as surrogate
FACILITY	37	work practice involving specific operations
FACILITY	38	work practice involving specific operations
FACILITY	39	work practice involving specific operations
FACILITY	40	record keeping/maintenance procedures
FACILITY	48	intermittent emission testing
FACILITY	49	intermittent emission testing
FACILITY	50	intermittent emission testing
FACILITY	41	monitoring of process or control device parameters
		as surrogate
0-U0001/E0001/OIL	80	monitoring of process or control device parameters
·		as surrogate
0-U0003/E0003/2FO/S0007	83	monitoring of process or control device parameters
		as surrogate
FACILITY	42	intermittent emission testing
THOTELT	10	incermitteent emission testing



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

FACILITY	43	intermittent emission testing
FACILITY	44	record keeping/maintenance procedures
FACILITY	45	record keeping/maintenance procedures
FACILITY	46	monitoring of process or control device parameters as surrogate
FACILITY	47	monitoring of process or control device parameters as surrogate

Basis for Monitoring

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

Condition # 5 for 6 NYCRR 201-6.2 (d) (3) (i): This condition is an emission unit level, emission point level, process level and emission source/control level condition for This facility 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:

All emissions of pollutants for which the facility is major, all emissions of regulated air pollutants, and all emissions of persistent, bioaccumulative and toxic compounds listed in Table 1 of Subpart 201-9 of this Part. The permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, emission point and process, except where such units are listed as exempt or trivial under Subpart 201-3 of this Part. The applicant shall submit additional information related to the emissions of regulated air pollutants sufficient to verify which Federal requirements are applicable to the facility.

Ethylene Oxide (EtO) is listed as a persistent, bioaccumulative and toxic compound in Table 1 of Subpart 201-9. Therefore; the facility must include the EtO gas sterilization unit (a sterilizer and an abator) as a process in the Title V Permit, according to 6 NYCRR 201-6.2(d)(3)(i).

The facility will keep records of the sterilization unit operation (usage) on-site, via logbooks and purchasing records. Records must be kept on site for five (5) years.

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



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Condition # 7 for 6NYCRR Part 202-2.1: This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. This condition sets forth the applicability criteria for submitting an annual statement of emissions. The criteria is based on annual emission threshold quantities and ozone attainment designation. This condition is a requirement for all Title V facilities. These facilities must submit an annual emission statement by April 15th of each year for emissions of the previous calendar year.

Condition # 14 for 6 NYCRR 201-3.2 (a): This condition is facility-wide condition for Work Practice Involving Specific Operations for Operating Hours of 500 Hours per year limit.

This condition lists the specific activities which may be exempt from the permitting provisions of this Part.

As proof of exempt eligibility for the emergency generators, the facility must maintain a monthly records which demonstrate that each engine is operated less than 500 hours per year, on a 12-month rolling total basis.

The four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators are exempt from NYSDEC permitting in accordance with 6 NYCRR 201-3.1(b) and 3.2(c) (6) and each one is limited to operating 500 hours per year in order to be considered exempt.

A stationary internal combustion engine that operates as a mechanical or electrical power source only when the usual supply of power is unavailable, and operates for no more than 500 hours per year. The 500 hours of annual operation for the engine include operation during emergency situations, routine maintenance, and routine exercising (for example, test firing the engine for one hour a week to ensure reliability). A stationary internal combustion engine used for peak shaving generation is not an emergency power generating stationary internal combustion engine.

Condition # 22 for 6 NYCRR 201-3.2 (c): This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work Practice Involving Specific Operations for Operating Hours of 500 Hours per year limit.

This condition lists the specific activities which may be exempt from the permitting provisions of this Part.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

The four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators are exempt from NYSDEC permitting in accordance with 6 NYCRR 201-3.1(b) and 3.2(c) (6) and each one is limited to operating 500 hours per year in order to be considered exempt.

A stationary internal combustion engine that operates as a mechanical or electrical power source only when the usual supply of power is unavailable, and operates for no more than 500 hours per year. The 500 hours of annual operation for the engine include operation during emergency situations, routine maintenance, and routine exercising (for example, test firing the engine for one hour a week to ensure reliability). A stationary internal combustion engine used for peak shaving generation is not an emergency power generating stationary internal combustion engine.

Condition # 24 for 6 NYCRR 201-6.2 (d) (3) (i): This condition is an emission unit level, emission point level, process level and emission source/control level condition for Record Keeping/Maintenance Procedures for Ethylene Oxide that applies to EU: 0-U0006, EP: 0ETO1, Proc: ETO & ES/C: ETO01 & ETO1C.

All emissions of pollutants for which the facility is major, all emissions of regulated air pollutants, and all emissions of persistent, bioaccumulative and toxic compounds listed in Table 1 of Subpart 201-9 of this Part. The permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, emission point and process, except where such units are listed as exempt or trivial under Subpart 201-3 of this Part. The applicant shall submit additional information related to the emissions of regulated air pollutants sufficient to verify which Federal requirements are applicable to the facility.

Condition # 28 for 6 NYCRR 201-7.1, Capping out of 6 NYCRR 227-2.4 (c) (1) (ii) and 6 NYCRR 227-2.5 (a): This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Unit: 0-U0001, Emission Point: E0001, Process: OIL, and Emission Sources/Controls: S0001, S0002, S0003, S0004 & S0005 for Oxides of Nitrogen for Work Practice Involving Specific Operations for a limit of 4900 hours between May 1 and September 30.

