



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

**Facility Identification Data**

Name: SAMUEL A CARLSON GENERATING STATION

Address: 136 STEELE ST

JAMESTOWN, NY 14701-6438

**Owner/Firm**

Name: JAMESTOWN BOARD OF PUBLIC UTILITIES

Address: 92 STEELE ST

PO BOX 700

JAMESTOWN, NY 14701-0700, USA

Owner Classification: Municipal

**Permit Contacts**

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JAMESTOWN, NY 14702-0700

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**Permit Description**

**Introduction**

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

**Summary Description of Proposed Project**



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

This permit is primarily for the renewal of the Title V (five) Air Permit, Renewal 2, but it does include changes at the facility.

- This permit includes the requirements from the Air State Facility (AFS) Permit (9-0608-00053/00033) that was issued on February 8, 2012 to formally shut down boiler #11 effective January 1, 2012 and to shut down boiler 12 by January 1, 2014. Boiler #11 has not operated since 2001. The Acid Rain Permit associated with this permit (Title V renewal 3) states that boiler #11 retired from the Acid Rain Program effective December 30, 2012. Boiler #12 will be shutdown to comply with the Best Available Retrofit Technology (BART) rule, 6NYCRR Part 249.

- The previous Title V permit included conditions to generate 125.0 tons of NO<sub>x</sub> emission reduction credits (ERC's) from the future permanent shutdown of emission unit U 00004 (boilers #10 and #11) prior to the completion of the proposed circulating fluidized bed (CFB) boiler project. The CFB project was put on hold and currently there are no plans to revive it, so the permit conditions that generate 125.0 tons of NO<sub>x</sub> ERC's were not included in this permit renewal.

- This permit limits the heat input to boiler #10 to 607,000 million Btu per year as it switches from pulverized coal to exclusively natural gas. This limit will avoid requirements for New Source Review and will avoid additional monitoring, recordkeeping, and reporting requirements under the Reasonable Possibility Requirements of 6NYCRR Part 231-11(c). This heat input limitation will keep the Potential to Emit for all contaminants from boiler #10 below 50% of the Significant Project Thresholds in 6NYCRR Part 231-13.

- A NO<sub>x</sub> RACT Plan for the station was submitted with the Title V renewal application package, dated October 2011, to explain how the station would comply with the NO<sub>x</sub> RACT emission limits that become effective on July 1, 2014 (6NYCRR Part 227-2). Boilers #11 and #12 will shut down before the compliance date, case-by-case NO<sub>x</sub> RACT variances were included for boiler #9 and the combustion gas turbine, and the rest of the sources will comply with the presumptive NO<sub>x</sub> limits. The case-by-case variance for boiler #9 includes a new 145 tons of NO<sub>x</sub> per year limit which makes NO<sub>x</sub> controls uneconomical to install, so boiler 9 will continue to meet the current (pre-July 1, 2014) NO<sub>x</sub> RACT emission limits.

In the case-by-case variance for the combustion gas turbine, during simple cycle operation after July 1, 2014 it will continue to meet the current 50 parts per million on a dry volume basis (ppmvd), corrected to 15% oxygen, hourly emission limit. During combined cycle operation during the ozone season (May 1st through September 30<sup>th</sup>) water injection will be increased so it can meet a 35 ppmvd, corrected to 15% oxygen, hourly emission limit, during the non-ozone season it will continue to meet the current 42 ppmvd, corrected to 15% oxygen, hourly emission limit.

- This permit includes the mercury emission limit for coal fired boiler #9 that is effective on January 1, 2015. The current mercury emission limit was carried over into this permit too.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

- A permit condition requires compliance with the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters [40 CFR Part 63.7480, subpart DDDDD (5D's)] but no detailed requirements because the rule becomes effective after the anticipated public notice date. Regardless, the facility must comply with the applicable requirements.

- The NYSDEC air permitting rule, 6NYCRR 201 was modified effective February 22, 2013, which changed the citations that some existing requirements are listed under. This was true for capping, which moved from 6NYCRR 201-7.2 to 201-7.1, so all of the new and carried over emission capping conditions are now under the citation for 6NYCRR 201-7.1.

- National Emission Standards for Hazardous Air Pollutants for Coal- and Oil-Fired Electric Utility Steam Generating Units [40 CFR Part 63.9980, subpart UUUUU (5U's)] does not apply to boilers #9 and #12 because they don't serve electric generators rated at 25 megawatts (MW) per hour or larger.

- The Acid Deposition Reduction NOx Budget Trading Program [6NYCRR 237] and Acid Deposition Reduction SO2 Budget Trading Program [6NYCRR 238] are no longer active and were replaced with requirements for the CAIR NOx Ozone Season Trading Program [6NYCRR 243], CAIR NOx Annual Trading Program [6NYCRR 244], and CAIR SO2 Trading Program [6NYCRR 245].

**Attainment Status**

SAMUEL A CARLSON GENERATING STATION is located in the town of JAMESTOWN in the county of CHAUTAUQUA.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

Criteria Pollutant	Attainment Status
Particulate Matter (PM)	ATTAINMENT
Particulate Matter < 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	TRANSPORT REGION (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.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

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

**Facility Description:**

The Samuel A. Carlson Steam Generating Station is owned and operated by the Jamestown Board of Public Utilities (BPU). It is a municipal electric power generating plant with applicable SIC code 4911 Electrical Services. The facility is located at 136 Steele Street, in the City of Jamestown, Chautauqua County. The facility operates two coal fired boilers, along with auxiliary coal and ash handling equipment, a large natural gas combustion gas turbine with a duct burner and a heat recovery steam generator (HRSG), a large natural gas boiler, a medium size natural gas boiler, a small natural gas boiler, a very small natural gas boiler, an emergency combustion gas turbine generator set, an emergency diesel engine generator set, and two mechanical draft cooling towers. The large combustion gas turbine can operate in simple or combined cycle mode. The coal boilers, the large natural gas boiler and HRSG provide steam to a common header which can feed either one or both of the steam turbine electric generators. The steam turbine generators are rated at 24.5 megawatts (MW) each.

A fourth coal fired boiler, (#11) was permanently shut down effective January 1, 2012. Boiler #12 will permanently shut down on or before January 1, 2014 in order to be exempt from the requirements of Best Available Retrofit Technology (BART).

**Permit Structure and Description of Operations**

The Title V permit for SAMUEL A CARLSON 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.

SAMUEL A CARLSON GENERATING STATION is defined by the following emission unit(s):

Emission unit U00005 - This emission unit was created for emission point 5, which vents air displaced by flyash collected in one of two ash collection silos.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

Emission unit U00005 is associated with the following emission points (EP):  
00005

Process: 003 is located at OP FLOOR, Building SA CARLSON - Fly ash collected in the ESPs is pneumatically transported from the ESPs to one of two ash collection silos. Ash from the ESPs is collected in a receiver on top of the silo, which is then discharged via gravity into the silo. The air displaced by the ash is exhausted through a bag filter. The system operates approximately once every 2 minutes when the ash collection system is in operation. The system is operated about 5 hours per 8 hour shift.

Emission unit U00006 - This emission unit was created for emission point 6, which vents air displaced by fly ash and bottom ash collected in one of two ash collection silos.

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

Process: 004 is located at OP FLOOR, Building SA CARLSON - Fly ash collected in the ESPs is pneumatically transported from the ESPs to one of two ash collection silos. Flyash and bottom ash are collected via the transport system in a receiver on top of the silo, which is then discharged via gravity into the silo. The air displaced by the ash is exhausted through a bag filter. The system operates approximately once every 2 minutes when the ash collection system is in operation. The system is operated about 3 hour per 8 hour shift.

Emission unit U00007 - This emission unit was created for emission point 7, which exhausts the transport air of the pneumatic ash handling system. This transport system services all the ESP collection hoppers.

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

Process: 005 is located at OP FLOOR, Building SA CARLSON - The ash handling system collects flyash from the ESPs and pneumatically transports it to the ash collection silos. The pneumatic transport air is exhausted out emission point 00007 through a bag filter. The cleaned air from the bag filter is drawn through a mechanical exhauster (fan) and then discharged to the atmosphere.

Emission unit U00008 - This emission unit was created for emission point 8, which ventilates the coal conveying system to keep dust levels down throughout the conveyor system. Air displaced by coal in the coal silo enters the conveyor system and is exhausted through emission point 8.

