



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

**Permit ID: 2-6304-00024/00035**

**Renewal Number: 3**

**01/08/2018**

**Facility Identification Data**

Name: RAVENSWOOD GENERATING STATION

Address: 38-54 VERNON BLVD

QUEENS, NY 11101

**Owner/Firm**

Name: HELIX RAVENSWOOD LLC

Address: 38-54 VERNON BLVD

LONG ISLAND CITY, NY 11101, USA

Owner Classification: Corporation/Partnership

**Permit Contacts**

Division of Environmental Permits:

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Air Permitting Contact:

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Address: RAVENSWOOD GENERATING STATION

38-54 VERNON BLVD

LONG ISLAND CITY, NY 11101

Phone:7187062818

**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.

**Attainment Status**

RAVENSWOOD GENERATING STATION is located in the town of QUEENS in the county of



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QUEENS.

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.)

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

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

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

**Facility Description:**

This facility consists of three (3) steam boiler turbine/generator sets and seventeen (17) simple cycle combustion turbines with a combined nominal rating of 2,288 mw and three (3) emergency generators. Natural gas is the primary fuel for all units, with low-sulfur oil fuel used on a limited basis.

**Permit Structure and Description of Operations**

The Title V permit for RAVENSWOOD GENERATING STATION 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.

RAVENSWOOD GENERATING STATION is defined by the following emission unit(s):

Emission unit U00010 - THIS UNIT CONSISTS OF DUAL, TANGENTIALLY FIRED FURNACES COMPRISING A SINGLE BOILER. STEAM FROM THIS BOILER



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OPERATES A TANDEM TURBINE GENERATOR SET NOMINALLY RATED AT 390 MW. THE FURNACES OPERATE ON NATURAL GAS OR LOW SULFUR #6 RESIDUAL OIL. ON OCCASION, SMALL AMOUNTS OF WASTE FUEL A MAY BE FIRED IN CONJUNCTION WITH THE PRIMARY FUEL. ON AN INFREQUENT BASIS, NON-HAZARDOUS BOILER CLEANING SOLUTION MAY BE EVAPORATED IN THIS UNIT IN CONJUNCTION WITH THE PRIMARY FUEL.

CLOSE COUPLED OVER-FIRED AIR (CCOFA) COMPARTMENTS HAVE BEEN ADDED TO THE UPPER AND LOWER WINDBOX SECTIONS OF THIS EMISSION UNIT. CCOFA IS A NO<sub>x</sub> REDUCTION TECHNOLOGY.

Emission unit U00010 is associated with the following emission points (EP):

00010

Process: P01 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS IS THE COMBUSTION OF #6 RESIDUAL OIL IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER. A non-hazardous additive may be used to improve combustion.

The facility also may use bio-residual fuel which is equivalent to residual fuel oil in all respect.

Process: P02 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER.

Process: P03 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS IS THE CO-FIRING OF WASTE FUEL A WITH #6 RESIDUAL OIL AND/OR NATURAL GAS IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER.

Process: P04 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS INVOLVES THE INCINERATION OF NON-HAZARDOUS BOILER CHEMICAL CLEANING SOLUTIONS IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER.

Emission unit U00020 - THIS UNIT CONSISTS OF DUAL, TANGENTIALLY FIRED FURNACES COMPRISING A SINGLE BOILER. STEAM FROM THIS BOILER OPERATES A TANDEM TURBINE GENERATOR SET NOMINALLY RATED AT 390 MW. THIS BOILER IS EQUIPPED WITH A CLOSE-COUPLED-OVERFIRED-AIR (CCOFA) SYSTEM TO REDUCE THE FORMATION OF NITROGEN OXIDES. THE FURNACES OPERATE ON NATURAL GAS OR LOW SULFUR #6 RESIDUAL OIL. ON OCCASION, SMALL AMOUNTS OF WASTE FUEL A MAY BE FIRED IN CONJUNCTION WITH THE PRIMARY FUEL. ON AN INFREQUENT BASIS, NON-HAZARDOUS BOILER CLEANING SOLUTIONS MAY BE EVAPORATED IN THIS UNIT IN CONJUNCTION WITH PRIMARY FUEL.