This condition is for the five 42 MM Btu/hr each Combustion Engineering boilers (Emission Sources S0001, S0002, S0003, S0004 & S0005) operating on natural gas (Process NG1) and on #2 fuel oil (Process FO2), and the three 3.0 MM Btu/hr each Fulton boilers (Emission Sources S0008, S0009 & S0010) operating on natural gas (Process GAS) and on #2 fuel oil (Process OIL).



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Condition # 29 for 6 NYCRR 201-7.1, Capping out of 6 NYCRR 231-2: This is a facility-wide condition. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen. 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 in a state facility permit.

This facility is capping out of NSR (6 NYCRR 231-2) to limit the NOx emissions to 225 tons per year (tpy) for Oxides of Nitrogen. This cap will also effectively limit the emissions of all other regulated pollutants to less than 225 tpy.

Condition # 30 for 6 NYCRR 201-7.1, Capping out of 40 CFR 52.21 (j): This is a facility-wide condition. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Sulfur Dioxide.

This condition for 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 in a state facility permit.

This facility is capping out of PSD (40 CFR 52-A.21) to limit the SO2 emissions to 225 tons per year (tpy) for Sulfur Dioxide. This cap will also effectively limit the emissions of all other regulated pollutants to less than 225 tpy.

Condition # 32 for 6 NYCRR 212.2: This condition is an emission unit level, emission point level, process level and emission source/control level condition for Intermittent Emission Testing for Ethylene Oxide that applies to EU: 0-U0006, EP: 0ETO1, Proc: ETO & ES/C: ETO01 & ETO1C. This condition is for Intermittent Emission Testing for Ethylene Oxide and applies to ES/C: ETO01 & ETO1C (2.3 cubic feet Anprolene EtO Abator, Model AN5100).

This condition requires compliance with the degree of control specified in Tables 2, 3 and 4 for existing (on or before July 1, 1973) process emission sources. This condition requires the facility to comply with either 99% or greater air cleaning or BACT is required for EtO emission from this sterilizer. This condition requires the EtO abator to be in operation whenever EtO sterilization is conducted.

Each sterilization cycle is 12 hours, and there are 2 cycles per day. Each ETO sterilization cycle is 12 hours, and each cycle uses 17.5 grams. The limit is 100 capsules/year based on 2 capsules/day maximum operation. EtO Sterilizer will be operated twice a day, five days a week, and 52 weeks a year.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Compliance of the EtO gas emissions from the sterilizer to the atmosphere with the limit of 0.000193 pounds per hour in Emission Point 0ETO1and Emission Unit 0-U0006 is to be verified with a stack test once during the term of the permit.

Condition # 33 for 6 NYCRR 212.2: This condition is an emission unit level, emission point level, process level and emission source/control level condition for Work Practice Involving Specific Operations for Ethylene Oxide that applies to EU: 0-U0006, EP: 0ETO1, Proc: ETO & ES/C: ETO01 & ETO1C. This condition is for Intermittent Emission Testing for Ethylene Oxide and applies to ES/C: ETO01 & ETO1C (2.3 cubic feet Anprolene EtO Abator, Model AN5100).

This condition requires compliance with the degree of control specified in Tables 2, 3 and 4 for existing (on or before July 1, 1973) process emission sources. This condition requires the facility to comply with either 99% or greater air cleaning or BACT is required for EtO emission from this sterilizer. This condition requires the EtO abator to be in operation whenever EtO sterilization is conducted.

Each sterilization cycle is 12 hours, and there are 2 cycles per day. Each ETO sterilization cycle is 12 hours, and each cycle uses 17.5 grams. The limit is 100 capsules/year based on 2 capsules/day maximum operation. EtO Sterilizer will be operated twice a day, five days a week, and 52 weeks a year.

Compliance of the EtO gas emissions from the sterilizer to the atmosphere with the limit of 0.000193 pounds per hour in Emission Point 0ETO1and Emission Unit 0-U0006 is to be verified with a stack test once during the term of the permit.

Condition # 34 for 6 NYCRR 212.3 (a): This condition is an emission unit level, emission point level, process level and emission source/control level condition for Ethylene Oxide that applies to EU: 0-U0006, EP: 0ETO1, Proc: ETO & ES/C: ETO01 & ETO1C. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Ethylene Oxide and applies to ES/C: ETO01 & ETO1C (2.3 cubic feet Anprolene EtO Abator, Model AN5100).

This condition requires compliance with the degree of control specified in Tables 2, 3 and 4 for existing (on or before July 1, 1973) process emission sources. This condition requires the facility to comply with either 99% or greater air cleaning or BACT is required for EtO emission from this sterilizer. This condition requires the EtO abator to be in operation whenever EtO sterilization is conducted.

Each sterilization cycle is 12 hours, and there are 2 cycles per day. Each ETO sterilization cycle is 12 hours, and each cycle uses 17.5 grams. The limit is 100



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

capsules/year based on 2 capsules/day maximum operation. EtO Sterilizer will be operated twice a day, five days a week, and 52 weeks a year.

Compliance of the EtO gas emissions from the sterilizer to the atmosphere with the limit of 0.000193 pounds per hour in Emission Point 0ETO1 and Emission Unit 0-U0006 is to be verified with a stack test once during the term of the permit.