Emission unit U00008 is associated with the following emission points (EP):  
00008

Process: 006 is located at OP FLOOR, Building SA CARLSON - Coal is transported on a conveyor system through the plant. Air displaced by coal in the coal silo enters the conveyor system, where the air in the conveyor corridors is collected, filtered through a bagfilter and exhausted out emission point 8.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

When the bag collectors are intermittently cleaned with a compressed air pulse jet, the collected coal dust is discharged to the coal bunker for use.

Emission unit U00020 - This emission unit consists of a GE LM6000 combustion gas turbine generator system and a Deltak heat recovery steam generator (HRSG). The turbine is natural gas-fired and has a nominal capacity of 43 MW at a heat input of 430 mmBtu/hr (HHV). The HRSG has natural gas supplemental firing (duct burners) rated at approximately 144 mmBtu/hr. During simple cycle operation, defined as when the combustion turbine is operating (including startup and shutdown) and the duct burner is not operating, the turbine exhausts directly to EP 00020 or to EP 00021. During combined cycle operation, defined as when both the combustion turbine and duct burner are operating, the turbine exhausts through the HRSG to EP 00021. A low pressure SPRINT (SPRAY INTERcooling) system and an Enhanced Flow System (EFS) were installed on the LM6000 gas turbine in 2005 to improve the efficiency and output of the system.

Emission unit U00020 is associated with the following emission points (EP):  
00020, 00021

Process: DB1 is located at GROUND, Building SA CARLSON - This process is the exclusive firing of the duct burner using natural gas. (This process is not actually possible since the duct burner cannot fire without the turbine. The process was defined because 40 CFR 60 subpart Db applies to the duct burner only.)

Process: GT1 is located at GROUND, Building SA CARLSON - This process is a GE LM6000 gas turbine and Deltak HRSG with supplemental firing of a duct burner, with both the turbine and duct burner firing natural gas. NO<sub>x</sub> from the turbine is controlled by water injection.

Process: GT2 is located at GROUND, Building SA CARLSON - This process is the GE LM6000 combustion gas turbine only, firing natural gas. NO<sub>x</sub> from the turbine is controlled by water injection. The duct burner is not operating.

Emission unit U00022 - This emission unit consists of a 23.3 mmBtu/hr natural gas-fired boiler manufactured by Cleaver Brooks. This boiler supplements the district heating requirements. This boiler emits to EP 00022.

Emission unit U00022 is associated with the following emission points (EP):  
00022

Process: 010 is located at GROUND, Building SA CARLSON - This process is a 23.3 mmBtu/hr boiler firing natural gas.

Emission unit U00023 - This emission unit consists of a 750 kW emergency backup Solar combustion gas turbine generator set to provide black start capability for the LM6000 combustion gas turbine. This turbine will fire only distillate oil and will operate only when the primary power source at the SA Carlson station has been rendered inoperable by an emergency situation and for weekly testing. Operations will be limited to 500 hours per year. The turbine exhausts to EP 00023.

Emission unit U00023 is associated with the following emission points (EP):



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

00023

Process: ET1 is located at Building SA CARLSON - A 750 kW emergency backup combustion gas turbine generator set that will provide black start capability for the LM6000 combustion gas turbine. This turbine will fire only distillate oil and will operate only when the primary power source at the SA Carlson station has been rendered inoperable by an emergency situation and for weekly testing. Operations will be limited to 500 hours per year.

Emission unit U00027 - This emission unit is a nominal 73.5 MMBtu/hr package boiler. The boiler is fired using natural gas as its only fuel. It is one of four sources that can provide hot water to the district heating system. This exhausts through emission point 00027.

Emission unit U00027 is associated with the following emission points (EP):

00027

Process: GAS is located at Building PB Bldg - This emission unit is a package boiler with a fuel input rate of 73.5 MMBtu/hr that operates to produce hot water for the district heating service. The boiler is natural gas fired with low NOx burners and is operated up to 8760 hours per year.

Emission unit U00003 - This emission unit was created for emission point 3. Two coal fired steam boilers (commonly known as boilers #9 and #12) emit to one common stack (EP 00003), also known as the North Stack. Boiler #9, designated as a large boiler, has a nominal heat input rate of 190 mmBtu/hr. Boiler #12, designated as a very large boiler, has a nominal heat input rate of 297 mmBtu/hr. The boilers primarily fire coal as described in process 001. However, distillate oil is used to bring the boilers up to temperature during startup and other conditions when necessary, as described in process 007. Low NOx burners are used to comply with the emission requirements of NOx RACT. Boiler #12 will be shut down on or before 01/01/2014 in order for this boiler to be exempt from BART requirements as well as NOx RACT limits that would otherwise have been effective on 7/1/2014.

Until boiler #12 shuts down, emission unit 3 consists of emission point 00003 (the north stack), emission source 00001 (boiler #9), emission source/control 00003 (the electrostatic precipitator that serves boiler #9), emission source 00004 (boiler #12), emission source/control 00PAC (the powdered activated carbon system that serves boiler #12), emission source/control 00WTR (the Consol water spray system that serves boiler #12), and emission source/control 00006 (the electrostatic precipitator that serves boiler #12). Once boiler #12 shuts down, emission unit 3 will consist of emission point 00003, emission source 00001, and emission source/control 00003.

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

00003

Process: 001 is located at OP FLOOR, Building SA CARLSON - Firing bituminous coal in two dry bottom, wall fired boilers (#9 and #12) that exhaust through one common stack (EP 00003). Electrostatic precipitators control particulate emissions from each boiler. One boiler (#9) is classified as a large boiler, the other boiler is classified as a very large boiler (#12). A Powdered Activated Carbon injection system (00PAC) and a Consol water spray system (00WTR) are used as needed to facilitate the control of mercury emissions from boiler #12. Process 001 will be replaced by Process 01A upon the permanent shutdown of boiler #12, no later than 01/01/2014.

Process: 007 is located at OP FLOOR, Building SA CARLSON - This process is for boiler startup using #2 fuel oil. Two dry bottom, wall fired boilers (#9 and #12) are operated and emit to one common stack.



New York State Department of Environmental Conservation  
Permit Review Report

Permit ID: 9-0608-00053/00019

Renewal Number: 2

03/22/2013

Each boiler has four burners which are ignited using #2 fuel oil upon boiler startup, each oil burner is rated at 5 mmBtu/hr. Process 007 will be replaced by Process07A upon the permanent shutdown of boiler #12, no

Process: 01A is located at OP Floor, Building SA CARLSON - Firing bituminous coal in a dry bottom wall fired boiler (#9) that exhaust through stack (EP 00003). Electrostatic precipitators control particulate emissions from the boiler, which is classified as a large boiler. Process 01A replaces Process 001 upon the permanent shutdown of boiler #12 which will occur on or before 01/01/2014.

Process: 07A is located at OP FLOOR, Building SA CARLSON - This process is for boiler startup using #2 fuel oil. One dry bottom wall fired boiler (#9) is operated and emits to stack EP 00003. The boiler has four burners which are ignited using #2 fuel oil upon boiler startup, each oil burner is rated at 5 mmBtu/hr. Process 07A replaces Process 007 upon the permanent shutdown of boiler #12 which will occur on or before 01/01/2014.

Emission unit U00028 - This emission unit is an 80 horsepower low pressure steam boiler with a nominal heat input rate of 3.2 MMBtu/hr. This is referred to as the DA (deaeration) Tank steam boiler. The boiler is fired using natural gas as its only fuel. This boiler exhausts through emission point 00028.

Emission unit U00028 is associated with the following emission points (EP):  
00028

Process: 28G is located at Building SA CARLSON -

Emission unit U00004 - This emission unit was created for emission point 4. One natural gas fired boiler (commonly known as boiler #10) emits to stack EP 00004, also known as the South Stack. This boiler is designated as large boiler and has a nominal heat input rate of 198 mmBtu/hr. The boiler fires natural gas only as described in process 10G. Low NOx burners and flue gas recirculation are used to comply with the emission requirements of NOx RACT.

Emission unit 4 consists of emission point 00004 (the south stack), emission source/control 00007 (boiler #10), emission source/control LNB10 (low NOx burners), and emission source/control FGR10 (flue gas recirculation). Emission source/control 00009 (the electrostatic precipitator for boiler #10) is no longer used because boiler was converted to natural gas and was removed from the permit. The ESP was abandoned in place.