Emission unit U00020 is associated with the following emission points (EP):

00020

Process: P05 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS IS THE COMBUSTION OF #6 RESIDUAL OIL IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER. A non-hazardous additive may be used to improve combustion.



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Process: P06 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER.

The facility also may use bio-residual fuel which is equivalent to residual fuel oil in all respect.

Process: P07 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS IS THE CO-FIRING OF WASTE FUEL A WITH #6 RESIDUAL OIL AND/OR NATURAL GAS IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER.

Process: P08 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS INVOLVES THE INCINERATION OF NON-HAZARDOUS BOILER CHEMICAL CLEANING SOLUTIONS IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER.

Emission unit U00030 - THIS UNIT CONSISTS OF DUAL BOILERS, EACH HEATED BY DUAL, TANGENTIALLY FIRED FURNACES. STEAM FROM THESE BOILERS OPERATES A TANDEM TURBINE GENERATOR SET NOMINALLY RATED AT 972 MW. THIS UNIT HAS A CLOSE-COUPLED-OVERFIRED-AIR (CCOFA) SYSTEM TO FURTHER REDUCE THE FORMATION OF NITROGEN OXIDES. THE FURNACES OPERATE ON NATURAL GAS OR LOW SULFUR #6 RESIDUAL OIL. ON OCCASION, SMALL AMOUNTS OF WASTE FUEL A MAY BE FIRED IN CONJUNCTION WITH THE PRIMARY FUEL. ON AN INFREQUENT BASIS, NON-HAZARDOUS BOILER CLEANING SOLUTION MAY BE EVAPORATED IN THIS UNIT IN CONJUNCTION WITH THE PRIMARY FUEL.

Emission unit U00030 is associated with the following emission points (EP):

00030

Process: P09 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS IS THE COMBUSTION OF #6 RESIDUAL OIL IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER. A non-hazardous additive may be used to improve combustion.

The facility also may use bio-residual fuel which is equivalent to residual fuel oil in all respect.

Process: P10 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER.

Process: P11 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS IS THE CO-FIRING OF WASTE FUEL A WITH #6 RESIDUAL OIL AND/OR NATURAL GAS IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER.

Process: P12 is located at GROUND FLOOR, Building GEN STA - THIS PROCESS INVOLVES THE INCINERATION OF NON-HAZARDOUS BOILER CHEMICAL CLEANING SOLUTIONS IN A TANGENTIALLY FIRED STEAM-ELECTRIC BOILER.

Emission unit UCT001 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. THIS UNIT IS A "BLACK-START" COMBUSTION TURBINE DESIGNED TO PROVIDE



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SUFFICIENT POWER TO BRING THE ENTIRE POWER STATION BACK ON-LINE FOLLOWING A CATASTROPHIC SYSTEM COLLAPSE. A DIESEL ENGINE, EMISSION POINT GT0S1, EMISSION UNIT U-CT0S1 IS UTILIZED TO START THIS COMBUSTION TURBINE.

Emission unit UCT001 is associated with the following emission points (EP):

GT001

Process: P21 is located at GROUND FLOOR, Building GT1 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE.

Emission unit UCT004 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. A DIESEL ENGINE, EMISSION POINT GT0S4, EMISSION UNIT U-CT0S4 IS UTILIZED TO START THIS COMBUSTION TURBINE.

Emission unit UCT004 is associated with the following emission points (EP):

CT004

Process: P24 is located at GROUND FLOOR, Building CT4 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P25 is located at GROUND FLOOR, Building CT4 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P26 is located at GROUND FLOOR, Building CT4 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE.

Emission unit UCT005 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. A DIESEL ENGINE, EMISSION POINT GT0S5, EMISSION UNIT U-CT0S5 IS UTILIZED TO START THIS COMBUSTION TURBINE.

Emission unit UCT005 is associated with the following emission points (EP):

CT005

Process: P29 is located at GROUND FLOOR, Building CT5 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P30 is located at GROUND FLOOR, Building CT5 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION



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A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P31 is located at GROUND FLOOR, Building CT5 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE.

Emission unit UCT006 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. A DIESEL ENGINE, EMISSION POINT GT0S6, EMISSION UNIT U-CT0S6 IS UTILIZED TO START THIS COMBUSTION TURBINE.