Condition # 35 for 6 NYCRR 212.6 (a): This condition is an emission unit level, emission point level, process level and emission source/control level condition for Ethylene Oxide that applies to EU: 0-U0006, EP: 0ETO1, Proc: ETO & ES/C: ETO01 & ETO1C. This condition is for Record Keeping/Maintenance Procedures for Ethylene Oxide and applies to ES/C: ETO01 & ETO1C (2.3 cubic feet Anprolene EtO Abator, Model AN5100).

The facility is required to comply with the opacity limitation of less than 20% for any six consecutive minute period for all process emission sources.

Condition # 36 for 6 NYCRR 212.9 (b): This condition is an emission unit level, emission point level, process level and emission source/control level condition for Ethylene Oxide that applies to EU: 0-U0006, EP: 0ETO1, Proc: ETO & ES/C: ETO01 & ETO1C. This condition is for Record Keeping/Maintenance Procedures for Ethylene Oxide and applies to ES/C: ETO01 & ETO1C (2.3 cubic feet Anprolene EtO Abator, Model AN5100).

This section refers to Table 2 which specifies the degree of control required for Gases and Liquid Particulate Emissions (Environmental Rating of A, B, C or D) and Solid Particulate Emissions (Environmental Rating A or D) but excluding Volatile Organic Compound Emissions in the New York City Metropolitan Area.

The ETO abator (Anprolene EtO Abator, Model AN5100) must be in operation whenever EtO sterilization is conducted. The emission control (abator) removes 99% EtO from the exhaust of the sterilization unit. The operation of the ethylene oxide abator is monitored for compliance in accordance with manufacturer's instructions. The owner/operator shall maintain a log containing the following information:

- 1. The date and the number of sterilization loads.
- 2. The quantity of sterilization gas used in pounds per hour, per day and per year.
- 3. The date and time of sterilizer and/or abator malfunctions and maintenance.
- 4. Records are to be maintained on site for a period of five (5) years.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Condition # 37 for 6 NYCRR 225-1.2 (f): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for sulfur content limit of 0.0015 percent by weight. The distillate fuel oil (#2 heating oil) purchase is limited to 0.0015 percent sulfur by weight on or after July 1, 2012. Compliance with this limit will be based on vendor certifications.

Condition # 38 for 6 NYCRR 225-1.2 (g): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for sulfur content limit of 0.0015 percent by weight. The distillate fuel oil (#2 heating oil) purchase is limited to 0.0015 percent sulfur by weight on or after July 1, 2014. Compliance with this limit will be based on vendor certifications.

Condition # 39 for 6 NYCRR 225-1.2 (h): This is a facility-wide condition. This condition is for Work Practice Involving Specific Operations for sulfur content limit of 0.0015 percent by weight. The distillate fuel oil (#2 heating oil) firing is limited to 0.0015 percent sulfur by weight on or after July 1, 2016. Compliance with this limit will be based on vendor certifications.

Condition # 40 for 6 NYCRR 225-1.6: This is a facility-wide condition. This condition is for Record Keeping/Maintenance Procedures. The owner or operator of a facility which purchases and fires coal or oil shall submit reports to the commissioner containing a fuel analysis, information on the quantity of the fuel received, burned, and results of any stack sampling, stack monitoring and any other procedures to ensure compliance with the provisions of 6 NYCRR Part 225-1. All records shall be available for a minimum of three years.

Condition # 41 for 6 NYCRR 227-1.3(a): This is a facility-wide condition. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Opacity. This condition prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20 % opacity except for one sixminute period per hour of not more than 27 % opacity. These conditions require a daily inspection for visible emissions. If visible emissions are noted for two consecutive days, a Method 9 test must be performed.

Condition # 42 for 6 NYCRR 227-2.4 (c) (1) (ii): This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: 0-TEMP1 & 0-U0007, Emission Points: TMPBL & E0007, Processes: 2FT & 2F7, and Emission Sources/Controls: TMPB1, TMPB2, S0011, S0012, S0013, S0014 & S0015 for Oxides of Nitrogen for Intermittent Emission Testing for Oxides of Nitrogen.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

This condition is for the five 50 MM Btu/hr each new boilers (Emission Sources S0001, S0002, S0003, S0004 & S0005) operating on natural gas (Process GAS) and on #2 fuel oil (Process OIL) and the new 50 MM Btu/hr temporary boiler to verify the NOx emission limit compliance. A mid-size boiler is a boiler with a maximum heat input capacity greater than 25 million Btu per hour and equal to or less than 100 million Btu per hour.

On or after July 1, 2014, the owner/operator of mid-size boilers (> 25 and equal to or <100 MM Btu/hr) boilers operating on residual oil/natural gas have a limit of 0.08 pounds of NOx per million Btus under the NOx RACT plan for mid-size boilers.

Condition # 43 for 6 NYCRR 227-2.4 (c) (1) (ii): This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Unit: 0-U0001, Emission Point: E0001, Processes: GAS & OIL, and Emission Sources/Controls: S0001, S0002, S0003, S0004 & S0005 for Oxides of Nitrogen for Intermittent Emission Testing for Oxides of Nitrogen.

This condition is for the five 42 MM Btu/hr each Combustion Engineering boilers (Emission Sources S0001, S0002, S0003, S0004 & S0005) operating on natural gas (Process GAS) and on #2 fuel oil (Process OIL) to verify the NOx emission limit compliance. A mid-size boiler is a boiler with a maximum heat input capacity greater than 25 million Btu per hour and equal to or less than 100 million Btu per hour.