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

**Title V/Major Source Status**

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

This is a major facility because it actually emits more than 100 tons per year (tpy) of sulfur dioxide, nitrogen oxides, carbon monoxide, green house gases as carbon dioxide equivalents, particulate matter, and particulate matter less than 10 microns in aerodynamic diameter (PM-10). The actual emissions of total hazardous air pollutants are also greater than the major facility threshold of 25 tpy.

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



**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

**Program Applicability**

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

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

**NOTES:**

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

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

**NESHAP** National Emission Standards for Hazardous Air Pollutants (40 CFR 61) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

**MACT** Maximum Achievable Control Technology (40 CFR 63) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

**NSPS** New Source Performance Standards (40 CFR 60) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

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

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

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

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

**Compliance Status**

Facility is in compliance with all requirements.

**SIC Codes**

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

of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

**SIC Code**

**Description**

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.

**SCC Code**

**Description**

1-01-002-02

EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION  
ELECTRIC UTILITY BOILER - BITUMINOUS COAL



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

**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

1-01-005-01	PULVERIZED COAL: DRY BOTTOM (BITUMINOUS COAL) EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - DISTILLATE OIL Grades 1 and 2 Oil
1-01-006-01	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - NATURAL GAS Boilers > 100 MBtu/Hr except Tangential
1-01-006-02	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - NATURAL GAS Boilers < 100 MBtu/Hr except Tangential
1-02-006-02	EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - NATURAL GAS 10-100 MMBtu/Hr
1-02-006-03	EXTERNAL COMBUSTION BOILERS - INDUSTRIAL INDUSTRIAL BOILER - NATURAL GAS Less Than 10 MMBtu/Hr
2-01-001-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Turbine
2-02-002-03	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - NATURAL GAS Turbine: Cogeneration
3-99-999-94	MISCELLANEOUS MANUFACTURING INDUSTRIES MISCELLANEOUS INDUSTRIAL PROCESSES Other Not Classified

**Facility Emissions Summary**

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

Cas No.	Contaminant Name	PTE	
		lbs/yr	Range
007440-38-2	ARSENIC	> 0	but < 10 tpy
000071-43-2	BENZENE	> 0	but < 10 tpy

New York State Department of Environmental Conservation  
Permit Review Report



Permit ID: 9-0608-00053/00019

Renewal Number: 2

03/22/2013

007440-41-7	BERYLLIUM	> 0 but < 10 tpy
007440-43-9	CADMIUM	> 0 but < 10 tpy
000124-38-9	CARBON DIOXIDE	>= 100,000 tpy
000630-08-0	CARBON MONOXIDE	>= 50 tpy but < 100 tpy
007440-47-3	CHROMIUM	> 0 but < 10 tpy
007440-48-4	COBALT	> 0 but < 10 tpy
000050-00-0	FORMALDEHYDE	> 0 but < 10 tpy
0NY100-00-0	HAP	>= 50 tpy but < 100 tpy
000110-54-3	HEXANE	> 0 but < 10 tpy
007647-01-0	HYDROGEN CHLORIDE	>= 10 tpy
007439-92-1	LEAD	> 0 but < 10 tpy
007439-96-5	MANGANESE	> 0 but < 10 tpy
007439-97-6	MERCURY	> 0 but < 10 tpy
000091-20-3	NAPHTHALENE	> 0 but < 10 tpy
007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS	> 0 but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN	>= 250 tpy but < 75,000 tpy
0NY075-00-0	PARTICULATES	>= 250 tpy but < 75,000 tpy
0NY075-00-5	PM-10	>= 250 tpy but < 75,000 tpy
130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS	> 0 but < 10 tpy
007782-49-2	SELENIUM	> 0 but < 10 tpy
007446-09-5	SULFUR DIOXIDE	>= 250 tpy but < 75,000 tpy
000108-88-3	TOLUENE	> 0 but < 10 tpy
0NY998-00-0	VOC	>= 10 tpy but < 25 tpy

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

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

An emergency constitutes an affirmative defense to an action brought 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 and/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;

(3) During the period of the emergency the facility owner and/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 and/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 and/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.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

- Item B: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)**  
The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.
- Item C: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.3(a)(4)**  
Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.
- Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)**  
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)**  
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)**  
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.5(a)(5)**  
It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.
- Item H: Property Rights - 6 NYCRR 201-6.5(a)(6)**  
This permit does not convey any property rights of any sort or any exclusive privilege.
- Item I: Severability - 6 NYCRR Part 201-6.5(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.

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



**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

**Item J: Permit Shield - 6 NYCRR Part 201-6.5(g)**

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

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

**Item K: Reopening for Cause - 6 NYCRR Part 201-6.5(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.



New York State Department of Environmental Conservation  
Permit Review Report

Permit ID: 9-0608-00053/00019

Renewal Number: 2

03/22/2013

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

**Item L: Permit Exclusion - ECL 19-0305**

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

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

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

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

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

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

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

**Regulatory Analysis**

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
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New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

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FACILITY	ECL 19-0301	106		Powers and Duties of the Department with respect to air pollution control
U-00020	40CFR 52-A.21	91, 92, 93, 94		Prevention of Significant Deterioration
U-00022	40CFR 52-A.21	100, 101, 102		Prevention of Significant Deterioration
FACILITY	40CFR 60-A	59		General provisions
FACILITY	40CFR 60-A.11 (d)	64		General provisions - compliance with standards and maintenance requirements
FACILITY	40CFR 60-A.12	65		General provisions - Circumvention
FACILITY	40CFR 60-A.13 (a)	66		General provisions - Monitoring requirements
FACILITY	40CFR 60-A.13 (d)	67, 68		General provisions - Monitoring requirements
FACILITY	40CFR 60-A.13 (e)	69, 70		General provisions - Monitoring requirements
FACILITY	40CFR 60-A.13 (h)	71		General provisions - Monitoring requirements
FACILITY	40CFR 60-A.4	60		General provisions - Address
FACILITY	40CFR 60-A.7 (a)	61		Notification and Recordkeeping
FACILITY	40CFR 60-A.7 (b)	62		Notification and Recordkeeping
FACILITY	40CFR 60-A.7 (f)	63		Notification and Recordkeeping
U-00020/-/DB1	40CFR 60-Db.44b(1) (1)	98		Standards for Nitrogen Oxides (firing coal, oil, natural gas or a mixture of all).
U-00020/-/DB1	40CFR 60-Db.49b(d)	99		Reporting and Recordkeeping Requirements.
FACILITY	40CFR 60-Dc.48c (g)	72		Reporting and Recordkeeping Requirements.
U-00023	40CFR 60-GG.332	103		Standard for Nitrogen Oxides for Gas Turbines > 100 mmBtu/hr
U-00020	40CFR 60-GG.332 (a) (1)	96		Standard for Oxides of nitrogen for Gas Turbines > 100 mmBTU/hr
U-00020	40CFR 60-GG.332 (f)	97		Exemption from Section 332(a) of this Subpart.
U-00023	40CFR 60-GG.333 (b)	104		Standard for Sulfur Dioxide
U-00008	40CFR 60-Y	90		Standards of



New York State Department of Environmental Conservation  
Permit Review Report

Permit ID: 9-0608-00053/00019

Renewal Number: 2

03/22/2013

FACILITY	40CFR 63-DDDDD	73	Performance for Coal Preparation Plants
FACILITY	40CFR 64	74	Boilers and Process Heaters Major Source NESHAP rule
U-00003/00003	40CFR 64	81, 82	COMPLIANCE ASSURANCE MONITORING
FACILITY	40CFR 64.8	75	COMPLIANCE ASSURANCE MONITORING
FACILITY	40CFR 68	11	CAM - Quality improvement plan (QIP) requirements
FACILITY	40CFR 72	76	Chemical accident prevention provisions
FACILITY	40CFR 82-F	12	Permits regulation
FACILITY	6NYCRR 200.6	1	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.7	5	Acceptable ambient air quality.
FACILITY	6NYCRR 201-1.4	107, 108, 109	Maintenance of equipment.
FACILITY	6NYCRR 201-1.7	6	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.8	7	Recycling and Salvage
FACILITY	6NYCRR 201-3.2 (a)	8	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2 (b)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3 (a)	9	Exempt Activities - maintenance of control equipment
FACILITY	6NYCRR 201-3.3 (b)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	15, 77, 78	Trivial Activities - maintenance of control equipment
FACILITY	6NYCRR 201-6.4 (a) (4)	16	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4 (a) (7)	17	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4 (a) (8)	18	General Conditions - Fees
FACILITY	6NYCRR 201-6.4 (c)	19	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4 (c) (2)	20	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4 (c) (3) (ii)	21	Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4 (d) (4)	22	Reporting Requirements - Deviations and Noncompliance
FACILITY			Compliance Schedules - Progress Reports