Emission unit UCT006 is associated with the following emission points (EP):  
CT006

Process: P34 is located at GROUND FLOOR, Building CT6 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P35 is located at GROUND FLOOR, Building CT6 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P36 is located at GROUND FLOOR, Building CT6 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE.

Emission unit UCT007 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. A DIESEL ENGINE, EMISSION POINT GT0S7, EMISSION UNIT U-CT0S7 IS UTILIZED TO START THIS COMBUSTION TURBINE.

Emission unit UCT007 is associated with the following emission points (EP):  
CT007

Process: P39 is located at GROUND FLOOR, Building CT7 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P40 is located at GROUND FLOOR, Building CT7 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.



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Process: P41 is located at GROUND FLOOR, Building CT7 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE.

Emission unit UCT008 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM.

Emission unit UCT008 is associated with the following emission points (EP):  
CT008

Process: P44 is located at GROUND FLOOR, Building CT8 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE.

Process: P45 is located at GROUND FLOOR, Building CT8 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P46 is located at GROUND FLOOR, Building CT8 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Emission unit UCT009 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM.

Emission unit UCT009 is associated with the following emission points (EP):  
CT009

Process: P47 is located at GROUND FLOOR, Building CT9 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE.

Process: P48 is located at GROUND FLOOR, Building CT9 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P49 is located at GROUND FLOOR, Building CT9 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.



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Emission unit UCT010 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM.

Emission unit UCT010 is associated with the following emission points (EP):

CT010

Process: P50 is located at GROUND FLOOR, Building CT10 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE.

Process: P51 is located at GROUND FLOOR, Building CT10 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P52 is located at GROUND FLOOR, Building CT10 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Emission unit UCT011 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM.

Emission unit UCT011 is associated with the following emission points (EP):

CT011

Process: P53 is located at GROUND FLOOR, Building CT11 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE.

Process: P54 is located at GROUND FLOOR, Building CT11 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Process: P55 is located at GROUND FLOOR, Building CT11 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING.

Emission unit UCT0S1 - THIS UNIT IS A 430 HP DIESEL ENGINE USED TO START THE "BLACK-START" COMBUSTION TURBINE, DESIGNATED EMISSION UNIT U-CT001. THIS UNIT ONLY OPERATES DURING START-UP OF THE COMBUSTION TURBINE, GENERALLY LESS THAN 15 MINUTES PER EVENT.





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Emission unit UCT0S1 is associated with the following emission points (EP):

GT0S1

Process: P22 is located at GROUND FLOOR, Building CT1 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.

Process: P23 is located at GROUND FLOOR, Building CT1 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.

Emission unit UCT0S4 - THIS UNIT IS A 430 HP DIESEL ENGINE USED TO START THE "BLACK-START" COMBUSTION TURBINE, DESIGNATED EMISSION UNIT U-CT004. THIS UNIT ONLY OPERATES DURING START-UP OF THE COMBUSTION TURBINE, GENERALLY LESS THAN 15 MINUTES PER EVENT.

Emission unit UCT0S4 is associated with the following emission points (EP):

CT0S4

Process: P27 is located at GROUND FLOOR, Building CT4 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.

Process: P28 is located at GROUND FLOOR, Building CT4 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.

Emission unit UCT0S5 - THIS UNIT IS A 430 HP DIESEL ENGINE USED TO START THE "BLACK-START" COMBUSTION TURBINE, DESIGNATED EMISSION UNIT U-CT005. THIS UNIT ONLY OPERATES DURING START-UP OF THE COMBUSTION TURBINE, GENERALLY LESS THAN 15 MINUTES PER EVENT.

Emission unit UCT0S5 is associated with the following emission points (EP):

CT0S5

Process: P32 is located at GROUND FLOOR, Building CT5 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.

Process: P33 is located at GROUND FLOOR, Building CT5 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.



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Emission unit UCT0S6 - THIS UNIT IS A 430 HP DIESEL ENGINE USED TO START THE "BLACK-START" COMBUSTION TURBINE, DESIGNATED EMISSION UNIT U-CT006. THIS UNIT ONLY OPERATES DURING START-UP OF THE COMBUSTION TURBINE, GENERALLY LESS THAN 15 MINUTES PER EVENT.

