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.
Division of Air Resources
Permit Review Report

Permit ID: 2-6104-00132/00009
Renewal Number: 4
01/06/2021

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.)

<table>
<thead>
<tr>
<th>Criteria Pollutant</th>
<th>Attainment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter (PM)</td>
<td>ATTAINMENT</td>
</tr>
<tr>
<td>Particulate Matter&lt; 10µ in diameter (PM10)</td>
<td>ATTAINMENT</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO2)</td>
<td>ATTAINMENT</td>
</tr>
<tr>
<td>Ozone*</td>
<td>SEVERE NON-ATTAINMENT</td>
</tr>
<tr>
<td>Oxides of Nitrogen (NOx)**</td>
<td>ATTAINMENT</td>
</tr>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>ATTAINMENT</td>
</tr>
</tbody>
</table>

* 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 and medical center for health education, research, and patient care. The facility operates several sources of air pollution including boilers, hydrogen fuel cell for electricity production, emergency generators, fuel oil tanks and other exempt sources. The facility is an existing Air Title V facility permitted to operate a few emission sources, including five (5) identical Victory Energy boilers with a maximum heat input of 50 MM Btu/hr each in Emission Unit 0-U0007. The boilers are identified as Emission Sources S0011, S0012, S0013, S0014 & S0015. The five (5) boilers are dual-fuel fired, operating on natural gas (Process NG7) and #2 distillate fuel oil (Process 2F7), one boiler at 10.461 MM Btu/hr in Emission Unit U-00003, six (6) generators, and a 200 lbs/hr crematorium on site.

The following is a list of sources in operation, modified, removed and added/replaced. Sources are represented with their emission unit and emission sources.

Operational Emission Sources at the facility:

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. The secondary chamber combustion temperature in the crematorium is continuously monitored and recorded by a Honeywell UDC2000 Monitor/Honeywell DR4200GP Recorder.

Emission Unit 0-U0003 consists of Boilers 6, a 10.46 MM Btu/hr dual fuel fired boiler (Emission Source S0007). This boiler supplies steam/hot water in the Basic Science Building and burns 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 0-U0004 consists of Boilers 7, 8 & 9, 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 exempt 1500 KW emergency generator (Emission Source GEN01) burning #2 fuel oil (Process GEN). These emission sources are located at the new Public Health Academic Building (PHAB) or as previously was known as the "New Academic Building (NAB)". This generator has been reverted back to emergency operation only. The facility has submitted the EPA "certificate of conformity" for the 1500 KW Cummins emergency generator (Emission Source GEN01) burning #2 fuel oil (Process GEN), which is the manufacturer's certification of compliance with the EPA's emission standards specified in 40 CFR Subpart III for major pollutants. This 1500 KW emergency generator (Emission Source GEN01) is allowed to operate up to 500 hours annually, and is exempt according to 6 NYCRR 201-3.2 (c).

The flue gases from the three boilers (Emission Sources S0008, S0009 & S0010) exit through their individual stack, identified as Emission Points ONAB1, ONAB2 & ONAB3; respectively. The flue gases from the new 1500 KW emergency generator (Emission Source GEN01) exit through its individual stack, identified as Emission Point ONAB4.

Emission Unit 0-U0005 consists of four identical exempt 750 KW (1,141 bhp) Caterpillar Model C27 each exempt emergency generators (Emission Sources GEN02, GEN03, GEN04 & GEN05). These engines have been reverted back to emergency operation only. Each of these four exempt stationary generator is a diesel 2013 Caterpillar Model C27, compression ignition rated at 750 KW (1,141 bHP), and EPA Tier II emission level certified. Process GN1 is the combustion of diesel fuel in these 4 exempt emergency engines. All emergency generators meet the emission limitations found in 40 CFR 60 Subpart III. The facility has submitted the EPA "certificate of conformity" for each of the 4 replacement generators, which is the manufacturer's certification of compliance with the EPA's emission standards specified in 40 CFR Subpart III for major pollutants. Each generator will be operated a maximum of 500 hours/yr and is exempt according to 6 NYCRR 201-3.2 (c).

The flue gases from the four 750 KW each emergency generators (Emission Sources GEN02, GEN03, GEN04 & GEN05) exit through their individual stacks, identified as Emission Points OGEN2, OGEN3, OGEN4 & OGEN5; respectively.

There are also four (4) identical 275 gallon Day tanks located in the generator room and is used for these four emergency generators.

Emission Unit 0-U0007 is the main boiler plant and consists of Boilers 1, 2, 3, 4 & 5, five (5) identical Victory Energy VS-3 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 start-up date was 8/23/2019. The emissions from these five boilers are exhausted through the existing stack identified as Emission Point E0007. The NOx emissions are based on the stack test report, in which Boilers 4 & 5 were stack tested on 12/14/2018, and Boiler 1,2 & 3 were stack tested on 4/18/2019 for NOx and PM.