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

FACILITY	6NYCRR 201-6.4 (e)	23	Compliance
FACILITY	6NYCRR 201-6.4 (f) (6)	24	Certification
FACILITY	6NYCRR 201-7.1	79	Off Permit Changes
U-00003/00003/001/00001	6NYCRR 201-7.1	85	Emission Capping in Facility Permits
U-00004	6NYCRR 201-7.1	89	Emission Capping in Facility Permits
U-00020	6NYCRR 201-7.1	91, 92, 93, 94	Emission Capping in Facility Permits
U-00022	6NYCRR 201-7.1	100, 101, 102	Emission Capping in Facility Permits
U-00023	6NYCRR 201-7.1	103	Emission Capping in Facility Permits
FACILITY	6NYCRR 202-1.1	10	Required emissions tests.
FACILITY	6NYCRR 202-1.2	25	Notification.
FACILITY	6NYCRR 202-1.3	26, 27, 28	Acceptable procedures.
FACILITY	6NYCRR 202-1.4	29	Separate emission tests by the commissioner.
FACILITY	6NYCRR 202-1.5	30	Prohibitions.
FACILITY	6NYCRR 202-2.1	2	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	3	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	31, 110	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	111	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 212.6 (a)	32	General Process Emission Sources - opacity of emissions limited
FACILITY	6NYCRR 215.2	4	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2 (a) (2)	33, 34, 112, 113	Sulfur in Fuel Limitations Post 12/31/87.
FACILITY	6NYCRR 225-1.2 (c)	35	Sulfur-in-fuel limitations - Table 1
FACILITY	6NYCRR 227-1.2 (a) (1)	36	Particulate Emissions from Liquid Fuels.
U-00003/00003/001	6NYCRR 227-1.2 (a) (4)	83, 84	Particulate Emissions Firing Solid Fuels.
FACILITY	6NYCRR 227-1.3 (a)	37, 38, 39	Smoke Emission Limitations.
FACILITY	6NYCRR 227-1.4 (a)	114	Stack Monitoring. (see narrative)
FACILITY	6NYCRR 227-1.4 (b)	40	Stack Monitoring
U-00003/00003/001/00004	6NYCRR 227-2.4 (a) (1) (i)	87	1994 NOx RACT presumptive limits.
U-00004/00004	6NYCRR 227-2.4 (b)	132	Large boilers.
U-00003/00003/001/00001	6NYCRR 227-2.4 (b) (1) (i)	86	1994 NOx RACT presumptive limits.
U-00003/00003/001/00001	6NYCRR 227-2.4 (b) (1) (ii)	85	2010 NOx RACT presumptive limits.
U-00027/00027	6NYCRR 227-2.4 (c) (1) (i)	105	1994 NOx RACT presumptive limit.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

U-00027/00027	6NYCRR 227-2.4(c)(1)(ii)	141	2010 NOx RACT presumptive limit.
U-00022/00022	6NYCRR 227-2.4(d)	138	Small boilers, small combustion turbines, and small stationary internal combustion engines.
U-00028/00028	6NYCRR 227-2.4(d)	142	Small boilers, small combustion turbines, and small stationary internal combustion engines.
U-00020/-/GT2	6NYCRR 227-2.4(e)(1)	136	Simple cycle combustion turbines.
U-00023/00023	6NYCRR 227-2.4(e)(1)	139	Simple cycle combustion turbines.
U-00020/-/GT1	6NYCRR 227-2.4(e)(2)	133	Combined cycle combustion turbines.
U-00020/-/GT1	6NYCRR 227-2.4(e)(3)	134, 135	NOx requirements for other combustion turbines.
U-00020/-/GT2	6NYCRR 227-2.4(e)(3)	137	NOx requirements for other combustion turbines.
U-00023/00023	6NYCRR 227-2.4(e)(3)	140	NOx requirements for other combustion turbines.
U-00003/00003/001/00001	6NYCRR 227-2.5(c)	130	Alternative RACT option.
U-00003/00003/001/00004	6NYCRR 227-2.5(d)	131	Shutdown of an emission source.
U-00003	6NYCRR 231-11.2(b)	80	Reasonable Possibility requirements for insignificant mods - less than 50% with excluded emissions
U-00004	6NYCRR 231-11.2(c)	89	Reasonable Possibility requirements for insignificant mods - greater than 50% with excluded emissions
U-00020	6NYCRR 231-2.2(a)(4)	91	Applicability
U-00022	6NYCRR 231-2.2(a)(4)	101	Applicability
U-00020	6NYCRR 231-2.4(a)(1)	95	Permit Requirements
FACILITY	6NYCRR 242-1.5	115	CO2 Budget Trading Program - Standard requirements
FACILITY	6NYCRR 242-4	116	CO2 Budget Trading Program - Compliance certification
FACILITY	6NYCRR 242-8.5	117	CO2 Budget Trading Program - Reporting and recordkeeping
FACILITY	6NYCRR 243-1.6(c)	41	NOx Ozone Season Emission Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6(d)	42	Excess Emission Requirements - CAIR NOx Ozone Season Trading Program

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



**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

FACILITY	6NYCRR 243-1.6 (e)	43	Recordkeeping and reporting requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-2.1	44	Authorization and responsibilities - CAIR Designated Representative
FACILITY	6NYCRR 243-8.1	45, 46	General Requirements - Monitoring and Reporting
FACILITY	6NYCRR 243-8.3	47, 48	Out of control periods - Monitoring and Reporting
FACILITY	6NYCRR 243-8.5 (d)	49	Quarterly reports re: recordkeeping and reporting - Monitoring and Reporting
FACILITY	6NYCRR 243-8.5 (e)	50	Compliance certification re: recordkeeping and reporting - Monitoring and Reporting
FACILITY	6NYCRR 244-1	51	CAIR NOx Ozone Annual Trading Program
FACILITY	6NYCRR 244-2	52	General Provisions CAIR Designated Representative for CAIR NOx Sources
FACILITY	6NYCRR 244-8	53, 54	Monitoring and Reporting CAIR NOx Allowances
FACILITY	6NYCRR 245-1	55	CAIR SO2 Trading Program General Provisions
FACILITY	6NYCRR 245-2	56	CAIR Designated Representative for CAIR SO2 Sources
FACILITY	6NYCRR 245-8	57, 58	Monitoring and Reporting for CAIR SO2 Trading Program
FACILITY	6NYCRR 246.11 (a)	125	Record Keeping Provisions
FACILITY	6NYCRR 246.11 (b)	126	Reporting Provisions
FACILITY	6NYCRR 246.11 (c)	127	Certification Application
FACILITY	6NYCRR 246.11 (d)	128	Quarterly Reports
FACILITY	6NYCRR 246.11 (e)	129	Compliance Certification
FACILITY	6NYCRR 246.5 (b)	118	Mercury Reduction Program Facility-wide Limits and Requirements for Existing Facilities
FACILITY	6NYCRR 246.6 (b)	119	Emission Limits for Existing Facilities, Effective January 1, 2015
FACILITY	6NYCRR 246.7 (b) (1)	120	Requirements for Installation, Certification, and



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

**Permit ID: 9-0608-00053/00019  
Renewal Number: 2  
03/22/2013**

FACILITY	6NYCRR 246.8(c)(1)	121	Data Accounting
FACILITY	6NYCRR 246.8(c)(2)	122	Initial Certification
FACILITY	6NYCRR 246.8(c)(3)	123	Procedures for CEMS
FACILITY	6NYCRR 246.9(a)	124	Recertification
U- 00003/00003/001/00004	6NYCRR 249.1(c)(2)	88	Procedures for CEMS Approval Process for Monitoring Certification and Recertification Missing Data Procedures and Out of Control Periods for CEMS Condition to allow source to permanently shut down to avoid Part 249

**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.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

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 202-1.1

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

6 NYCRR 202-2.1

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

6 NYCRR 202-2.5

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

6 NYCRR 211.2

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

6 NYCRR 215.2

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

40 CFR Part 68

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

40 CFR Part 82, Subpart F

Subpart F requires the reduction of emissions of class I and class II refrigerants to the lowest achievable level during the service, maintenance, repair, and disposal of appliances in accordance with section 608 of the Clean Air Act AmENDments of 1990. This subpart applies to any person servicing, maintaining, or repairing appliances except for motor vehicle air conditioners. It also applies to persons disposing of appliances, including motor vehicle air conditioners, refrigerant reclaimers, appliance owners, and



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

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, SAMUEL A CARLSON GENERATING STATION has been determined to be subject to the following regulations:

40 CFR 52.21

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

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

40 CFR 60.11 (d)

This regulation specifies the type of opacity monitoring requirements in relation to compliance with the standards and maintenance requirements.