Emission unit UCT0S6 is associated with the following emission points (EP):  
CT0S6

Process: P37 is located at GROUND FLOOR, Building CT6 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.

Process: P38 is located at GROUND FLOOR, Building CT6 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.

Emission unit UCT0S7 - THIS UNIT IS A 430 HP DIESEL ENGINE USED TO START THE "BLACK-START" COMBUSTION TURBINE, DESIGNATED EMISSION UNIT U-CT007. THIS UNIT ONLY OPERATES DURING START-UP OF THE COMBUSTION TURBINE, GENERALLY LESS THAN 15 MINUTES PER EVENT.

Emission unit UCT0S7 is associated with the following emission points (EP):  
CT0S7

Process: P42 is located at GROUND FLOOR, Building CT7 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.

Process: P43 is located at GROUND FLOOR, Building CT7 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A DIESEL ENGINE. THIS ENGINE IS USED TO START THE ASSOCIATED COMBUSTION TURBINE. DURING EACH START-UP THE ENGINE OPERATES FOR LESS THAN 15 MINUTES.

Emission unit UCT201 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. TWO TURBINE ENGINES DRIVE A SINGLE GENERATOR AND EXHAUST THROUGH A COMMON STACK. Inlet water spray may be utilized for NO<sub>x</sub> reduction. Based on stack test results for carbon monoxide, operation of this unit shall be restricted such that the 365 day rolling summation of CO mass emissions shall not exceed that which would have been released during 4,171 (3,672 hr in ozone season plus 499 non-ozone season operation) hours of operation without inlet spray.

Emission unit UCT201 is associated with the following emission points (EP):  
CT201

Process: P56 is located at GROUND FLOOR, Building CT21 - THIS PROCESS IS THE COMBUSTION



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OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P57 is located at GROUND FLOOR, Building CT21 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P58 is located at GROUND FLOOR, Building CT21 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Emission unit UCT202 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. TWO TURBINE ENGINES DRIVE A SINGLE GENERATOR AND EXHAUST THROUGH A COMMON STACK. Inlet water spray may be utilized for NOx reduction. Based on stack test results for carbon monoxide, operation of this unit shall be restricted such that the 365 day rolling summation of CO mass emissions shall not exceed that which would have been released during 4,171 (3,672 hr in ozone season plus 499 non-ozone season operation) hours of operation without inlet spray.

Emission unit UCT202 is associated with the following emission points (EP):  
CT202

Process: P59 is located at GROUND FLOOR, Building CT22 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P60 is located at GROUND FLOOR, Building CT22 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P61 is located at GROUND FLOOR, Building CT22 - THIS PROCESS IS THE COMBUSTION



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OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NO<sub>x</sub> reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Emission unit UCT203 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. TWO TURBINE ENGINES DRIVE A SINGLE GENERATOR AND EXHAUST THROUGH A COMMON STACK. Inlet water spray may be utilized for NO<sub>x</sub> reduction. Based on stack test results for carbon monoxide, operation of this unit shall be restricted such that the 365 day rolling summation of CO mass emissions shall not exceed that which would have been released during 4,171 (3,672 hr in ozone season plus 499 non-ozone season operation) hours of operation without inlet spray.

Emission unit UCT203 is associated with the following emission points (EP):

CT203

Process: P62 is located at GROUND FLOOR, Building CT23 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE. Inlet water spray may be utilized for NO<sub>x</sub> reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P63 is located at GROUND FLOOR, Building CT23 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NO<sub>x</sub> reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P64 is located at GROUND FLOOR, Building CT23 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NO<sub>x</sub> reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Emission unit UCT204 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. TWO TURBINE ENGINES DRIVE A SINGLE GENERATOR AND EXHAUST THROUGH A COMMON STACK. Inlet water spray may be utilized for NO<sub>x</sub> reduction. Based on stack test results for carbon monoxide, operation of this unit shall be restricted such that the 365 day rolling summation of CO mass emissions shall not exceed that which would have been released during 4,171 (3,672 hr in ozone



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season plus 499 non-ozone season operation) hours of operation without inlet spray.