Emission Unit 0-EXMPT consists of a Bloom Energy 1.8 MW Hydrogen Fuel Cell Energy Saver 5 supplied with natural gas (Process FC1) to produce electricity for the campus. The fuel cell is 123.5 feet long, 24 feet wide, and 7 feet tall. Because of this, the fuel cell has twenty-six (26) points that will release emissions. This unit was installed on May 1, 2018. Associated with Emission Unit 0-EXMPT is Emission Point FC001, Process FC1 and Emission Source FC001.

The emission unit is exempt under 6 NYCRR 201-3.2(c)(46). The limited emission from the fuel cell is 26.81 lbs/yr of NOx and 250.71 lbs/yr of VOC. The Fuel Cell is in the Main Building/Campus, in the corner of Lenox Road and E 37th Street.

Removed or replaced Emission Sources at the facility:
Emission Unit 0-U0001, which consisted 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 operated on dual-fuel, natural gas (Process GAS) and #6 fuel oil (Process OIL). Three of the boilers were installed in 1954, one in 1966 and the other in 1970. The flue gases from these boilers exited through a common stack, identified as Emission Point E0001. The operation end date for these five (5) boilers was 2/15/2018.

Emission Unit 0-U0006, which would have consisted of an Ethylene Oxide Sterilization unit with an abator to sterilize medical equipment, was never installed.

Emission Unit 0-TEMP1, which consisted of two (2) temporary 50 MM Btu/hr (Emission Sources TMPB1 & TMPB2) which operated on natural gas (Process NGT) and #2 distillate fuel oil (Process 2FT), which provided steam and heat load during the boiler replacement project (beginning 12/1/2015). These two temporary boilers were removed on 10/1/2019.

The 2000 kw temporary generator (Emission Source TEMPG) in Emission Unit 0-U0005 was removed on 9/16/2019.

Added Emission Sources at the facility:

The facility has added one exempt emergency generator rated at 1,111 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 two small boilers (1.0 MM Btu/hr) each water heaters operating on natural gas only in the HSEB Nurse's Residence (<10 MM Btu/hr), fourteen (14) fuel oil storage tanks in the HSEB University Hospital Basic Science Study Nurse's Residence (<300,000 bbls), one hundred and twenty (120) ventilating and exhaust systems for laboratory operations campus-wide, and total of nine (9) emergency generators (operating <500 hours/yr) listed below as:

List of exempt emergency diesel generators:

One (1) 1500 KW Cummins emergency generator in the PHAB Building (Emission Unit 0-U0004), manufactured 9/2013, the EPA the "certificate of conformity" is available on file,

Four (4) identical 750 KW Caterpillar C27 each diesel generators in the Generator Plant (Emission Unit 0-U0005 - UHB CAT plant), manufactured on 6/24/2013, the EPA "certificate of conformity" is available on file,

Two 1,111 KW Cummins each generator in the BSB 8th Floor. The Cummins 2000 Model was manufactured pre 2007 and the EPA "certificate of conformity," is not available for pre 2007 stationary engines, and the other is Cummins QST30-G5 NR2, and was manufactured on 6/2017, the EPA "certificate of conformity" is available on file,

One (1) 500 KW Cummins 1988 Model emergency power generator in the HSEB Generator, manufactured in 1988. The EPA "certificate of conformity" is not available for pre 2007 stationary engines, and

One 35 KW Detroit Diesel generator in the Parking Garage, which will be removed when the garage is demolished. The anticipated date of demolition is 2020-21. Manufactured pre 2007, the EPA "certificate of conformity" is not available for pre 2007 stationary engines.
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 0U0005 - Emission Unit 0-U0005 consists of four 750 KW each emergency generators (Emission Sources GEN02, GEN03, GEN04 & GEN05). Each of the four emergency generators is a diesel 2013 Caterpillar 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).

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.

There are 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 ratio of 16.5: 1.0.

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

The facility has submitted data for the four (4) identical 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 III, 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):

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emissions @ 100% Load</th>
<th>Fuel Consumption @ 100% Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>5.25 g/HP-hr</td>
<td>202.9 L/hr or 53.6 gal/hr</td>
</tr>
<tr>
<td>CO</td>
<td>0.25 g/HP-hr</td>
<td></td>
</tr>
<tr>
<td>HC</td>
<td>0.03 g/HP-hr</td>
<td></td>
</tr>
<tr>
<td>PM</td>
<td>0.21 g/HP-hr</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Emissions (lb/hr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOx</td>
<td>15.83</td>
</tr>
<tr>
<td>CO</td>
<td></td>
</tr>
<tr>
<td>HC</td>
<td>0.12</td>
</tr>
<tr>
<td>PM</td>
<td>0.10</td>
</tr>
</tbody>
</table>

Emissions Power Category: 560 < KW < or = 2237

The four 750 KW 2013 Caterpillar each generator engines (Emission Sources GEN02, GEN03, GEN04 & GEN05) 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

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, which is < 50 MM Btu/hr

The 2000 kw temporary generator (Emission Source TEMPG) in Emission Unit 0-U0005 was removed on 9/16/2019.