On or after July 1, 2014, the owner/operator of mid-size boilers (> 25 and equal to or <100 MM Btu/hr) boilers operating on residual oil/natural gas have a limit of 0.20 pounds of NOx per million Btus under the NOx RACT plan for mid-size boilers.

Fuel switching NOx RACT compliance option: A facility that recently has been firing # 6 fuel oil/gas can opt to switch to #2 fuel oil/gas and still will require to meet the new NOx emission limit of # 6 fuel oil/gas only and not the new # 2 fuel oil/gas emission limit, even though they will be firing #2 fuel oil, which is a cleaner fuel and it is their option to burn. For example, a mid-size boiler that recently has been firing #6 fuel oil/gas will require to meet 0.2 lbs/MM Btus upon switching to # 2 fuel oil/gas and not the 0.08 lb/MM Btus which is for the #2 fuel oil.

Condition # 44 for 6 NYCRR 227-2.4(d): This condition is an emission unit level, emission point level, process level and emission source level condition for Record Keeping/Maintenance Procedures for Oxides of Nitrogen that applies to EU:0-U0004, Emission Points: 0NAB1, 0NAB2 & 0NAB & E0003, Processes: FO2 & NG1, and Emission Sources: S0008, S0009 & S0010.

This condition is for the NOx RACT condition for small boilers (those with a heat input more than 1 and less than or equal to 25 MM Btu/hr) and applies to the three 3.0 MM



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Btu/hr Fulton boilers. A boiler tune-up shall be performed annually to these three boilers. The facility is required to tune-up each boiler at least once a year in order to ensure that the boiler is operating properly, thus minimizing the emissions to the atmosphere. The owner or operator of a small boiler (between 1 and 25 MM Btu/hr) shall maintain a log (in the format acceptable to the Department as in Air Guide 5 - DAR-5) containing the following information:

- (1) The date which the equipment was adjusted; and
- (2) The name, title, and affiliation of the person who adjusted the equipment.

Annual tune-up maintenance usually includes not only some aspects of daily, weekly, and monthly scheduled maintenance, but also focuses on tests, evaluations and adjustments necessary for efficient combustion. Annual tune-up maintenance requirements must include a tune-up checklist (see Appendix A of Air Guide 5) and written procedures.

Condition # 45 for 6 NYCRR 227-2.4(d): This condition is an emission unit level, emission point level, process level and emission source level condition for Record Keeping/Maintenance Procedures for Oxides of Nitrogen that applies to EU:0-U0003, Emission Point: E0003, Processes: 2FO & NAT, and Emission Source: S0007.

This condition is for the NOx RACT condition for small boilers (those with a heat input more than 1 and less than or equal to 25 MM Btu/hr) and applies to the three 3.0 MM Btu/hr Fulton boilers. A boiler tune-up shall be performed annually to these three boilers. The facility is required to tune-up each boiler at least once a year in order to ensure that the boiler is operating properly, thus minimizing the emissions to the atmosphere. The owner or operator of a small boiler (between 1 and 25 MM Btu/hr) shall maintain a log (in the format acceptable to the Department as in Air Guide 5 - DAR-5) containing the following information:

- (1) The date which the equipment was adjusted; and
- (2) The name, title, and affiliation of the person who adjusted the equipment.

Annual tune-up maintenance usually includes not only some aspects of daily, weekly, and monthly scheduled maintenance, but also focuses on tests, evaluations and adjustments necessary for efficient combustion. Annual tune-up maintenance requirements must include a tune-up checklist (see Appendix A of Air Guide 5) and written procedures.

Condition #46 for 6 NYCRR 227-2.5 (a): This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: 0-TEMP1 & 0-U0007, Emission Points: TMPBL & E0007, Processes: 2FT, NGT, 2F7 & NG7, and Emission Sources/Controls: TMPB1, TMPB2, S0011,



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

S0012, S0013, S0014 & S0015 for Monitoring of Process or Control Device Parameters as Surrogate for Oxides of Nitrogen.

This condition is for the two 50 MM Btu/hr each temporary boilers (Emission Sources TMPB1 & TMPB2) operating on natural gas (Process NG2) and on #2 fuel oil (Process 2FT), and the three 50 MM Btu/hr each new boilers (Emission Sources S0011, S0012, S0013, S0014 & S0015) operating on natural gas (Process NG7) and on #2 fuel oil (Process 2F7).

This condition is for Oxides of Nitrogen and a NOx RACT emission limit of 0.20 pounds per million Btus on or after July 1, 2014. Due to the Fuel switching NOx RACT compliance option, the NOx RACT emission limit is 0.08 pounds per million Btus on or after July 1, 2014.

Condition #47 for 6 NYCRR 227-2.5 (a): This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Unit: 0-U0001, Emission Point: E0001, Processes: GAS & OIL, and Emission Sources/Controls: S0001, S0002, S0003, S0004 & S0005 for Oxides of Nitrogen for Intermittent Emission Testing for Oxides of Nitrogen.

This condition is for the five 42 MM Btu/hr each Combustion Engineering boilers (Emission Sources S0001, S0002, S0003, S0004 & S0005) operating on natural gas (Process GAS) and on #2 fuel oil (Process OIL) to verify the NOx emission limit compliance. A mid-size boiler is a boiler with a maximum heat input capacity greater than 25 million Btu per hour and equal to or less than 100 million Btu per hour.