40 CFR 60.12

This regulation prohibits an owner or operator from concealing emissions in violation of applicable standards by any means.

40 CFR 60.13 (a)

This regulation specifies that all New Source Performance Standard (NSPS) affected sources that are required to have continuous monitoring systems (CMS) are subject to the requirements of Appendix B of 40 CFR Part 60 and if the CMS is used to demonstrate compliance with emission limits on a continuous basis, then it is also subject to Appendix F of 40 CFR Part 60.

40 CFR 60.13 (d)

This regulation contains the requirements for daily drift testing for continuous monitoring systems required by 40 CFR Part 60.

40 CFR 60.13 (e)

This regulation specifies minimum frequency of operation requirements for continuous monitoring systems required by 40 CFR Part 60.

40 CFR 60.13 (h)

This regulation specifies the data averaging requirements for continuous monitoring systems subject to 40 CFR Part 60.

40 CFR 60.332

Gas turbine subpart GG.....



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

40 CFR 60.332 (a) (1)

This regulation provides the equation to be used to determine the allowable emissions of oxides of nitrogen (NO<sub>x</sub>) from a gas turbine with a heat input greater than 100 million BTU per hour.

40 CFR 60.332 (f)

This regulation allows gas turbines using water or steam injection to control NO<sub>x</sub> to be exempt from section 332.a when ice fog is deemed a traffic hazard.

40 CFR 60.333 (b)

This regulation limits the amount of sulfur in the fuel burned in a gas turbine to 0.8% by weight

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 60.44b (1) (1)

This subdivision sets emissions standards for oxides of nitrogen for the firing of coal, oil, natural gas, or a mixture of all fuels.

40 CFR 60.48c (g)

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

40 CFR 60.49b (d)

This subdivision requires reporting and recordkeeping for affected steam generating units - annual fuel capacity factors.

40 CFR 60.7 (a)

This regulation requires any owner or operator subject to a New Source Performance Standard (NSPS) to furnish the Administrator with notification of the dates of: construction or reconstruction, initial startup, any physical or operational changes, commencement of performance testing for continuous monitors and anticipated date for opacity observations as required.

40 CFR 60.7 (b)

This regulation requires the owner or operator to maintain records of the occurrence and duration of any startup, shutdown, or malfunction of the source or control equipment or continuous monitoring system.

40 CFR 60.7 (f)



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

This condition specifies requirements for maintenance of files of all measurements, including continuous monitoring system (CMS), monitoring device, and performance testing measurements; all CMS performance evaluations; all CMS or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices for at least two years.

40 CFR 64.8

This section lists the elements of a Quality Improvement Plan (QIP). A QIP may be required if a permittee has a number of exceedances or excursions of its Compliance Assurance Monitoring (CAM) program during during a reporting period.

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 Y

Coal handling NSPS.....

40 CFR Part 63, Subpart DDDDD

This subpart establishes national emission limits and work practice standards for hazardous air pollutants (HAP) emitted from industrial, commercial, and institutional boilers and process heaters located at major sources of HAP emissions. It also establishes requirements to demonstrate initial and continuous compliance with the emission limits and work practice standards. (63.7480)

40 CFR Part 64

The federal Compliance Assurance Monitoring (CAM) rule, 40 CFR Part 64, requires monitoring of control device, capture system, and/or process parameters to provide a reasonable assurance of compliance with emission limitations or standards. It applies to emission units that use a control device to comply with certain standards and limitations and that have potential pre-control device emissions equal to or greater than a major source threshold.

Acid Rain program requirements; stratospheric ozone protection requirements; post-1990 New Source Performance Standards, Emission Guidelines, and National Emission Standards for Hazardous Air Pollutants; and some other limitations are exempt from CAM. However, many of the exempt requirements are subject to less stringent periodic monitoring under 40 CFR Part 70 and 6NYCRR Subpart 201-6.

40 CFR Part 72

In order to reduce acid rain the the U.S. and Canada, Title IV of the Clean Air Act Amendments of 1990 requires the establishment of a program to reduce emissions of SO<sub>2</sub> and NO<sub>x</sub> (sulfur dioxide and oxides of nitrogen). Fossil fuel burning electric utility companies are a major source of these



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

contaminants in the US. These sources were regulated in a phased approach. Phase I, which began in 1995, requires 110 of the higher-emitting utility plants in the eastern and Midwest states to meet intermediate SO<sub>2</sub> emission limitations. Phase II, which began in 2000, tightens the emission limitations and expands the coverage to most fossil fuel burning utilities. The utilities are given "allowances" which is a limited authorization to emit one ton of SO<sub>2</sub>. The utilities are required to limit SO<sub>2</sub> emissions to the number of allowances they hold. Some can benefit however by reducing their emissions and selling their excess allowances. Part 72 contains the means of implementing this portion of Title IV of the Clean Air Act.

6 NYCRR 201-3.2 (b)

The owner and/or operator of any emission source or unit that is eligible to be exempt on the basis of the use of appropriate emission control devices shall operate and maintain such devices in a manner consistent with good engineering practices. Failure to do so constitutes a violation of this Part.

6 NYCRR 201-3.3 (b)

The owner and/or operator of any emission source or unit that is eligible to be considered as a trivial source on the basis of the use of appropriate emission control devices shall operate and maintain such devices in a manner consistent with good engineering practices. Failure to do so constitutes a violation of this Part.

6 NYCRR 201-6.4 (a) (4)

The owner or operator shall furnish to the department, within a reasonable time, any information that the department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The permittee shall also furnish to the department copies of records required to be kept by the permit.

6 NYCRR 201-6.4 (a) (7)

The owner or operator of a facility shall pay fees to the department consistent with the fee schedule authorized by Subpart 482-2 of this Title.

6 NYCRR 201-6.4 (a) (8)

The department or an authorized representative shall be allowed upon presentation of credentials and other documents as may be required by law to: enter upon the permittee's premises; have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit; inspect at reasonable times any emission sources, equipment, practices, and operations regulated or required under the permit; and sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

6 NYCRR 201-6.4 (c)

This citation lists the information that must be included in records, reports, and compliance monitoring.

6 NYCRR 201-6.4 (c) (2)

Records of all monitoring data and support information must be retained for a period of at least five years.

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)

Progress reports consistent with an applicable schedule of compliance are to be submitted at least semiannually.

6 NYCRR 201-6.4 (e)

Set 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)

No permit revision will be required for operating changes that contravene an express permit term, provided that such changes would not violate applicable requirements as defined under this Part or contravene federally enforceable monitoring (including test methods), recordkeeping, reporting, or compliance certification permit terms and conditions.

6 NYCRR 201-7.1



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

Emission capping in facility permits - The owner or operator of a facility subject to this Part may elect to accept federally enforceable permit conditions which restrict or cap emissions from the facility or an emission source below one or more applicable requirements or where needed to establish an emission reduction credit as defined in Part 231 of this Title.

6 NYCRR 202-1.2

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

6 NYCRR 202-1.3

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

6 NYCRR 202-1.4

This regulation allows the department discretion to conduct separate or additional emission tests, including preparation of the testing site, at the source owner's expense, to determine compliance.