Emission unit 0U0005 is associated with the following emission points (EP):
0GEN2, 0GEN3, 0GEN4, 0GEN5
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) in Emission Unit 0-U0005 in the Power Plant University Hospital (PPUH).

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.
Each of the four (4) emergency generators combusts 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 0U0003 - Emission Unit 0-U0003 consists of a 10.46 MM Btu/hr dual fuel fired boiler (Emission Source S0007). This boiler supplies steam/hot water in the Basic Science Building and burns 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 10.461 MM Btu/hr Cleaver Brooks dual fuel external combustion boiler (Emission Source S0007) in Emission Unit 0-U0003 in the Basic Science Building. 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 Cleaver Brooks dual fuel external combustion boiler (Emission Source S0007) in Emission Unit 0-U0003 in the Basic Science Building. The flue gases from this boiler exit through a stack, identified as Emission Point E0003.

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). These emission sources are located at the new Public Health Academic Building (PHAB) or as previously was known as the "New Academic Building (NAB). This generator has been reverted back to emergency use only. The Public Health Academic Building (PHAB)" was previously known as 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 PHAB1, PHAB2 & PHAB3; respectively.

The facility has submitted the EPA "certificate of conformity" for the 1500 KW emergency generator (Emission Source GEN01) burning #2 fuel oil (Process GEN), which is the manufacturer's certification of compliance with the EPA's emission standards specified in 40 CFR Subpart III for major pollutants. The facility is required to operate and maintain these engines and control device according to the manufacturer's emission related written instructions, and change only those emission-related settings that are permitted by the manufacturer.
This new 1500 KW emergency generator (Emission Source GEN01) ia allowed to operate up to 500 hours annually, and is exempt according to 6 NYCRR 201-3.2 (c).

This 1500 KW Cummins engine is 2013 model year and is in the EPA family code: DCEXL50.AAD, and certificate # DCEXL050.AAD-25.

Emission unit 0U0004 is associated with the following emission points (EP):
PHAB1, PHAB2, PHAB3, PHAB4

Process: FO2 is located at Building PHAB - Process FO2 consists of the operation of the burning of #2 distillate fuel oil (heating 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 Public Health Academic Building (PHAB) which was previously known as the New Academic Building (NAB). The flue gases from each of the three boilers exit through their individual stack, identified as Emission Points PHAB1, PHAB2 & PHAB3; respectively.

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 PHAB - 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 Public Health Academic Building (PHAB) or 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 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 PHAB - 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 Public Health Academic Building (PHAB) which was previously known as the New Academic Building (NAB). The flue gases from each of the three boilers exit through their individual stack, identified as Emission Points PHAB1, PHAB2 & PHAB3; respectively.

In addition to the boilers burning natural gas (Process NG1), the three boilers also burn #2 distillate fuel oil (Process FO2).
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Emission unit 0U0007 - Emission Unit 0-U0007 consists of Boilers 1, 2, 3, 4 & 5, five (5) identical Victory Energy VS-3 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 start-up date was 12/1/2018.

The emissions from these five boilers are exhausted through the existing stack identified as Emission Point E0007.

The two temporary boilers (Emission Sources TMPB1 & TMPB2) in Emission Unit 0-TEMP1 that were temporarily installed on 12/1/2015 to provide heat load during the boiler replacement project, were decommissioned and removed on 10/1/2019.

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 one or more of the five (5) identical Victory Energy boilers with a maximum heat input of 50 MM Btu/hr each, firing on #2 distillate fuel oil (heating oil) as the back-up fuel 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 (Process NG7) as the primary fuel.

The emissions from these five (5) boilers are exhausted through the existing stack identified as Emission Point E0007.

Process: NG7 is located at Basement/Sub-Base, Building 1 - Process NG7 consists of one or more of the five (5) identical Victory Energy boilers with a maximum heat input of 50 MM Btu/hr each, firing on natural gas as the primary fuel 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 (Process 2F7) as the back-up fuel.

The emissions from these five (5) boilers are exhausted through the existing stack identified as Emission Point E0007.

Emission unit 0EXMPT - Emission Unit 0-EXMPT consists of a Bloom Energy 1.8 MW Hydrogen Fuel Cell Energy Saver 5 supplied with natural gas (Process FC1) to produce electricity for the campus. The fuel cell is 123.5 feet long, 24 feet wide, and 7 feet tall. Because of this, the fuel cell has twenty-six (26) points that will release emissions. This unit was installed on May 1, 2018.

Associated with Emission Unit 0-EXMPT is Emission Point FC001, Process FC1 and Emission Source FC001.

The Fuel Cell will be in the Main Building/Campus, in the corner of Lenox Road and E 37th Street.
26.81 lbs/yr of NOx and 250.71 lbs/yr of VOC.