Emission unit UCT204 is associated with the following emission points (EP):

CT204

Process: P65 is located at GROUND FLOOR, Building CT24 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P66 is located at GROUND FLOOR, Building CT24 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P67 is located at GROUND FLOOR, Building CT24 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Emission unit UCT301 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. TWO TURBINE ENGINES DRIVE A SINGLE GENERATOR AND EXHAUST THROUGH A COMMON STACK. Inlet water spray may be utilized for NOx reduction. Based on stack test results for carbon monoxide, operation of this unit shall be restricted such that the 365 day rolling summation of CO mass emissions shall not exceed that which would have been released during 4,171 (3,672 hr in ozone season plus 499 non-ozone season operation) hours of operation without inlet spray.

Emission unit UCT301 is associated with the following emission points (EP):

CT301

Process: P68 is located at GROUND FLOOR, Building CT31 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P69 is located at GROUND FLOOR, Building CT31 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE



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ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NO<sub>x</sub> reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P70 is located at GROUND FLOOR, Building CT31 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NO<sub>x</sub> reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Emission unit UCT302 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. TWO TURBINE ENGINES DRIVE A SINGLE GENERATOR AND EXHAUST THROUGH A COMMON STACK. Inlet water spray may be utilized for NO<sub>x</sub> reduction. Based on stack test results for carbon monoxide, operation of this unit shall be restricted such that the 365 day rolling summation of CO mass emissions shall not exceed that which would have been released during 4,171 (3,672 hr in ozone season plus 499 non-ozone season operation) hours of operation without inlet spray.

Emission unit UCT302 is associated with the following emission points (EP):  
CT302

Process: P71 is located at GROUND FLOOR, Building CT32 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE. Inlet water spray may be utilized for NO<sub>x</sub> reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P72 is located at GROUND FLOOR, Building CT32 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NO<sub>x</sub> reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P73 is located at GROUND FLOOR, Building CT32 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NO<sub>x</sub> reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.



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Emission unit UCT303 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. TWO TURBINE ENGINES DRIVE A SINGLE GENERATOR AND EXHAUST THROUGH A COMMON STACK. Inlet water spray may be utilized for NOx reduction. Based on stack test results for carbon monoxide, operation of this unit shall be restricted such that the 365 day rolling summation of CO mass emissions shall not exceed that which would have been released during 4,171 (3,672 hr in ozone season plus 499 non-ozone season operation) hours of operation without inlet spray.

Emission unit UCT303 is associated with the following emission points (EP):  
CT303

Process: P74 is located at GROUND FLOOR, Building CT33 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P75 is located at GROUND FLOOR, Building CT33 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P76 is located at GROUND FLOOR, Building CT33 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Emission unit UCT304 - THIS UNIT IS A COMBUSTION TURBINE USED TO SUPPLY PEAK GENERATION CAPACITY, AS REQUIRED TO SUPPORT THE NYC ELECTRIC DISTRIBUTION SYSTEM. TWO TURBINE ENGINES DRIVE A SINGLE GENERATOR AND EXHAUST THROUGH A COMMON STACK. Inlet water spray may be utilized for NOx reduction. Based on stack test results for carbon monoxide, operation of this unit shall be restricted such that the 365 day rolling summation of CO mass emissions shall not exceed that which would have been released during 4,171 (3,672 hr in ozone season plus 499 non-ozone season operation) hours of operation without inlet spray.

Emission unit UCT304 is associated with the following emission points (EP):  
CT304

Process: P77 is located at GROUND FLOOR, Building CT34 - THIS PROCESS IS THE COMBUSTION OF PIPELINE NATURAL GAS IN A COMBUSTION TURBINE. Inlet water spray may be utilized for possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.



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Process: P78 is located at GROUND FLOOR, Building CT34 - THIS PROCESS IS THE COMBUSTION OF #2 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

Process: P79 is located at GROUND FLOOR, Building CT34 - THIS PROCESS IS THE COMBUSTION OF #1 DISTILLATE OIL IN A COMBUSTION TURBINE. IN ORDER TO IMPROVE COMBUSTION A FUEL ADDITIVE MAY BE MIXED WITH THE DISTILLATE OIL PRIOR TO COMBUSTION. IN ADDITION, WHEN FUEL OIL IS STORED FOR EXTENDED PERIODS, A BIOCIDES MAY BE ADDED TO PREVENT FOULING. Inlet water spray may be utilized for NOx reduction, as required. Throughputs listed under each process are intended to be examples of possible unit utilization. Actual operation to be in accordance with the emission limitations identified in the Emission Unit portion of this permit.