On or after July 1, 2014, the owner/operator of mid-size boilers (> 25 and equal to or <100 MM Btu/hr) boilers operating on residual oil/natural gas have a limit of 0.20 pounds of NOx per million Btus under the NOx RACT plan for mid-size boilers.

Fuel switching NOx RACT compliance option: A facility that recently has been firing # 6 fuel oil/gas can opt to switch to #2 fuel oil/gas and still will require to meet the new NOx emission limit of # 6 fuel oil/gas only and not the new # 2 fuel oil/gas emission limit, even though they will be firing #2 fuel oil, which is a cleaner fuel and it is their option to burn. For example, a mid-size boiler that recently has been firing #6 fuel oil/gas will require to meet 0.2 lbs/MM Btus upon switching to # 2 fuel oil/gas and not the 0.08 lb/MM Btus which is for the #2 fuel oil.

Condition # 48 for 6 NYCRR 227.2 (b) (1): This condition is an emission unit level, emission point level, process level and emission source condition for Intermittent Emission Testing for Particulates that applies to EU: 0-U0007, EP: E0007, Process: 2F7 and



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Emission Sources: S0011, S0012, S0013, S0014 7 S0015. This condition is from the 1972 version of Part 227 and still remains as part of New York's SIP. This condition establishes a particulate limit of 0.10 lbs/MM Btu based on a 2 hour average emission for any oil fired stationary combustion installation.

Condition # 49 for 6 NYCRR 227.2 (b) (1): This condition is an emission unit level, emission point level and process level condition for Intermittent Emission Testing for Particulates that applies to EU: 0-TEMP1, EP: TMPB1, Process: 2FT and Emission Sources: TMPB1 & TMPB2. This condition is from the 1972 version of Part 227 and still remains as part of New York's SIP. This condition establishes a particulate limit of 0.10 lbs/MM Btu based on a 2 hour average emission for any oil fired stationary combustion installation.

Condition # 50 for 6 NYCRR 227.2 (b) (1): This condition is an emission unit level, emission point level and process level condition for Intermittent Emission Testing for Particulates that applies to EU: 0-U0001, EP: E0001, Process: OIL and Emission Sources: S0001, S0002, S0003, S0004 & S0005. This condition is from the 1972 version of Part 227 and still remains as part of New York's SIP. This condition establishes a particulate limit of 0.10 lbs/MM Btu based on a 2 hour average emission for any oil fired stationary combustion installation.

Condition # 52 for 40 CFR 60.4202 (a)(2), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Unit: 0-U0005, Emission Points: 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Process: GN1, and Emission Sources/Controls: GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

This condition 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.

Condition # 53 for 40 CFR 60.4205 (b), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

This condition 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.

Condition # 56 for 40 CFR 60.4211 (c), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

This condition 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 40 CFR 60.4204 (b) or 40 CFR 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 40 CFR 60.4205 (c), must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204 (b), or 40 CFR 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 in 40 CFR 60 Subpart IIII for major pollutants will be sent to the Department prior to commencement of operation of the engines.

Condition #57 for 40 CFR 60.4211 (e), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: 0-U0004 & 0-U0005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Monitoring of Process or Control Device Parameters as Surrogate for Hours of Operation.

This condition is for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators and each one is limited to operating 500 hours per year. This condition lists the compliance options for



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

modified and reconstructed compression ignition engines that must comply with emission standards. Maintenance checks, readiness and readiness testing of the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generator are exempt from NYSDEC permitting in accordance with 6 NYCRR 201-3.1(b) and 3.2(c)(6) and each ICE generator is limited to 100 hours per year for maintenance checks, readiness and readiness testing.

Condition # 58 for 40 CFR 60.4214, NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

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.

Condition # 61 for 40 CFR 63.6585, NSPS Subpart ZZZZ: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

This condition details what criteria are used to determine if a reciprocating internal combustion engine is subject to the provisions of this NESHAP rule. If the engine is meets the rule's definition of reciprocating internal combustion engine, and is located at a facility that emits at least 10 tons of a single hazardous air pollutant or 25 tons of all hazardous air pollutants, then the engine will need to meet the provisions in this rule.

Condition # 62 for 40 CFR 63.6603 (a), NSPS Subpart ZZZZ: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

These conditions list the emission limits, operating limits, and work practices that existing engines located at an area source of HAP emissions must meet.

The engines must meet work practices, emission limits, and operating limits on carbon monoxide or formaldehyde for the specific type of engine listed in table 2d of subpart ZZZZ.

Condition # 63 for 40 CFR 63.6603 (a), NSPS Subpart ZZZZ: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

These conditions list the emission limits, operating limits, and work practices that existing engines located at an area source of HAP emissions must meet.

The engines must meet work practices, emission limits, and operating limits on carbon monoxide or formaldehyde for the specific type of engine listed in table 2d of subpart ZZZZ.

Condition # 64 for 40 CFR 63.6625 (e), NSPS Subpart ZZZZ: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

This condition requires the owners or operator of an existing stationary RICE with a site rating of less than 100 brake HP located at a major source of HAP emissions, an existing stationary emergency RICE, or an existing stationary RICE located at an area source of HAP emissions must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop their own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

Condition # 65 for 40 CFR 63.6640 (f), NSPS Subpart ZZZZ: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

This condition states the operation requirements for emergency engines.

Condition # 66 for 40 CFR 63.6640 (f), NSPS Subpart ZZZZ: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

This condition states the operation requirements for emergency engines.