Emission unit 0EXMPT is associated with the following emission points (EP):
FC001
Process: FC1 is located at Building 1 - Process FC1 consists of a Bloom Energy 1.8 MW Hydrogen Fuel Cell Energy Saver 5 supplied with Natural Gas in Emission Unit 0-EXMPT to produce electricity for the campus. The fuel cell is 123.5 feet long, 24 feet wide, and 7 feet tall. Because of this, the fuel cell has twenty-six (26) points that will release emissions. This unit was installed on May 1, 2018. Emission Unit 0-EXMPT is exempt under 6 NYCRR 201-3.2 (c)(46).

Associated with Emission Unit 0-EXMPT is Emission Point FC001, Process FC1 and Emission Source FC001.

The Fuel Cell is in the Main Building/Campus, in the corner of Lenox Road and E 37th Street.

The emission unit is exempt under 6 NYCRR 201-3.2(c)(46). The limited emission from the fuel cell is 26.81 lbs/yr of NOx and 250.71 lbs/yr of VOC.

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, firing natural gas and processing cadavers generated on-site. The flue gases from this crematorium exit through a stack, identified as Emission Point E0002.

**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:

<table>
<thead>
<tr>
<th>Regulatory Program</th>
<th>Applicability</th>
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<tbody>
<tr>
<td>PSD</td>
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<tr>
<td>NSR (non-attainment)</td>
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<table>
<thead>
<tr>
<th>NESHAP (40 CFR Part 61)</th>
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<tr>
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<td>NSPS</td>
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<td>SIP</td>
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NOTES:

PSD Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) - 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 231-5, 231-6) - 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, 6 NYCRR 200.10) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAA) 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, 6 NYCRR 200.10) - 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, 6 NYCRR 200.10) - 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, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - 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 212-3, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available,
considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC’s and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH, 6 NYCRR 200.10) - 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.

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8062</td>
<td>GENERAL MEDICAL &amp; SURGICAL HOSPITALS</td>
</tr>
<tr>
<td>8221</td>
<td>COLLEGES AND UNIVERSITIES, NEC</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>SCC Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1-01-009-10</td>
<td>EXTERNAL COMBUSTION BOILERS - ELECTRIC generation</td>
</tr>
<tr>
<td></td>
<td>ELECTRIC UTILITY BOILER - WOOD/BARK WASTE</td>
</tr>
<tr>
<td></td>
<td>FUEL CELL-DUTCH OVEN BOILERS</td>
</tr>
<tr>
<td>1-03-005-02</td>
<td>EXTERNAL COMBUSTION BOILERS -</td>
</tr>
<tr>
<td></td>
<td>COMMERCIAL/INDUSTRIAL</td>
</tr>
<tr>
<td></td>
<td>COMMERCIAL/INSTITUTIONAL BOILER - DISTILLATE OIL</td>
</tr>
<tr>
<td></td>
<td>10-100MBTU/HR **</td>
</tr>
<tr>
<td>1-03-006-02</td>
<td>EXTERNAL COMBUSTION BOILERS -</td>
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<tr>
<td></td>
<td>COMMERCIAL/INDUSTRIAL</td>
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<td></td>
<td>COMMERCIAL/INSTITUTIONAL BOILER - NATURAL GAS</td>
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<tr>
<td></td>
<td>10-100 MBtu/Hr</td>
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<td>2-03-001-01</td>
<td>INTERNAL COMBUSTION ENGINES -</td>
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<tr>
<td></td>
<td>COMMERCIAL/INSTITUTIONAL</td>
</tr>
<tr>
<td></td>
<td>COMMERCIAL/INSTITUTIONAL IC ENGINE - DISTILLATE OIL (DIESEL)</td>
</tr>
<tr>
<td></td>
<td>Reciprocating</td>
</tr>
</tbody>
</table>
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 for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. 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.

