



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

Permit ID: 4-3814-00029/00024

Renewal Number: 1

11/02/2012

Facility Identification Data

Name: RENSSLAER COGEN FACILITY

Address: 39 RIVERSIDE AVE

RENSSELAER, NY 12144

Owner/Firm

Name: CCI RENSSLAER LLC

Address: 811 MAIN STREET SUITE 3500

HOUSTON, TX 77002, USA

Owner Classification: Corporation/Partnership

Permit Contacts

Division of Environmental Permits:

Name: NANCY M BAKER

Address: NYSDEC

1130 N WESTCOTT RD

SCHENECTADY, NY 12306-2014

Phone:5183572069

Division of Air Resources:

Name: FRANCIS V RIEDY

Address: 1130 N WESTCOTT RD

SCHENECTADY, NY 12306

Phone:

Air Permitting Contact:

Name: HARRY H BRAND

Address: RENSSLAER COGEN

39 RIVERSIDE AVE

RENSSELAER, NY 12144

Phone:5184651657

Permit Description

Introduction

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

Summary Description of Proposed Project

This Title V permit renewal includes conditions that originated in the NYSDEC Certificate to Construct and Operate for the facility. These conditions limit the fuel oil sulfur content, heat input rate and emission rates of NO_x and CO such that the facility's potential emissions of SO₂, NO_x and CO were



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determined to be less than the Prevention of Significant Deterioration of Air Quality (PSD, 40 CFR 52 A.21(j)) applicability threshold when the facility was constructed in 1992 93.

Attainment Status

RENSSELAER COGEN FACILITY is located in the town of RENSSELAER in the county of RENSSELAER.

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*	MARGINAL NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

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

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

Facility Description:

RENSSELAER COGENERATION, LLC IS A COGENERATION FACILITY CONSISTING OF ONE (1) GAS TURBINE WITH SUPPLEMENTAL DUCT BURNERS FIRING NATURAL GAS AS THE PRIMARY FUEL AND NO. 2 FUEL OIL FOR BACKUP. ONE (1) NATURAL GAS FIRED HOT WATER BOILER, TWO (2) OIL MIST ELIMINATOR VENTS FOR THE GAS AND STEAM TURBINE LUBE OIL SUMPS, ONE (1) 750 HP EMERGENCY DIESEL GENERATOR WITH FUEL TANK ONE (1) 110 HP DIESEL EMERGENCY FIREWATER PUMP ENGINE WITH FUEL TANK, ONE (1) 350,000 GALLON MAIN NO. 2 FUEL OIL TANK, ONE (1) PORTABLE WELDER, ONE (1) PARTS WASHER, ONE (1) NON-CONTACT WATER COOLING TOWER, ONE (1) SNOWBLOWER, AND ONE (1) LPG POWERED FORKLIFT. THE GAS TURBINE (WESTINGHOUSE 251B12) USES STEAM INJECTION TO MINIMIZE INITIAL NOX FORMATION. THE JOHN ZINC DUCT BURNERS EMPLOY LOW NOX BURNER TECHNOLOGY TO REDUCE NOX PRODUCTION IN THE HEAT RECOVERY STEAM GENERATOR. SELECTIVE CATALYTIC REDUCTION (SCR), WITH AMMONIA INJECTION, IS USED TO CONTROL NOX EMISSIONS FROM THE COMBINED GAS TURBINE AND DUCT BURNER EXHAUST. THE MINIMUM GAS TURBINE OPERATING LOAD IS 40 PERCENT (ON NATURAL GAS). THE MAXIMUM COMBINED HEAT INPUT TO THE GAS TURBINE AND DUCT BURNERS IS 780 MMBTU/HR. THE FACILITY PRODUCES ELECTRICITY FOR SALE TO THE LOCAL UTILITY.

Permit Structure and Description of Operations

The Title V permit for RENSSELAER COGEN FACILITY is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source



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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.

RENSSELAER COGEN FACILITY is defined by the following emission unit(s):

Emission unit 1FPDSL - EMERGENCY FIRE WATER PUMP ENGINE.

Emission unit 1FPDSL is associated with the following emission points (EP):
00004

Process: FP1 is located at GROUND, Building B004 - FIREWATER PUMP DIESEL ENGINE. TOTAL OPERATING HOURS FOR THE FIRE WATER PUMP DIESEL ENGINE SHALL NOT EXCEED 500 HOURS PER YEAR. THE FIRE WATER PUMP DIESEL ENGINE SHALL FIRE NO. 2 FUEL OIL ONLY.

Emission unit 1GTDBS - ONE COMBUSTION TURBINE WITH SUPPLEMENTAL DUCT BURNERS AND A SELECTIVE CATALYTIC REDUCTION (SCR) SYSTEM FOR NOX CONTROL VENTING THROUGH ONE STACK ATTACHED TO THE TURBINE/GENERATOR BUILDING.