Condition # 68 for 40 CFR 63.6665, NSPS Subpart ZZZZ: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

This condition specifies which provisions of the General provisions (Subpart A of 40 CFR 63) apply to the owner or operators of stationary internal combustion engines at facilities with emissions of hazardous air pollutants.

Condition # 69 for 40 CFR 80.510 (b), Subpart I: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: 0-U0004 & 0-U0005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Monitoring of Process or Control Device Parameters as Surrogate for Sulfur Dioxide.

This condition is for motor vehicle diesel fuel: non-road, locomotive and marine diesel fuel for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators.

This condition requires that beginning June 1, 2010: Except as otherwise specifically provided in 40 CFR 80 Subpart I, all nonroad and locomotive marine diesel fuel is subject to the following per-gallon standards for sulfur content:

15 ppm maximum for NR diesel fuel.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Condition # 70 for 40 CFR 89.112, Subpart B: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: 0-U0004 & 0-U0005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work Practice Involving Specific Operations for 40 CFR 60 Subpart IIII – NMHC + NOx for a limit of 6.4 grams per kilowatt hour.

This condition is for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators for 40 CFR 60 Subpart IIII – NMHC + NOx.

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

This condition sets forth the limits for 40 CFR 60 Subpart IIII – NMHC + NOx as 6.4 grams per kilowatt hour maximum in diesel oil from the exhaust of compression-ignition nonroad engines.

Condition # 71 for 40 CFR 89.112, Subpart B: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work Practice Involving Specific Operations for Carbon Monoxide.

This condition is for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators for Carbon Monoxide.

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

This condition sets forth the limits for Carbon Monoxide as 3.5 grams per kilowatt hour maximum in diesel oil from the exhaust of compression-ignition nonroad engines.

Condition # 72 for 40 CFR 89.112, Subpart B: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work Practice Involving Specific Operations for Particulates.

This condition is for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators for Particulates.

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

This condition sets forth the limits for Particulates as 0.2 grams per kilowatt hour maximum in diesel oil from the exhaust of compression-ignition nonroad engines.

Condition # 73 for 40 CFR 89.112, Subpart B: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work Practice Involving Specific Operations for Particulates.

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

Condition # 74 for 40 CFR 89.112, Subpart B: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work Practice Involving Specific Operations for Hours of Operation.

This condition is for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators.

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

This condition sets forth the limits for hours of operation as 100 hours maximum in diesel oil from the exhaust of compression-ignition nonroad engines.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Condition # 75 for 40 CFR 89.112, Subpart B: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work Practice Involving Specific Operations for Particulates for Opacity.

This condition is for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators.

This condition sets forth the limits for opacity as percent maximum in diesel oil from the exhaust of compression-ignition nonroad engines.

Condition # 80 for 6 NYCRR 227-1.3(a): This condition is an emission unit level, emission point level and process level monitoring condition for Particulates and opacity that applies to EU: 0-U0001, EP: E0001 and Process OIL. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Opacity. This condition prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20 % opacity except for one six-minute period per hour of not more than 27 % opacity. These conditions require a daily inspection for visible emissions. If visible emissions are noted for two consecutive days, a Method 9 test must be performed.

Condition # 82 for 40 CFR 60.42c(d), NSPS Subpart Dc: This condition is an emission unit level, process level and emission source level Record Keeping/Maintenance Procedures condition for Sulfur Dioxide that applies to EU: 0-U0003, Proc: 2FO, and ES: S0007.

This condition requires that on or after the date on which the initial performance test is completed or required to be completed under section 60.8 of 40 CFR 60 Subpart A, no owner or operator of an affected facility that combusts oil, shall combust oil with a sulfur content in excess of 0.5 percent by weight.

Condition # 83 for 6 NYCRR 227-1.3(a): This condition is an emission unit level, emission point level process level and emission source level monitoring condition for Particulates and opacity that applies to EU: 0-U0003, EP: E0003, Process 2FO and ES: S0007. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Opacity. This condition prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20 % opacity except for one six-minute period per hour of not more than 27 % opacity. These conditions



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

require a daily inspection for visible emissions. If visible emissions are noted for two consecutive days, a Method 9 test must be performed.

Condition # 90 for 40 CFR 60.44c(h), NSPS Subpart Dc: This condition is an emission unit level, emission point level process level and emission source level monitoring condition Monitoring of Process or Control Device Parameters as Surrogate that applies to EU: 0-U0003, EP: E0003, Process 2FO and ES: S0007.

This condition requires facilities demonstrating compliance through vender certification to follow the compliance procedures listed in the appropriate paragraphs of 40 CFR 60-Dc.48c.

Condition # 92 for 40 CFR 60.48c(d), NSPS Subpart Dc: This condition is an emission unit level, emission point level, process level and emission source level Record Keeping/Maintenance Procedures condition for Sulfur Dioxide that applies to EU: 0-U0003, EP: E0003, Proc: 2FO, and ES: S0007.

This condition requires the owner or operator of the facility subject to the SO2 emission limits, fuel oil sulfur limits, or percent reduction requirements under §60.42c, to submit semi-annual reports to the EPA

Condition # 93 for 40 CFR 60.48c(e)(1), NSPS Subpart Dc: This condition is an emission unit level, emission point level, process level and emission source level Record Keeping/Maintenance Procedures condition for Sulfur Dioxide that applies to EU: 0-U0003, EP: E0003, Proc: 2FO, and ES: S0007.