<table>
<thead>
<tr>
<th>Cas No.</th>
<th>Contaminant</th>
<th>PTE lbs/yr</th>
<th>PTE tons/yr</th>
<th>Actual lbs/yr</th>
<th>Actual tons/yr</th>
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<tbody>
<tr>
<td>0NY508-00-0</td>
<td>40 CFR 60 SUBPART IIII - NMHC + NOX</td>
<td>21105</td>
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<td>2687</td>
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<tr>
<td>000124-38-9</td>
<td>CARBON DIOXIDE</td>
<td>397145598</td>
<td>51269188</td>
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<tr>
<td>0NY750-00-0</td>
<td>CARBON DIOXIDE EQUIVALENTS</td>
<td>418217677</td>
<td>54094119</td>
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<tr>
<td>000630-08-0</td>
<td>CARBON MONOXIDE</td>
<td>223795</td>
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<tr>
<td>007439-92-1</td>
<td>LEAD</td>
<td>1.17</td>
<td>0.2122</td>
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<td>000074-82-8</td>
<td>METHANE</td>
<td>970603</td>
<td>22513</td>
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<td>011104-93-1</td>
<td>NITROGEN OXIDE- (USE ONY210-00-0)</td>
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<td>0NY210-00-0</td>
<td>OXIDES OF NITROGEN</td>
<td>281903</td>
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<td>0NY075-00-0</td>
<td>PARTICULATES</td>
<td>54180</td>
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<tr>
<td>0NY075-02-5</td>
<td>PM 2.5</td>
<td>23861</td>
<td>8978</td>
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<td>0NY075-00-5</td>
<td>PM 10</td>
<td>53675</td>
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<td>007446-09-5</td>
<td>SULFUR DIOXIDE</td>
<td>27841</td>
<td>9273</td>
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<tr>
<td>0NY100-00-0</td>
<td>TOTAL HAP</td>
<td>4769</td>
<td>10.82</td>
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<tr>
<td>00E966-10-1</td>
<td>TOTAL VOLATILE POLLUTANTS</td>
<td>250.71</td>
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<tr>
<td>0NY998-00-0</td>
<td>VOC</td>
<td>23886</td>
<td>256</td>
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</tr>
</tbody>
</table>

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS
Item A: **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 B: **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 C: **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 D: **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 E: **Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)**
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Item F: **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 G: **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 H: **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 I: 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 J: Reopening for Cause - 6 NYCRR Part 201-6.4(i)
This Title V permit shall be reopened and revised under any of the following circumstances:

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

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

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

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

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

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

Item K: 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 L: Federally Enforceable Requirements - 40 CFR 70.6(b)
All terms and conditions in this permit required by the Act or any applicable requirement, including any provisions designed to limit a facility's potential to emit, are enforceable by the Administrator and citizens under the Act. The Department has, in this permit, specifically designated any terms and conditions that are not required under the Act or under any of its applicable requirements as being enforceable under only state regulations.

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5

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

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

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

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

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

**Item B: General Provisions for State Enforceable Permit Terms and Condition - 6**

NYCRR Part 201-5

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

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

**Regulatory Analysis**

<table>
<thead>
<tr>
<th>Location</th>
<th>Regulation</th>
<th>Condition</th>
<th>Short Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITY ECL 19-0301</td>
<td>66</td>
<td></td>
<td>Powers and Duties of the Department with respect to air pollution control</td>
</tr>
<tr>
<td>0-U0003/E0003/2FO/S0007</td>
<td>40CFR 60-A</td>
<td>51</td>
<td>General provisions</td>
</tr>
<tr>
<td>0-U0003</td>
<td>40CFR 60-A.4</td>
<td>48</td>
<td>General provisions - Address</td>
</tr>
<tr>
<td>0-U0003/E0003/2FO/S0007</td>
<td>40CFR 60-Dc.40c</td>
<td>52</td>
<td>Steam generators 10-100 million Btu per hour</td>
</tr>
<tr>
<td>0-U0003/-/2FO/S0007</td>
<td>40CFR 60-Dc.42c(d)</td>
<td>49</td>
<td>Standard for Sulfur Dioxide Firing Oil. (see narrative)</td>
</tr>
<tr>
<td>0-U0003/E0003/2FO/S0007</td>
<td>40CFR 60-Dc.42c(h)</td>
<td>53</td>
<td>Exemption from Averaging Requirements</td>
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<tr>
<td>0-U0003/E0003/2FO/S0007</td>
<td>40CFR 60-Dc.42c(i)</td>
<td>54</td>
<td>Standard for Sulfur Dioxide Period of Requirements. Alternative</td>
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<tr>
<td>0-</td>
<td>40CFR 60-Dc.44c(g)</td>
<td>55</td>
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</tbody>
</table>

| FACILITY | 6NYCRR 201-3.2(a) | 13, 14 | Exempt Activities - Proof of eligibility |
| FACILITY | 6NYCRR 201-3.2(c) | 23 | Exempt Activities - exempt activity list |
| FACILITY | 6NYCRR 201-3.3(a) | 15 | Trivial Activities - proof of eligibility |
| FACILITY | 6NYCRR 201-6 | 24, 42, 43 | Title V Permits and the Associated Permit Conditions |
| FACILITY | 6NYCRR 201-6.4(a)(4) | 16 | General Conditions - Requirement to Provide Information |
| FACILITY | 6NYCRR 201-6.4(a)(7) | 2 | General Conditions - Fees |
| FACILITY | 6NYCRR 201-6.4(a)(8) | 17, 18 | General Conditions - Right to Inspect Records and Reporting of Compliance Monitoring Records of Monitoring, Sampling and Measurement Reporting Requirements - Deviations and Noncompliance |
| FACILITY | 6NYCRR 201-6.4(c) | 3 | Compliance Schedules - Progress Reports Compliance Certification |
| FACILITY | 6NYCRR 201-6.4(d)(4) | 25 | Off Permit Changes Permit Shield |
| FACILITY | 6NYCRR 201-6.4(e) | 6 | State Enforceable Requirements |
| FACILITY | 6NYCRR 201-6.5(a) | 68 | Federally Enforceable Emissions Caps Emission Capping in Facility Permits |
| FACILITY | 6NYCRR 201-7 | 27, 44, 45 | Required emissions tests. |
| FACILITY | 6NYCRR 201-7.1 | 29, 46, 47 | Emission Statements - Applicability Emission Statements - record keeping requirements. |
| FACILITY | 6NYCRR 202-1.1 | 20 | General Prohibitions - air pollution prohibited General Prohibitions - visible emissions limited. |
| FACILITY | 6NYCRR 202-2.1 | 7 | Open Fires - Prohibitions |
| FACILITY | 6NYCRR 202-2.5 | 8 | Particulate Limit for Existing Cremation Units Operating Requirements - Opacity Limit Operating Requirements - Secondary Chamber Temperature Operating Requirements - |
### Allowed Materials