6 NYCRR 202-1.5

This rule prohibits the concealment of an emission by the use of air or other gaseous diluents (diluting agents) to achieve compliance with an emission standard which is based on the concentration of a contaminant in the gases emitted through a stack.

6 NYCRR 211.1

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

6 NYCRR 212.6 (a)

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

6 NYCRR 225-1.2 (a) (2)

This regulation prohibits any person from selling, offering for sale, purchasing or using any fuel which contains sulfur in a quantity exceeding the limitations set forth in Table 1, Table 2, or Table 3 of this



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

section.

6 NYCRR 225-1.2 (c)

The sulfur-in-fuel limitations for residual and distillate oil and for solid fuel are listed in Tables 1,2 and 3 or 6 NYCRR Part 225-1.2(c), (d) and (e).

6 NYCRR 227-1.2 (a) (1)

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

6 NYCRR 227-1.2 (a) (4)

This regulation establishes a particulate emission limit in terms of lbs per mmBtu of heat input for stationary combustion units which fire solid fuels at variable sizes of heat input (mmBtu/hr).

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

Existing NO<sub>x</sub> RACT presumptive limits that will expire on 6/30/14 for very large boilers (>250 mmBtu/hr).

6 NYCRR 227-2.4 (b)

NO<sub>x</sub> RACT for large boilers, 100 to 250 mmBtu/hr.

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

Existing NO<sub>x</sub> RACT presumptive limits that expire on 6/30/14 for large boilers. (100-250 mmBtu/hr)



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

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

Future NO<sub>x</sub> RACT presumptive limits effective 7/1/14 for large boilers (100-250 mmBtu/hr)

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

Existing NO<sub>x</sub> RACT presumptive limit that expires on 6/30/14 for mid-size boilers (25-100 mmBtu/hr).

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

Future NO<sub>x</sub> RACT presumptive limit effective 7/1/14 for mid-size boilers (25-100 mmBtu/hr).

6 NYCRR 227-2.4 (d)

This section includes NO<sub>x</sub> RACT requirements for small boilers, small combustion turbines, and small stationary internal combustion engines.

6 NYCRR 227-2.4 (e) (1)

Presumptive NO<sub>x</sub> RACT emission limits for simple cycle combustion turbines before July 1, 2014.

6 NYCRR 227-2.4 (e) (2)

Presumptive NO<sub>x</sub> RACT emission limits for combined cycle combustion turbines before July 1, 2014.

6 NYCRR 227-2.4 (e) (3)

NO<sub>x</sub> RACT requirements for combustion turbines fired with fuels other than natural gas or distillate oil, and NO<sub>x</sub> RACT requirements for all combined cycle combustion turbines that operate after July 1, 2014.

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



**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

6 NYCRR 227-2.5 (c)

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

6 NYCRR 227-2.5 (d)

Shutdown of an emission source as a NO<sub>x</sub> RACT compliance option.

6 NYCRR 231-11.2 (b)

This subdivision is referred to as the "Reasonable Possibility" provisions. This citation lists the record keeping requirements for insignificant modifications that are less than 50% of the applicable significant project threshold including excluded emissions as defined in Part 231-4.1(b)(40)(i)(c).

6 NYCRR 231-11.2 (c)

This citation lists the record keeping requirements for insignificant modifications that are greater than 50% of the threshold including excluded emissions as defined in 231-4.1(b)(40)(i)(c) of Part 231.

6 NYCRR 231-2.2 (a) (4)

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

The purpose of Section 231-2.2 is to define what new or modified facilities are subject to the requirements set forth in the other sections of the rule.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

6 NYCRR 231-2.4 (a) (1)

The provisions of Subpart 231-2 apply to new or modified major facilities. The contaminants of concern state-wide are nitrogen oxides and volatile organic compounds since New York State is located in the ozone transport region and because there are ozone non-attainment areas within the state. In the New York City metropolitan area, carbon monoxide is also a non-attainment contaminant. In addition, particulate matter less than 10 microns in size (PM-10) is a non-attainment contaminant in Manhattan County.

The permitting requirements for proposed source projects and new major facilities are set forth in section 231-2.4.

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 242-8.5

This regulation requires the CO<sub>2</sub> authorized account representative to comply with all applicable recordkeeping and reporting requirements in section 242-8.5, the applicable record keeping and reporting requirements under 40 CFR 75.73 and with the certification requirements of section 242-2.1(e) of this Part.

6 NYCRR 243-1.6 (c)

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

6 NYCRR 243-1.6 (d)

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

6 NYCRR 243-1.6 (e)

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

6 NYCRR 243-2.1

This citation of the Clean Air Interstate Rule (CAIR) NO<sub>x</sub> Ozone Season Trading Program explains that an CAIR NO<sub>x</sub> Ozone Season designated representative must be selected to submit, sign and certify each



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

submission on behalf of the source for the this program.

6 NYCRR 243-8.1

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

6 NYCRR 243-8.3

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

6 NYCRR 243-8.5 (d)

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

6 NYCRR 243-8.5 (e)

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

6 NYCRR 246.11 (a)

This citation requires a mercury reduction program facility to comply with the record keeping requirements of 6NYCRR Part 246.11 and of 40 CFR 75.84(a) through (c) of the Acid Rain Program.

6 NYCRR 246.11 (b)

This citation requires mercury reduction program facilities to comply with the reporting requirements of 6 NYCRR 246.11 and of 40 CFR 75.84(d) through (f) of the Acid Rain Program.

6 NYCRR 246.11 (c)

This citation requires mercury reduction program facilities to submit an application when the certification testing is completed.

6 NYCRR 246.11 (d)

This citation requires mercury reduction program facilities to submit quarterly reports electronically that include mercury emissions, heat input and other required information in the manner specified in 40 CFR 75.84(f). The reports for sources subject to the Acid Rain Program or the Clean Air Interstate Rule (CAIR) for oxides of nitrogen or sulfur dioxide shall included the applicable data required by 40 CFR 75 subparts F through H and 6 NYCRR 246.7 through 246.13.

6 NYCRR 246.11 (e)



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

This citation requires mercury reduction program facilities to submit a compliance certification statement in support of each quarterly report. It also lists the information that must be certified.

6 NYCRR 246.5 (b)

This citation limits a mercury reduction program facility's annual mercury emissions and describes the emission averaging method.

6 NYCRR 246.6 (b)

Effective January 1, 2015, each existing mercury reduction program (MRP) facility shall not exceed the emission limit of 0.6 pounds mercury per trillion Btu (0.6 lb Hg/TBtu). Compliance with this emission limit shall be determined on a 30-day rolling average, rolled daily and reported quarterly.

6 NYCRR 246.7 (b) (1)

This citation requires mercury reduction program facilities to have a certified mercury monitoring system by certain dates.

6 NYCRR 246.8 (c) (1)

This citation states the procedures that a mercury reduction facility must follow to initially certify their mercury monitoring system.

6 NYCRR 246.8 (c) (2)

This citation states the procedures that a mercury reduction facility must follow to recertify their mercury monitoring system.

6 NYCRR 246.8 (c) (3)

This citation states the process that a mercury reduction facility must follow to initially certify or recertify their mercury monitoring system.

6 NYCRR 246.9 (a)

This citation states that if a mercury monitoring system at a mercury reduction facility fails to meet the quality assurance and quality control requirements or data validation requirements of 40 CFR 75, then data shall be substituted using the applicable missing data procedures in 40 CFR 75 subpart D.

6 NYCRR 249.1 (c) (2)

6 NYCRR Subpart 242-4

This citation requires that an Annual Compliance Certification report be submitted by March 1st, on an annual basis, certifying compliance with the CO2 Budget Trading Program.



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

6 NYCRR Subpart 244-1

This subpart explains the general provisions of the Clean Air Interstate Rule (CAIR) Nitrogen Oxide (NOx) Annual Trading Program. The control period for this annual NOx cap and trade program runs from January 1 to December 31 each year, starting in 2009. Each source shall hold a tonnage equivalent in CAIR NOx allowances that is not less than the total tons of NOx emissions for the control period.

6 NYCRR Subpart 244-2

Each Clean Air Interstate Rule (CAIR) NOx source shall have one CAIR designated representative and may have one alternate representative. Each submission for the CAIR NOx Annual Trading Program shall be submitted, signed, and certified by the CAIR designated representative or the alternate representative.