This condition sets forth the reporting and recordkeeping provisions for facilities subject to a sulfur-in-fuel standard, sulfur dioxide emission limit, or percent reduction of sulfur dioxide emissions.

Condition # 94 for 40 CFR 60.48c(e)(2), NSPS Subpart Dc: This condition is an emission unit level, emission point level, process level, and emission source level Record Keeping/Maintenance Procedures condition for Sulfur Dioxide that applies to EU: 0-U0003, EP: E0003, Proc: 2FO, and ES: S0007.

This condition sets forth the reporting and recordkeeping provisions for facilities subject to a sulfur-in-fuel standard, sulfur dioxide emission limit, or percent reduction of sulfur dioxide emissions.

Condition # 95 for 40 CFR 60.48c(e)(3), NSPS Subpart Dc: This condition is an emission unit level, emission point level, process level, and emission source level Record



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Keeping/Maintenance Procedures condition for Sulfur Dioxide that applies to EU: 0-U0003, EP: E0003, Proc: 2FO, and ES: S0007.

This condition sets forth the reporting and the recordkeeping provisions for facilities subject to a sulfur-in-fuel standard, sulfur dioxide emission limit, or percent reduction of sulfur dioxide emissions.

Condition # 96 for 40 CFR 60.48c(e)(11), NSPS Subpart Dc: This condition is an emission unit level, emission point level, process level, and emission source level Record Keeping/Maintenance Procedures condition for Sulfur Dioxide that applies to EU: 0-U0003, EP: E0003, Proc: 2FO, and ES: S0007.

This condition specifies that if fuel supplier certifications are used to demonstrate compliance with the distillate oil specifications under 40 CFR 60-Dc.41c, then reports shall include a certified statement signed by the owner or operator that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

Condition # 97 for 40 CFR 60.48c(g), NSPS Subpart Dc: This condition is an emission unit level, emission point level, process level and emission source level Record Keeping/Maintenance Procedures condition for Sulfur Dioxide that applies to EU: 0-U0003, EP: E0003, Proc: 2FO, and ES: S0007.

This condition requires the owner or operator of each affected facility to record and maintain records of the amount of each fuel combusted during each day.

Condition # 98 for 40 CFR 60.48c(i), NSPS Subpart Dc: This condition is an emission unit level, emission point level, process level and emission source level Record Keeping/Maintenance Procedures condition for Sulfur Dioxide that applies to EU: 0-U0003, EP: E0003, Proc: 2FO, and ES: S0007.

This condition requires the source owner or operator to retain all records for a minimum of two years for compliance with the NSPS. This does not supersede any requirement that is more stringent, including the Title V requirement to maintain records for a minimum of 5 years.

Condition # 99 for 40 CFR 60.4207(b), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Practice Involving Specific Operations for Aromatic Content with a limit of 35 percent in the diesel fuel.

This condition is for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators.

Condition # 100 for 40 CFR 60.4207(b), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work Practice Involving Specific Operations for Cetane Index of a minimum of 40 ratio in the diesel fuel oil.

This condition is for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators.

This condition states the fuel requirements for compression ignition stationary engines with a displacement of less than 30 liters per cylinder. The diesel fuel oil shall have a minimum Cetane Index of 40 ratio in the diesel fuel oil.

Condition # 101 for 40 CFR 60.4207(b), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Work Practice Involving Specific Operations for Sulfur Content of a maximum of 15 parts per million by weight.

This condition is for the four 750 KW each Cummins (Emission Sources GEN02, GEN03, GEN04 & GEN05), the 1500 KW Cummins (emission Source GEN01), and the 2000 KW Balder (Emission Source TEMPG) diesel fuel emergency generators.

This condition states the fuel requirements for compression ignition stationary engines with a displacement of less than 30 liters per cylinder. The diesel fuel oil shall have a maximum sulfur content of 15 parts per million by weight.

Condition # 102 for 40 CFR 60.4209(a), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4,



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

This condition requires 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.

Condition # 103 for 40 CFR 60.4211(a), NSPS Subpart IIII: This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Units: U-00004 & U-00005, Emission Points: 0NAB4, 0GEN2, 0GEN3, 0GEN4, 0GEN5 & 0TEMP, Processes GEN & GN1, and Emission Sources/Controls: GEN01, GEN02, GEN03, GEN04, GEN05 & TEMPG for Record Keeping/Maintenance Procedures.

This condition 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.

Condition # 104 for 6 NYCRR 201-6.2 (d) (3) (i): This condition is an emission unit level, emission point level, process level and emission source/control level condition for Ethylene Oxide that applies to EU: 0-U0006, EP: 0ETO1, Proc: ETO & ES: ETO01. This condition is for Record Keeping/Maintenance Procedures for Ethylene Oxide and applies to ES: ETO01 (2.3 cubic feet Anprolene EtO Abator, Model AN5100).

All emissions of pollutants for which the facility is major, all emissions of regulated air pollutants, and all emissions of persistent, bioaccumulative and toxic compounds listed in Table 1 of Subpart 201-9 of this Part. The permit application shall describe all emissions of regulated air pollutants emitted from any emissions unit, emission point and process, except where such units are listed as exempt or trivial under Subpart 201-3 of this Part. The applicant shall submit additional information related to the emissions of regulated air pollutants sufficient to verify which Federal requirements are applicable to the facility.