<table>
<thead>
<tr>
<th>FACILITY</th>
<th>6NYCRR 219-4.4(e)</th>
<th>71</th>
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<tr>
<td>FACILITY</td>
<td>6NYCRR 219-4.4(f)</td>
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<td>6NYCRR 227.2(b)(1)</td>
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<td>FACILITY</td>
<td>6NYCRR 227-2.4(d)</td>
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### Operating Requirements

- Certification Form
- Charging Limit
- Operator Training and Certification
- Inspection and Maintenance
- Recordkeeping Requirements
- Recordkeeping Requirements
- Compliance Schedule
- Sulfur-in-Fuel Limitations
- Reports, Sampling, and Analysis
- Smoke Emission Limitations
- Particulate emissions
- Smoke Emission Limitations
- Emission limits
- Small boilers, small combustion turbines, and small stationary internal combustion engines

### Applicability Discussion:

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

- **ECL 19-0301**
  This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

- **6 NYCRR 200.6**
  Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

- **6 NYCRR 200.7**
  Anyone owning or operating an air contamination source which is equipped with an emission control device must operate the control consistent with ordinary and necessary practices, standards and procedures, as per manufacturer’s specifications and keep it in a satisfactory state of maintenance and repair so that it operates effectively

- **6 NYCRR 201-1.4**
  This regulation specifies the actions and recordkeeping and reporting requirements for any violation of an applicable state enforceable emission standard that results from a necessary scheduled equipment maintenance, start-up, shutdown, malfunction or upset in the event that these are unavoidable.

- **6 NYCRR 201-1.7**
  Requires the recycle and salvage of collected air contaminants where practical
6 NYCRR 201-1.8
Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)
An owner and/or operator of an exempt emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains exempt emission sources or units, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR 201-3.3 (a)
The owner and/or operator of a trivial emission source or unit may be required to certify that it operates within the specific criteria described in this Subpart. All required records must be maintained on-site for a period of 5 years and made available to department representatives upon request. In addition, department representatives must be granted access to any facility which contains trivial emission sources or units subject to this Subpart, during normal operating hours, for the purpose of determining compliance with this and any other state and federal air pollution control requirements, regulations, or law.

6 NYCRR Subpart 201-6
This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with applicable requirements as listed in the Title V permit. For permitting purposes, this rule specifies the need to identify and describe all emission units, processes and products in the permit application as well as providing the Department the authority to include this and any other information that it deems necessary to determine the compliance status of the facility.

6 NYCRR 201-6.4 (a) (4)
This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.4 (a) (7)
This is a mandatory condition that requires the owner or operator of a facility subject to Title V requirements to pay all applicable fees associated with the emissions from their facility.

6 NYCRR 201-6.4 (a) (8)
This is a mandatory condition for all facilities subject to Title V requirements. It allows the Department to inspect the facility to determine compliance with this permit, including copying records, sampling and monitoring, as necessary.

6 NYCRR 201-6.4 (c)
This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling, measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of...
sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.4 (c) (2)  
This requirement specifies that all compliance monitoring and recordkeeping is to be conducted according to the terms and conditions of the permit and follow all QA requirements found in applicable regulations. It also requires monitoring records and supporting information to be retained for at least 5 years from the time of sampling, measurement, report or application. Support information is defined as including all 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) (4)  
This condition applies to every Title V facility subject to a compliance schedule. It requires that reports, detailing the status of progress on achieving compliance with emission standards, be submitted semiannually.

6 NYCRR 201-6.4 (e)  
Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 201-6.4 (f) (6)  
This condition allows changes to be made at the facility, without modifying the permit, provided the changes do not cause an emission limit contained in this permit to be exceeded. The owner or operator of the facility must notify the Department of the change. It is applicable to all Title V permits which may be subject to an off permit change.

6 NYCRR 201-6.4 (g)  
Permit Exclusion Provisions - specifies those actions, such as administrative orders, suits, claims for natural resource damages, etc that are not affected by the federally enforceable portion of the permit, unless they are specifically addressed by it.