6 NYCRR Subpart 244-8

The owners, operators, and Clean Air Interstate Rule (CAIR) designated representative of a CAIR NOx unit shall comply with the monitoring, recordkeeping, and reporting requirements as provided in Subpart 6 NYCRR Part 244-8 and in 40 CFR Part 75, Subparts F and G. A certified NOx emission monitoring system must be used to measure NOx emissions. NOx emission reports must be certified and submitted quarterly. Low Mass Emitters follow the requirements of 40 CFR 75.19.

6 NYCRR Subpart 245-1

This subpart explains the general provisions of the Clean Air Interstate Rule (CAIR) sulfur dioxide (SO2) Trading Program. The control period for this annual SO2 cap and trade program runs from January 1 to December 31, starting in the year 2010. Each source shall hold a tonnage equivalent in CAIR SO2 allowances that is not less than the total tons of SO2 emissions for the control period.

6 NYCRR Subpart 245-2

Each Clean Air Interstate Rule (CAIR) SO2 source shall have one CAIR designated representative and may have one alternate representative. Each submission for the CAIR SO2 Trading Program shall be submitted, signed, and certified by the CAIR designated representative or the alternate representative.

6 NYCRR Subpart 245-8

The owners, operators, and Clean Air Interstate Rule (CAIR) designated representative of a CAIR SO2 unit shall comply with the monitoring, recordkeeping, and reporting requirements as provided in Subpart 6 NYCRR Part 245-8 and in 40 CFR Part 75, Subparts F and G. A certified SO2 emission monitoring system must be used to measure SO2 emissions. SO2 emission reports must be certified and submitted quarterly. Low Mass Emitters follow the requirements of 40 CFR 75.19.

**Compliance Certification**

**Summary of monitoring activities at SAMUEL A CARLSON GENERATING STATION:**

Location	Cond No.	Type of Monitoring
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New York State Department of Environmental Conservation  
**Permit Review Report**



**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

**Facility/EU/EP/Process/ES**

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FACILITY	68	record keeping/maintenance procedures
FACILITY	70	record keeping/maintenance procedures
U-00020/-/DB1	98	continuous emission monitoring (cem)
U-00020/-/DB1	99	record keeping/maintenance procedures
FACILITY	72	record keeping/maintenance procedures
U-00020	96	continuous emission monitoring (cem)
U-00020	97	record keeping/maintenance procedures
U-00023	104	work practice involving specific operations
U-00008	90	monitoring of process or control device parameters as surrogate
FACILITY	73	record keeping/maintenance procedures
FACILITY	74	record keeping/maintenance procedures
U-00003/00003	81	monitoring of process or control device parameters as surrogate
U-00003/00003	82	monitoring of process or control device parameters as surrogate
FACILITY	21	record keeping/maintenance procedures
FACILITY	23	record keeping/maintenance procedures
U-00003/00003/001/00001	85	monitoring of process or control device parameters as surrogate
U-00004	89	work practice involving specific operations
U-00020	91	monitoring of process or control device parameters as surrogate
U-00020	92	monitoring of process or control device parameters as surrogate
U-00020	93	intermittent emission testing
U-00020	94	continuous emission monitoring (cem)
U-00022	100	monitoring of process or control device parameters as surrogate
U-00022	101	monitoring of process or control device parameters as surrogate
U-00022	102	monitoring of process or control device parameters as surrogate
U-00023	103	work practice involving specific operations
FACILITY	2	record keeping/maintenance procedures
FACILITY	110	record keeping/maintenance procedures
FACILITY	32	monitoring of process or control device parameters as surrogate
FACILITY	33	continuous emission monitoring (cem)
FACILITY	34	continuous emission monitoring (cem)
FACILITY	112	work practice involving specific operations
FACILITY	113	continuous emission monitoring (cem)
FACILITY	35	work practice involving specific operations
FACILITY	36	intermittent emission testing
U-00003/00003/001	83	intermittent emission testing
U-00003/00003/001	84	intermittent emission testing
FACILITY	37	record keeping/maintenance procedures
FACILITY	38	monitoring of process or control device parameters as surrogate
FACILITY	39	monitoring of process or control device parameters as surrogate
FACILITY	40	record keeping/maintenance procedures
U-00003/00003/001/00004	87	continuous emission monitoring (cem)
U-00004/00004	132	intermittent emission testing
U-00003/00003/001/00001	86	continuous emission monitoring (cem)
U-00027/00027	105	intermittent emission testing
U-00027/00027	141	intermittent emission testing
U-00022/00022	138	record keeping/maintenance procedures
U-00028/00028	142	record keeping/maintenance procedures



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

**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

U-00020/-/GT2	136	continuous emission monitoring (cem)
U-00023/00023	139	intermittent emission testing
U-00020/-/GT1	133	continuous emission monitoring (cem)
U-00020/-/GT1	134	continuous emission monitoring (cem)
U-00020/-/GT1	135	continuous emission monitoring (cem)
U-00020/-/GT2	137	continuous emission monitoring (cem)
U-00023/00023	140	intermittent emission testing
U-00003/00003/001/00001	130	continuous emission monitoring (cem)
U-00003/00003/001/00004	131	record keeping/maintenance procedures
U-00003	80	record keeping/maintenance procedures
FACILITY	115	record keeping/maintenance procedures
FACILITY	116	record keeping/maintenance procedures
FACILITY	117	record keeping/maintenance procedures
FACILITY	48	record keeping/maintenance procedures
FACILITY	53	record keeping/maintenance procedures
FACILITY	54	record keeping/maintenance procedures
FACILITY	57	record keeping/maintenance procedures
FACILITY	58	record keeping/maintenance procedures
FACILITY	125	record keeping/maintenance procedures
FACILITY	126	record keeping/maintenance procedures
FACILITY	127	record keeping/maintenance procedures
FACILITY	128	record keeping/maintenance procedures
FACILITY	129	record keeping/maintenance procedures
FACILITY	118	continuous emission monitoring (cem)
FACILITY	119	continuous emission monitoring (cem)
FACILITY	123	record keeping/maintenance procedures
U-00003/00003/001/00004	88	record keeping/maintenance procedures

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**Basis for Monitoring**  
update for renewal 2

**Basis of Monitoring for Permit Renewal 1, Modification 3**

1. A significant number of permit conditions at the facility level are based on citations from 6 NYCRR Parts 200, 201, 202, 211, 215 and 217 and are conditions that are in every Title V (five) operating permit. These conditions generally reiterate rules that apply to most facilities and some require the permittee to monitor or take actions.

2. Permit conditions that list 6NCRR Part 201-7 (Permits and Registrations, Federally enforceable Emission Caps) contains federally enforceable emission capping conditions which allow the identified emission units, emission points, or emission sources avoid otherwise applicable requirements.

This permit contains a new capping condition on coal boilers 10 and 11 (emission unit (EU) U-00004) which limits the NOx emissions to zero tons. This will create 125 tons of emission reduction credits that the permittee will use to offset the NOx emissions from the proposed 500 mmBtu/hr circulating fluidized bed (CFB) boiler in a netting demonstration. This will allow the CFB project to avoid 40 CFR Part 52.21, Prevention of Significant Deterioration (PSD) and 6NYCRR 231-2, New Source Review in Non-attainment Areas and Ozone Transport Regions NOx requirements for NOx. This limit becomes effective the day the CFB boiler project (Air State Facility Permit Id. 9-0608-00053/00030)

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



**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

commences operation, where "commence operation" allows for a shakedown period not to exceed 180 days as defined in 6 NYCRR section 231-2.1.

Emission caps for nitrogen oxide, carbon monoxide, and particulates less than 10 microns in diameter (PM-10) were instituted for the permitting of the LM6000 combustion gas turbine project during years 2000/2001 so the project would avoid the requirements of the Prevention of Significant Deterioration (PSD) provisions in 40 CFR Part 52.21 and 6NYCRR 231-2, New Source Review in Non-attainment Areas and Ozone Transport Regions NOx requirements. The permittee limited emissions from the combustion gas turbine (CGT, emission unit EU U-00020), the small gas boiler (EU U-00022), and coal boilers 10 and 11 (EU U-00004) to avoid the requirements of PSD on the CGT when it was constructed. The limits continue to apply.