**Title V/Major Source Status**

RAVENSWOOD GENERATING STATION is subject to Title V requirements. This determination is based on the following information:

Facility has PTE emissions of a major source

**Program Applicability**

The following chart summarizes the applicability of RAVENSWOOD GENERATING STATION with regards to the principal air pollution regulatory programs:

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

**NOTES:**

PSD Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) -





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

**SIP** State Implementation Plan (40 CFR 52, Subpart HH, 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**



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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.

<b>SIC Code</b>	<b>Description</b>
4911	ELECTRIC SERVICES

**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.

<b>SCC Code</b>	<b>Description</b>
1-01-004-04	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - RESIDUAL OIL Grade 6 Oil: Tangential Firing
1-01-006-04	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - NATURAL GAS Tangentially Fired Units
1-01-013-02	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - LIQUID WASTE Waste Oil
2-01-001-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Turbine
2-01-001-02	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Reciprocating
2-01-002-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - NATURAL GAS Turbine
2-01-009-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY IC ENGINE - KEROSENE/NAPHTHA (JET FUEL) Turbine
2-02-001-02	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - DISTILLATE OIL(DIESEL) Reciprocating
2-02-009-02	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - KEROSENE/NAPHTHA (JET FUEL) Reciprocating
5-03-007-01	SOLID WASTE DISPOSAL - INDUSTRIAL



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SOLID WASTE DISPOSAL: INDUSTRIAL - LIQUID  
WASTE  
General

**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.

Cas No.	Contaminant	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
007440-38-2	ARSENIC	1606			
007440-43-9	CADMIUM	585			
000630-08-0	CARBON MONOXIDE	14722080			
007440-47-3	CHROMIUM	1053			
007440-50-8	COPPER	2178			
007439-89-6	IRON	839000			
007439-92-1	LEAD	20509			
007439-97-6	MERCURY	286			
007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS	88606			
0NY210-00-0	OXIDES OF NITROGEN	45426758			
0NY075-00-0	PARTICULATES	20161394			
0NY075-00-5	PM-10	22909873			
007446-09-5	SULFUR DIOXIDE	51407347			
0NY100-00-0	TOTAL HAP	624797			
0NY998-00-0	VOC	913135			
007440-66-6	ZINC	30680			

**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



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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



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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



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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.



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(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\_02

**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**

<b>Location Facility/EU/EP/Process/ES</b>	<b>Regulation</b>	<b>Condition</b>	<b>Short Description</b>
FACILITY	ECL 19-0301	61	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 63-UUUUU	37, 38	NESHAP for Coal- and Oil-Fired Electric Utility Steam Generating Units
FACILITY	40CFR 63-ZZZZ.6603(a)	39	Reciprocating Internal Combustion Engine (RICE) NESHAP - requirements for existing engines at area sources of HAP emissions
FACILITY	40CFR 68	19	Chemical accident prevention provisions
FACILITY	40CFR 82-F	20	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	40CFR 97	40	Federal Cross-State Air Pollution Regulation (CSAPR)
FACILITY	40CFR 97-AAAA.406	41	Transport Rule (TR) NOx Annual Trading Program Standard
FACILITY	40CFR 97-BBBBB.506	42	Requirments Transport Rule (TR)



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FACILITY	40CFR 97-CCCC.606	43	NOx Ozone Season Trading Program Standard Requirement Transport Rule (TR) SO2 Group 1 Trading Program Standard Requirments
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	62	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 air
FACILITY	6NYCRR 201-3.2(a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	21, 44, 45	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	15	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	16	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 201-6.4(c)(3)(ii)	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	22	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4(f)(6)	17	Off Permit Changes
FACILITY	6NYCRR 201-7	23, 46, 47	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1.1	18	Required emissions tests.
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 207	24	Control Measures for an Air Pollution Episode
FACILITY	6NYCRR 211.1	25	General Prohibitions - air pollution prohibited