6 NYCRR 202-1.1  
This regulation allows the department the discretion to require an emission test for the purpose of determining compliance. Furthermore, the cost of the test, including the preparation of the report are to be borne by the owner/operator of the source.

6 NYCRR 202-2.1  
Requires that emission statements shall be submitted on or before April 15th each year for emissions of the previous calendar year.

6 NYCRR 202-2.5  
This rule specifies that each facility required to submit an emission statement must retain a copy of the statement and supporting documentation for at least 5 years and must make the information available to department representatives.
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 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 60.42c (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 combats 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 vendor 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 sulfur limits, or percent reduction requirements 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.
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 supersede any requirement that is more stringent, including the Title V requirement to maintain records for a minimum of 5 years.

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 III
This regulation defines performance standards for compression ignition stationary reciprocating internal combustion engines.

40 CFR Part 63, Subpart ZZZZ
This regulation defines performance standards for stationary reciprocating internal combustion engines.

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 201-6.5 (a)
This section identifies state enforceable requirements for Title V permits.

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 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.
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 219-4.3 (a)
This citation specifies the particulate matter emissions limitation for cremation equipment constructed prior to March 13, 2020.

6 NYCRR 219-4.4 (a)
This citation specifies the opacity limit for cremation units.

6 NYCRR 219-4.4 (b)
This citation specifies the minimum operating temperature and gas residence time for the secondary chamber of a cremation unit.

6 NYCRR 219-4.4 (d)
This citation describes the types of materials that are allowed to be combusted in a cremation unit.

6 NYCRR 219-4.4 (e)
This citation requires the preparation of a cremation certification form prior to the cremation of human and animal remains.

6 NYCRR 219-4.4 (f)
This citation prohibits crematory operators from charging remains in excess of the manufacturer's rated capacity of the cremation unit.

6 NYCRR 219-4.6 (a)
This citation requires crematories to be operated by certified individuals.

6 NYCRR 219-4.7 (a)
This citation contains the inspection and maintenance requirements for cremation units.
This citation specifies the recordkeeping requirements for crematory facilities.

6 NYCRR 219-4.8 (b)  
This citation specifies the recordkeeping requirements for crematory facilities.

6 NYCRR 219-4.9  
This citation contains the compliance schedule for existing cremation units installed prior to the effective date of 6 NYCRR Subpart 219-4.

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

6 NYCRR 225-1.6  
This section establishes the requirements for reporting, sampling, and analyzing fuel by subject facilities.

6 NYCRR 227.2 (b) (1)  
This regulation is from the 1972 version of Part 227 and still remains as part of New York's SIP. The rule establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for any oil fired stationary combustion installation.

6 NYCRR 227-1.3 (a)  
This regulation prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity.

6 NYCRR 227-2.4 (c) (1)  
Presumptive NOx RACT emission limits for mid-size boilers.

6 NYCRR 227-2.4 (d)  
This section includes NOx RACT requirements for small boilers, small combustion turbines, and small stationary internal combustion engines.
6 NYCRR Subpart 201-7
This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit that cap is 15,768 megawatt-hours per year of electrical output.

Non Applicability Analysis

List of non-applicable rules and regulations:

<table>
<thead>
<tr>
<th>Location</th>
<th>Regulation</th>
<th>Short Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FACILITY</td>
<td>40 CFR 52.21 (j)</td>
<td>Best Available Control Technology</td>
</tr>
</tbody>
</table>

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 because 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 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).

| 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 231-2 is not applicable to this facility because 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:

<table>
<thead>
<tr>
<th>Location Facility/EU/EP/Process/ES</th>
<th>Cond No.</th>
<th>Type of Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-U0003/-/2FO/S0007</td>
<td>49</td>
<td>work practice involving specific operations</td>
</tr>
<tr>
<td>0-U0003/E0003/2FO/S0007</td>
<td>57</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
<tr>
<td>0-U0003/E0003/2FO/S0007</td>
<td>59</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>0-U0003/E0003/2FO/S0007</td>
<td>60</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
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</tr>
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<td>FACILITY 2</td>
<td>23</td>
<td>work practice involving specific operations</td>
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<td>28</td>
<td>monitoring of process or control device parameters as surrogate</td>
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<td>FACILITY 7</td>
<td>31</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
<tr>
<td>FACILITY 8</td>
<td>7</td>
<td>record keeping/maintenance procedures</td>
</tr>
<tr>
<td>0-U0002/E0002/002/S0006</td>
<td>78</td>
<td>intermittent emission testing</td>
</tr>
<tr>
<td>0-U0002/E0002/002/S0006</td>
<td>79</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
<tr>
<td>0-U0002/E0002/002/S0006</td>
<td>80</td>
<td>monitoring of process or control device parameters as surrogate</td>
</tr>
</tbody>
</table>
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 #14 for NYCRR 201-3.2 (a): This condition is facility-wide condition for Work Practice Involving Specific Operations for the exempt emergency generators for Operating Hours of 500 hours per year limit on a 12-month rolling total basis.