Emission unit 1GTDBS is associated with the following emission points (EP):
00001

Process: BW1 is located at Ground, Building B001 - GAS TURBINE AND SUPPLEMENTAL DUCT BURNERS BOTH FIRING NATURAL GAS WHILE PERFORMING ON-LINE WATER WASHING. SCR USED FOR NOX CONTROL. ON-LINE GAS TURBINE WATER WASHING SHALL NOT EXCEED 500 HOURS 12 MONTH PERIOD.

Process: BW2 is located at GROUND, Building B001 - GAS TURBINE AND SUPPLEMENTAL DUCT BURNERS BOTH FIRING NO. 2 FUEL OIL WHILE PERFORMING ON-LINE WATER WASHING. SCR USED FOR NOX CONTROL. ON-LINE GAS TURBINE WATER WASHING SHALL NOT EXCEED 500 HOURS PER 12 MONTH PERIOD. TOTAL NO. 2 FUEL OIL CONSUMPTION IN THE GAS TURBINE SHALL NOT EXCEED 8.14×10^6 GALLONS PER YEAR AND TOTAL NO. 2 FUEL OIL CONSUMPTION IN THE DUCT BURNERS SHALL NOT EXCEED 1.24×10^6 GALLONS PER YEAR, BOTH CALCULATED ON A DAILY ROLLING BASIS. DUCT BURNERS FIRING FUEL OIL IS PROPOSED AS A N ALTERNATE OPERATING SCENARIO (A05).



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Process: BW3 is located at GROUND, Building B001 - GAS TURBINE FIRING NO. 2 FUEL OIL AND SUPPLEMENTAL DUCT BURNERS FIRING NATURAL GAS WHILE PERFORMING ON-LINE WATER WASHING. SCR USED FOR NOX CONTROL. ON-LINE GAS TURBINE WATER WASHING SHALL NOT EXCEED 500 HOURS PER 12 MONTH PERIOD. TOTAL NO. 2 OIL CONSUMPTION IN THE GAS TURBINE SHALL NOT EXCEED 8.14×10^6 GALLONS PER YEAR CALCULATED ON A DAILY ROLLING BASIS.

Process: G01 is located at GROUND, Building B001 - GAS TURBINE FIRING NATURAL GAS WITHOUT SUPPLEMENTAL DUCT FIRING. SCR USED FOR NOX CONTROL.

Process: G02 is located at GROUND, Building B001 - GAS TURBINE FIRING NO. 2 FUEL OIL WITHOUT SUPPLEMENTAL DUCT BURNERS. TOTAL NO. 2 FUEL OIL FIRING IN THE GAS TURBINE SHALL NOT EXCEED 8.14×10^6 GALLONS PER YEAR, CALCULATED ON A DAILY ROLLING BASIS.

Process: GB1 is located at GROUND, Building B001 - GAS TURBINE AND SUPPLEMENTAL DUCT BURNERS BOTH FIRING NATURAL GAS. SCR USED FOR NOX CONTROL.

Process: GB2 is located at GROUND, Building B001 - GAS TURBINE AND SUPPLEMENTAL DUCT BURNERS BOTH FIRING NO. 2 FUEL OIL. SCR USED FOR NOX CONTROL. TOTAL NO. 2 FUEL OIL CONSUMPTION IN THE GAS TURBINE SHALL NOT EXCEED 8.14×10^6 GALLONS PER YEAR AND TOTAL NO. 2 FUEL OIL CONSUMPTION IN THE DUCT BURNERS SHALL NOT EXCEED 1.24×10^6 GALLONS PER YEAR, BOTH CALCULATED ON A DAILY ROLLING BASIS. DUCT BURNERS FIRING FUEL OIL IS PROPOSED AS AN ALTERNATE OPERATING SCENARIO (AOS).

Process: GB3 is located at GROUND, Building B001 - GAS TURBINE FIRING NO. 2 FUEL OIL AND SUPPLEMENTAL DUCT BURNERS FIRING NATURAL GAS. SCR USED FOR NOX CONTROL. TOTAL NO. 2 FUEL OIL FIRING IN THE GAS TURBINE SHALL NOT EXCEED 8.14×10^6 GALLONS PER YEAR, CALCULATED ON A DAILY ROLLING BASIS.

Process: GW1 is located at GROUND, Building B001 - GAS TURBINE FIRING NATURAL GAS WHILE PERFORMING ON-LINE WATER WASHING. NO SUPPLEMENTAL DUCT BURNERS OPERATING. SCR USED FOR NOX CONTROL. ON-LINE GAS TURBINE WATER WASHING SHALL NOT EXCEED 500 HOURS PER 12 MONTH PERIOD.

Process: GW2 is located at GROUND, Building B001 - GAS TURBINE FIRING NO. 2 FUEL OIL WHILE PERFORMING ON-LINE WATER WASHING. TOTAL NO. 2 FUEL OIL FIRING IN THE GAS TURBINE SHALL NOT EXCEED 8.14×10^6 GALLONS PER YEAR CALCULATED ON A DAILY ROLLING BASIS ON-LINE GAS TURBINE WATER WASHING SHALL NOT EXCEED 500 HOURS PER 12 MONTH PERIOD.