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FACILITY	6NYCRR 211.2	63	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 215.2	9	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2(d)	26	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.2(h)	27	Sulfur-in-Fuel Limitations
FACILITY	6NYCRR 225-1.5(c)	28	Monitoring Requirements
FACILITY	6NYCRR 225-2.3(b)	29	Eligibility to burn waste fuel A.
FACILITY	6NYCRR 225-2.4(b)	30, 31, 32, 33	Eligibility to burn waste fuels A and B.
U-00010	6NYCRR 227-1.2(a)(1)	48	Particulate Emissions from Liquid Fuels.
U-CT008	6NYCRR 227-1.2(a)(1)	52	Particulate Emissions from Liquid Fuels.
FACILITY	6NYCRR 227-1.3(a)	34	Smoke Emission Limitations.
U-00010/00010	6NYCRR 227-1.4(a)	67	Stack Monitoring. (see narrative)
U-00020/00020	6NYCRR 227-1.4(a)	68	Stack Monitoring. (see narrative)
U-00030/00030	6NYCRR 227-1.4(a)	69	Stack Monitoring. (see narrative)
FACILITY	6NYCRR 227-1.4(b)	35	Stack Monitoring
FACILITY	6NYCRR 227-2.5(b)	36	System averaging plan.
U-00010	6NYCRR 227-2.6(a)	49	Applicable testing and/or monitoring requirements.
U-00020	6NYCRR 227-2.6(a)	50	Applicable testing and/or monitoring requirements.
U-00030	6NYCRR 227-2.6(a)	51	Applicable testing and/or monitoring requirements.
FACILITY	6NYCRR 242-1.5	64, 65, 66	CO2 Budget Trading Program - Standard requirements

**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



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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



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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 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 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



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department representatives.

6 NYCRR 211.2

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

6 NYCRR 215.2

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

40 CFR Part 68

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

40 CFR Part 82, Subpart F

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

**Facility Specific Requirements**

In addition to Title V, RAVENSWOOD GENERATING STATION has been determined to be subject to the following regulations:

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.

40 CFR 97.406

This condition provides the general requirements for implementing EPA's Transport Rule (TR) 40 CFR Part 97, Subpart AAAAA; intended to reduce the interstate transport of fine particulate matter and ozone. This particular condition requires facilities to measure and report their emissions of Nitrogen Oxide (NOx) and to hold TR annual NOx allowances sufficient to cover these emissions. Commonly referred to as a budget trading program, each State has an established 'budget' of emissions that are distributed or sold to facilities, which, in turn, can only emit as much as they hold in allowances.

40 CFR 97.506



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This condition provides the general requirements for implementing EPAs Transport Rule (TR) 40 CFR Part 97, Subpart BBBBB; intended to reduce the interstate transport of fine particulate matter and ozone. This particular condition requires facilities to measure and report their emissions of Nitrogen Oxide (NOx) during the ozone season (May through September) and to hold TR ozone season NOx allowances sufficient to cover these emissions. Commonly referred to as a budget trading program, each State has an established 'budget' of emissions that are distributed or sold to facilities, which, in turn, can only emit as much as they hold in allowances.

40 CFR 97.606

This condition provides the general requirements for implementing EPAs Transport Rule (TR) 40 CFR Part 97, Subpart CCCCC; intended to reduce the interstate transport of fine particulate matter and ozone. This particular condition requires facilities to measure and report their emissions of sulfur dioxide (SO2) annually and to hold TR annual SO2 allowances sufficient to cover these emissions. Commonly referred to as a budget trading program, each State has an established 'budget' of emissions that are distributed or sold to facilities, which, in turn, can only emit as much as they hold in allowances.

40 CFR Part 63, Subpart UUUUU

Description: This subpart establishes national emission limits and work practice standards for hazardous air pollutants emitted from coal- and oil-fired electric utility steam generating units. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards.

40 CFR Part 97

Cross-State Air Pollution Rule (CSAPR), requires states to significantly improve air quality by reducing power plant emissions that contribute to ozone and/or fine particle pollution in other states.

6 NYCRR 211.1

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

6 NYCRR 225-1.2 (d)

Sulfur-in-fuel limitations that fire residual oil in the downstate after July 1, 2014.