3. Permit conditions that list 6NYCRR Part 204 (NOx Budget Trading Program) or one of its subparts as the applicable requirement have been expired with modification 3 because the Part 204 program's last monitoring period ended on September 30, 2008. The regulation is in the process of being rescinded.

4. Permit conditions that list 6NYCRR Part 212 (General Process Emission Sources) as the applicable requirement regulate the particulate and opacity emissions from the material handling emission units. The particulate monitoring and emission limits are contained a Compliance Assurance Monitoring (CAM) condition under citation 40 CFR Part 64 instead of in a Part 212 conditions. All the applicable emission sources are grouped under the one permit condition. The CAM monitoring requirements are the same as those in the Part 212 opacity monitoring condition so the one monitoring action meets the requirements of two permit conditions.

5. Permit conditions that list 6NYCRR Part 225-1 (Fuel Composition and Use - sulfur limitations) as the applicable requirement regulates the sulfur content of the fuel oil used by any source at the plant and the sulfur dioxide emissions from the coal boilers. The emission units subject to the Part 225-1 limits, monitoring, record keeping and reporting requirements are grouped above each condition they are subject to. The sulfur limits that have not been accepted by EPA into the State Implementation Plan are in the state side of the permit.

6. Permit conditions that list 6NYCRR Part 227-1 (Stationary Combustion Installations) as the applicable requirement regulates particulate and opacity emissions from liquid or solid fuel fired combustion sources. The emission units subject to the Part 227-1 limits, monitoring, record keeping and reporting requirements are grouped above each permit condition. The particulate limits for the coal boilers are contained in a Compliance Assurance Monitoring (CAM) condition under citation 40 CFR Part 64 instead of in a Part 227-1 condition.

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



**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

7. Permit conditions that list 6NYCRR Part 227-2 (Nitrogen Oxide Reasonably Available Control Technology, NOx RACT) as the applicable requirement specifies what information must be recorded and submitted by the regulation. The NOx RACT emission limits apply to the coal boilers, LM6000 combustion gas turbine, duct burner, the emergency combustion gas turbine, the mid-size gas boiler and the small gas boiler.

8. Permit conditions that list 6NYCRR 231-2 (New Source Review in Non-Attainment Areas and Ozone Transport Regions) as the applicable requirement either created emission reduction credits (ERC's) or consumed ERC's. Some 6NYCRR Part 201-7 citations list Part 231-2 as the regulation that is being avoided by capping emissions. Together, Part 201-7 capping conditions and Part 231-2 ERC creation permit conditions created ERC's which allowed the facility to avoid the modeling, emission control, emission offsets of Part 231-2 for the construction of the combustion gas turbine project, EU U-00020, or for the proposed construction of the circulating fluidized bed (CFB) project.

This permit contains capping conditions on coal boilers 10 and 11 (EU U-00004) which limits their NOx emissions to zero tons. This will create 125 tons of emission reduction credits that the permittee will use to offset the NOx emissions from the proposed 500 mmBtu/hr circulating fluidized bed (CFB) boiler in a netting demonstration. This will allow the CFB project to avoid the PSD and 6NYCRR 231-2, New Source Review in Non-attainment Areas and Ozone Transport Regions NOx requirements. This limit becomes effective the day the CFB boiler project (Air State Facility Permit Id. 9-0608-00053/00030) commences operation, where "commence operation" allows for a shakedown period not to exceed 180 days as defined in 6 NYCRR section 231-2.1.

This citation applies to facilities that are subject to the Prevention of Significant Deterioration (PSD) provisions in 40 CFR Part 52.21; for example, facilities that are located in an attainment area and that emit pollutants which are listed in 40 CFR 52.21(b)(23)(i). The permittee has limited emissions from the combustion gas turbine (CGT, emission unit (EU) U-00020), the small gas boiler (EU U-00022), and coal boilers 10 and 11 (EU U-00004) to avoid the requirements of PSD on the CGT when it was constructed. The limits continue to apply.

9. Permit conditions that list 6NYCRR 237 (Acid Deposition Reduction NOx Budget Trading Program) as the applicable requirement, limit the emissions of Oxides of Nitrogen (NOx) from the combustion gas turbine, EU U-00020, during the non-ozone season (October 1 to April 30). The emissions are monitored with a NOx CEMS in the stack. The record keeping and monitoring requirements are prescribed by the regulation. The coal boilers, and the heat recovery steam generator associated with the LM6000 combustion gas turbine, provide steam through a common header which can feed either one or both of the steam turbine generators. The steam turbine generators have been de-rated from 25 and 28.75 megawatts (MW) to 24.5 MW each in 2004 to avoid applicability of Part 237. A September 27, 2004 letter from the NYSDEC acknowledges this de-rate.

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



**Permit ID: 9-0608-00053/00019**  
**Renewal Number: 2**  
**03/22/2013**

10. Permit conditions that list 6NYCRR 238 (Acid Deposition Reduction SO<sub>2</sub> Budget Trading Program) as the applicable requirement, limit the emissions of sulfur dioxide (SO<sub>2</sub>) in tons per year from the four coal boilers and the combustion gas turbine. The boiler emissions are monitored with a continuous emission monitor system, and for the turbine through fuel use and fuel analysis for sulfur content. The record keeping and monitoring requirements are prescribed by the regulation.

11. Permit conditions that list 40CFR60 subpart A (New Source Performance Standards (NSPS) - General Provisions) as the applicable requirement, requires the facility to comply with notification, monitoring, record keeping, and reporting requirements that all NSPS sources are subject to.

12. The duct burner is subject to permit conditions that list 40CFR60 subpart Db (New Source Performance Standards for Industrial-Commercial-Institutional Steam Generating Units, 100 to 250 million Btu per hour) as the applicable requirement, and limit the emissions of sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), particulates, and opacity. The record keeping and monitoring requirements are prescribed by the regulation. The duct burner is not required to use a continuous emission monitoring system to measure NO<sub>x</sub> emissions, but the permittee choose to use one. The duct burner only burns natural gas so it is only subject to the NO<sub>x</sub> requirements and fuel monitoring requirements.

13. Permit conditions that list 40CFR60 subpart Dc (New Source Performance Standards (NSPS) (New Source Performance Standards for Small Industrial-Commercial-Institutional Steam Generating Units, 10 to 100 million Btu per hour) as the applicable regulation, requires the small natural gas boiler and the midsize natural gas package boiler to monitor and record fuel consumption on a daily basis.

14. Permit conditions that list 40CFR60 subpart Y (New Source Performance Standards (NSPS) (New Source Performance Standards for Coal Preparation Plants) as the applicable regulation sets an opacity limit for the coal handling system, EU U-00008, since it was constructed or modified after the applicability date of the rule. The opacity monitoring requirement includes the same actions required by the Part 212 opacity and the CAM particulate monitoring permit conditions.

15. The combustion gas turbines are subject to 40CFR60 subpart GG (New Source Performance Standards for Stationary Gas Turbines) which limits the emissions of sulfur dioxide (SO<sub>2</sub>), nitrogen oxide (NO<sub>x</sub>), and opacity. The record keeping and monitoring requirements are prescribed by the regulation.

The permittee requested not to monitor the sulfur content of the natural gas fired in the LM6000 combustion gas turbine as allowed for in 40 CFR Part 60 subpart GG, 60.334(h)(3). Analytical results were submitted with a July 25, 2006 letter to support this request. The permittee does not use the nitrogen content of the natural gas to calculate



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

**Permit ID: 9-0608-00053/00019**

**Renewal Number: 2**

**03/22/2013**

the NOx emission limit in 40 CFR Part 60 subpart GG, so they do not need to measure the nitrogen content of natural gas for subpart GG purposes.

The emergency combustion gas turbine generator set is not subject to the subpart GG NOx requirements because it is an emergency turbine that is limited to 500 hours of operation per year, but it must still meet the sulfur in fuel oil requirements of subpart GG.

16. The permittee is subject to the requirements of Continuous Assurance Monitoring (CAM), 40CFR Part 64, because the pre-control particulate emissions from the coal boilers and the material handling systems are greater than 100 tons per year. Particulate CAM conditions for emission units U-00003, U-00004, U-00005, U-00006, U-00007, and U-00008 are included in the permit. This permittee is not subject to the CAM requirements for NOx at the coal boiler or EU U-00020 combustion gas turbine stacks because these stacks use CEMS which provide continuous compliance determinations for NOx emissions.