Ethylene Oxide (EtO) is listed as a persistent, bioaccumulative and toxic compound in Table 1 of Subpart 201-9. Therefore; the facility must include the EtO gas sterilization unit (a sterilizer and an abator) as a process in the Title V Permit, according to 6 NYCRR 201-6.2(d)(3)(i).

The facility will keep records of the sterilization unit operation (usage) on-site, via logbooks and purchasing records. Records must be kept on site for five (5) years.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Condition # 108 for 6 NYCRR 219-4: This condition is an emission unit level, emission point level, process level and emission source level Record Keeping/Maintenance Procedures condition for Particulates that applies to EU: 0-U0002, EP: E0002, Proc: 002, and ES: S0006.

This condition sets forth the emission standards and requirements for all new and modified (after January 1, 1989) crematories and pathological waste incinerators.

Condition # 109 for 6 NYCRR 219-4.5(a): This condition is an emission unit level, emission point level, process level and emission source level monitoring condition for Particulates that applies to EU: 0-U0002, EP: E0002, Proc: 002, and ES: S0006. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Opacity.

This condition sets forth the emission standards of six-minute average opacity for the crematories, which is less than 10 percent.

Condition # 110 for 6 NYCRR 219-4.5(b): This condition is an emission unit level, emission point level, process level and emission source level monitoring condition for Particulates that applies to EU: 0-U0002, EP: E0002, Proc: 002, and ES: S0006. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Temperature.

This condition sets forth the secondary combustion chamber temperature of the crematories and pathological incinerator(s), which is described in section 219-4.4 of this subpart. The secondary combustion chamber temperature of the crematory cannot fall below 1800 degrees Fahrenheit at any time.

The secondary combustion chamber temperature of the crematory must be maintained at all times at 1800 degrees Fahrenheit that waste is being burned.

Condition # 111 for 6 NYCRR 219-4.5(b): This condition is an emission unit level, emission point level, process level and emission source level monitoring condition for Particulates that applies to EU: 0-U0002, EP: E0002, Proc: 002, and ES: S0006. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Temperature.

This condition sets forth the primary combustion chamber temperature of the crematories and pathological incinerator(s), which is described in section 219-4.4 of this subpart. The primary combustion chamber temperature of the crematory cannot fall below 1400 degrees Fahrenheit at any time.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

Condition # 112 for 6 NYCRR 219-4.7: This condition is an emission unit level, emission point level, process level and emission source level monitoring condition for Particulates that applies to EU: 0-U0002, EP: E0002, Proc: 002, and ES: S0006. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Temperature.

This condition sets forth the continuous emission monitoring (CEMs) requirements for the crematories, which are primary combustion chamber exit temperatures.

The continuous emission monitoring (CEMs) requirements for the crematories, which are primary combustion chamber exit temperature cannot fall below 1400 degrees Fahrenheit at any time using CEMs.

Any person who owns or operates a crematory facility must install, operate and maintain in accordance with manufacturer's instructions, instruments meeting specifications acceptable to the commissioner for continuously monitoring and recording the primary combustion chamber exit temperature. Temperature charts produced by the continuous monitor/recorder shall demonstrate compliance with the combustion operating temperature requirements. Any malfunction of the monitor or recorder shall be reported to the NYSDEC within 24 hours of occurrence and corrective action shall be implemented immediately. Records of operation, monitoring, maintenance and repair shall be kept onsite for five years and shall be readily available for NYSDEC review upon request.

Condition # 113 for 6 NYCRR 219-4.7: This condition is an emission unit level, emission point level, process level and emission source level monitoring condition for Particulates that applies to EU: 0-U0002, EP: E0002, Proc: 002, and ES: S0006. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for Temperature.

This condition sets forth the continuous emission monitoring (CEMs) requirements for the crematories, which are secondary (or last) combustion chamber exit temperatures.

The continuous exit temperature of the secondary (or last) combustion chamber temperature of the crematory cannot fall below 1800 degrees Fahrenheit at any time using CEMs.

Any person who owns or operates a crematory facility must install, operate and maintain in accordance with manufacturer's instructions, instruments meeting specifications acceptable to the commissioner for continuously monitoring and recording the secondary (or last) combustion chamber exit temperature. Temperature charts produced by the continuous monitor/recorder shall demonstrate compliance with the combustion operating temperature requirements. Any malfunction of the monitor or recorder shall be reported



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015

to the NYSDEC within 24 hours of occurrence and corrective action shall be implemented immediately. Records of operation, monitoring, maintenance and repair shall be kept onsite for five years and shall be readily available for NYSDEC review upon request.

Condition # 114 for 6 NYCRR 219-4.11: This condition is an emission unit level, emission point level, process level and emission source level monitoring condition for Particulates that applies to EU: 0-U0002, EP: E0002, Proc: 002, and ES: S0006. This condition is for Record Keeping/Maintenance Procedures.

This condition sets forth the Inspection and Reporting requirements for the crematories. Each owner or operator of a permitted crematory facility must inspect the facility annually and submit a report to the commissioner, certifying that the condition and operation of that facility, including the calibration of all instrumentation, meet manufacturer's specifications. Annual inspections shall be conducted by a qualified incinerator service technician. The Operation and Maintenance Manual for the JK Environmental SP-300 incinerator shall be utilized at all times and maintenance and calibration procedures performed shall be recorded.



Permit ID: 2-6104-00132/00009 Renewal Number: 3 08/06/2015