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6 NYCRR 225-1.2 (h)

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

6 NYCRR 225-1.5 (c)

This citation sets the daily and weekly fuel monitoring requirements for subject emission sources.

6 NYCRR 225-2.3 (b)

This regulation requires that each piece of equipment which fires Waste Fuel A demonstrate, at a minimum, 99% combustion efficiency in burning Waste fuel A.

6 NYCRR 225-2.4 (b)

This regulation sets the limits for the compounds that may be in Waste Fuel A or B. These are: PCB less than 50 parts per million (ppm); Total Halogens less than 1,000 ppm; Sulfur less than the limits in Part 225-1; Lead less than 250 ppm; and a minimum gross heat content of 125,000 BTU/Gallon

6 NYCRR 227-1.2 (a) (1)

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

6 NYCRR 227-1.3 (a)

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

6 NYCRR 227-1.4 (a)

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

6 NYCRR 227-1.4 (b)

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

6 NYCRR 227-2.5 (b)

System averaging plan NO<sub>x</sub> RACT compliance option.



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6 NYCRR 227-2.6 (a)

Applicable testing and/or monitoring requirements for emission sources subject to NOx RACT.

6 NYCRR 242-1.5

His regulation requires that the facility hold enough carbon dioxide allowances in their carbon dioxide budget at least equal to the amount of carbon dioxide emitted from the facility each year.

6 NYCRR Part 207

This regulation requires the owner or operator to submit an episode action plan to the Department in accordance with the requirements of 6NYCRR Part 207. The plan must contain detailed steps which will be taken by the facility to reduce air contaminant emissions during each stage of an air pollution episode. Once approved, the facility shall take whatever actions are prescribed by the episode action plan when an air pollution episode is in effect.

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

**Compliance Certification**

**Summary of monitoring activities at RAVENSWOOD GENERATING STATION:**

<b>Location Facility/EU/EP/Process/ES</b>	<b>Cond No.</b>	<b>Type of Monitoring</b>
FACILITY	37	record keeping/maintenance procedures
FACILITY	38	record keeping/maintenance procedures
FACILITY	39	record keeping/maintenance procedures
FACILITY	41	record keeping/maintenance procedures
FACILITY	42	record keeping/maintenance procedures
FACILITY	43	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
U-CT201	53	record keeping/maintenance procedures
U-CT202	54	record keeping/maintenance procedures
U-CT203	55	record keeping/maintenance procedures
U-CT204	56	record keeping/maintenance procedures
U-CT301	57	record keeping/maintenance procedures
U-CT302	58	record keeping/maintenance procedures
U-CT303	59	record keeping/maintenance procedures
U-CT304	60	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	26	work practice involving specific operations
FACILITY	27	work practice involving specific operations
FACILITY	28	record keeping/maintenance procedures
FACILITY	29	work practice involving specific operations
FACILITY	30	work practice involving specific operations
FACILITY	31	work practice involving specific operations
FACILITY	32	work practice involving specific operations



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

**Permit ID: 2-6304-00024/00035**

**Renewal Number: 3**

**01/08/2018**

FACILITY	33	work practice involving specific operations
U-00010	48	intermittent emission testing
U-CT008	52	intermittent emission testing
FACILITY	34	monitoring of process or control device parameters as surrogate
U-00010/00010	67	monitoring of process or control device parameters as surrogate
U-00020/00020	68	monitoring of process or control device parameters as surrogate
U-00030/00030	69	monitoring of process or control device parameters as surrogate
FACILITY	35	record keeping/maintenance procedures
FACILITY	36	record keeping/maintenance procedures
U-00010	49	record keeping/maintenance procedures
U-00020	50	record keeping/maintenance procedures
U-00030	51	record keeping/maintenance procedures
FACILITY	65	record keeping/maintenance procedures
FACILITY	66	record keeping/maintenance procedures

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**Basis for Monitoring**

Part 225: Monitoring for sulfur in fuel

Part 225: Monitoring for Lead, heat content in fuel

Part 225: Monitoring for Polychlorinated Biphenyls and Total Halogenated compounds in fuel

Part 227: Monitoring Opacity and Particulate Matter

Part 227: Monitoring NOx

Part 242: Monitoring CO2 under CO2 budget trading program