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 Caterpillar (Emission Sources GEN02, GEN03, GEN04 & GEN05) and the 1500 KW Cummins (emission Source GEN01) 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 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.

The facility operates a total of nine (9) exempt emergency generators from NYSDEC permitting in accordance with 6 NYCRR 201-3.1(b) and 3.2(c)(6). Each of the following exempt generators at the facility is to operate for no more than 500 hours per year:

- One 35 KW generator in the Parking Garage
- One 500 KW generator in the HSEB Building
- Two 1,111 KW each generators in the BSB 8th Floor
- Four 750 KW each Caterpillar Model C27 replacement diesel fuel generator in the UHB CAT Plant
- One 1,500 KW Cummins Inc., QSK50-G4 NR2 diesel fuel emergency generator in the PHAB Building

**Condition #28 for 6 NYCRR for 6 NYCRR 201-7, Capping Out of 6 NYCRR Subpart 231-2:** This condition is an emission unit level, emission point level, process
level and emission source/control level condition that applies to Emission Unit: 0-EXMPT, Emission Point: FC001, Process: FC1, and Emission Sources/Controls: FC001 for Oxides of Nitrogen for Monitoring of Process or Control Device Parameters As Surrogate for an electric output limit of 15,768 megawatt-hours per year.

This condition is for the Bloom Energy 1.8 MW Hydrogen Fuel Cell (Emission Source/Control FC001) supplied with natural gas (Process FC1) in Emission Unit: 0-EXMPT.

**Condition #30 for 6 NYCRR for 6 NYCRR 201-7, Capping Out of 6 NYCRR Subpart 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 New Source Review - 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 #31 for 6 NYCRR for 6 NYCRR 201-7, 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 #33 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 #35 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 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 #36 for 6 NYCRR 227-2.4 (c) (1):** This condition is an emission unit level, emission point level, process level and emission source/control level condition that applies to Emission Unit: 0-U0007, Emission Point: E0007, Processes: 2F7 & NG7, and Emission Sources/Controls: S0011, S0012, S0013, S0014 & S0015 for Oxides of Nitrogen for Intermittent Emission Testing for Oxides of Nitrogen.

This condition is for the five 50 MM Btu/hr each Victory Energy boilers (Emission Sources S0011, S0012, S0013, S0014 & S0015) operating on natural gas (Process NG7) and on #2 fuel oil (Process 2F7) to verify the 0.08 pounds per million Btus 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 distillate 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 #39 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 Emission Sources: S0011, S0012, S0013, S0014 & 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 pounds per million Btus based on a 2 hour average emission for any oil fired stationary combustion installation.

**Condition #49 for 40 CFR 60.42c(d), NSPS Subpart Dc:** This condition is an emission unit level, process level and emission source/control level condition for Work Practice Involving Specific Operations for Sulfur Dioxide that applies to EU: 0-U0003, EP: 0-U0007, Proc: 2FO, ES/C: S0007, and EU: 0-U0007, EP: E0007, Proc: 2F7, ES/C: S0011, S0012, S0013, S0014 & S0015 for the 0.50 percent sulfur content by weight limit.

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

**Condition #57 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-U0007, EP: E0007, Proc: 2F7 and ES/C: S0011, S0012, S0013, S0014, S0015 in addition to EU: 0-U0003, EP: E0003, Process 2FO and ES: S0007 for the 0.5 percent sulfur content by weight limit.

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

**Condition #72 for 6 NYCRR 219-4.4(f):** This condition is a Monitoring of Process or Control Device Parameters as Surrogate for the 200 pounds per hour maximum hourly feed rate of human or animal remains in the crematorium. This condition prohibits crematory operators from charging remains in excess of the manufacturer's rated capacity of the cremation unit.

**Condition #78 for 6 NYCRR 219-4.3 (a):** This condition is an emission unit level, emission point level, process level and emission source level monitoring condition for Intermittent Emission Testing for Particulates that applies to EU: 0-U0002, EP: E0002, Proc: 002 and ES/C: S0006 for the Particulates limit of 0.08 grains per dry standard cubic foot (corrected to 7% O2).

This condition specifies the particulate matter emissions limitation for cremation equipment constructed prior to March 13, 2020.

**Condition #79 for 6 NYCRR 219-4.4 (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/C: S0006. This condition is for Monitoring of Process or Control Device Parameters as Surrogate for the 10 percent opacity limit.

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

**Condition #80 for 6 NYCCR 219-4.4 (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/C: 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 1600 degrees Fahrenheit for at least one second of residence time.

This condition specifies the minimum operating temperature and gas residence time for the secondary chamber of a cremation unit. 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 for at least one second of residence time. The secondary combustion chamber temperature of the crematory must be maintained at all times at 1800 degrees Fahrenheit that waste is being burned.