Emission unit 1HWBLR - HOT WATER BOILER IS USED FOR FREEZE PROTECTION AND FUEL OIL PREHEATING.

Emission unit 1HWBLR is associated with the following emission points (EP):
00005

Process: HB1 is located at GROUND, Building B001 - NATURAL GAS OR PROPANE FIRED 2.1



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PREHEATING.

Emission unit T00110 - MAIN 350,000 GALLON NO. 2 FUEL OIL TANK VENT. THE TANK IS 40 FEET HIGH WITH A 40 FOOT DIAMETER.

Emission unit T00110 is associated with the following emission points (EP):
00002

Process: VT1 is located at GROUND, Building B002 - MAIN NO. 2 FUEL OIL TANK VENT.

Emission unit 1EDGEN - EMERGENCY DIESEL GENERATOR ENGINE.

Emission unit 1EDGEN is associated with the following emission points (EP):
00003

Process: DG1 is located at GROUND, Building B003 - EMERGENCY DIESEL GENERATOR ENGINE. LIMITED TO 500 HRS. PER YEAR OPERATION.

Title V/Major Source Status

RENSELAER COGEN FACILITY is subject to Title V requirements. This determination is based on the following information:

This facility is "major" according to the definitions in NYS Part 201. NYS Part 201 has a "major" threshold emission limit of 100 ton per year for oxides of nitrogen. This facility is also "major" for carbon dioxide according to has a threshold 100,000 tons per year. Each threshold value is based on the facility potential to emit

Program Applicability

The following chart summarizes the applicability of RENSELAER COGEN FACILITY with regards to the principal air pollution regulatory programs:

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

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NOTES:

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

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

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

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

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

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

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

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

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.



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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

1-02-006-03

EXTERNAL COMBUSTION BOILERS - INDUSTRIAL
INDUSTRIAL BOILER - NATURAL GAS
Less Than 10 MMBtu/Hr

2-01-001-02

INTERNAL COMBUSTION ENGINES - ELECTRIC
GENERATION
ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE
- DISTILLATE OIL (DIESEL)
Reciprocating

2-01-001-08

INTERNAL COMBUSTION ENGINES - ELECTRIC
GENERATION
ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE
- DISTILLATE OIL (DIESEL)
TURBINE: EVAPORATIVE LOSSES (FUEL STORAGE
AND DELIVERY SYSTEM)

2-02-001-01

INTERNAL COMBUSTION ENGINES - INDUSTRIAL
INDUSTRIAL INTERNAL COMBUSTION ENGINE -
DISTILLATE OIL (DIESEL)
Turbine

2-02-001-02

INTERNAL COMBUSTION ENGINES - INDUSTRIAL
INDUSTRIAL INTERNAL COMBUSTION ENGINE -
DISTILLATE OIL (DIESEL)
Reciprocating

2-02-002-01

INTERNAL COMBUSTION ENGINES - INDUSTRIAL
INDUSTRIAL INTERNAL COMBUSTION ENGINE -
NATURAL GAS
Turbine

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

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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
000106-99-0	1,3-BUTADIENE		> 0 but < 10 tpy
000075-07-0	ACETALDEHYDE		> 0 but < 10 tpy
000107-02-8	ACROLEIN		> 0 but < 10 tpy
007664-41-7	AMMONIA		>= 40 tpy but < 50 tpy
007440-38-2	ARSENIC		> 0 but < 10 tpy
000071-43-2	BENZENE		> 0 but < 10 tpy
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		>= 100 tpy but < 250 tpy
007440-47-3	CHROMIUM		> 0 but < 10 tpy
007440-50-8	COPPER		> 0 but < 2.5 tpy
000100-41-4	ETHYLBENZENE		> 0 but < 10 tpy
000050-00-0	FORMALDEHYDE		> 0 but < 10 tpy
0NY100-00-0	HAP		>= 2.5 tpy but < 10 tpy
000110-54-3	HEXANE		> 0 but < 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	339139	
0NY075-00-0	PARTICULATES		>= 50 tpy but < 100 tpy
0NY075-00-5	PM-10		>= 50 tpy but < 100 tpy
130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS		> 0 but < 10 tpy
000075-56-9	PROPANE, 1,2-EPOXY-		> 0 but < 10 tpy
007446-09-5	SULFUR DIOXIDE	69834	
007664-93-9	SULFURIC ACID		> 0 but < 2.5 tpy
000108-88-3	TOLUENE		> 0 but < 10 tpy
0NY998-00-0	VOC		>= 40 tpy but < 50 tpy
001330-20-7	XYLENE, M, O & P MIXT.		> 0 but < 10 tpy



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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.

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.

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- 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.
- 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.



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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.

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.

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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
-- FACILITY	ECL 19-0301	134	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 52-A.21	55, 56, 57, 58, 59, 60, 61	Prevention of Significant Deterioration
1-GTDBS/00001	40CFR 52-A.21	132, 133	Prevention of Significant Deterioration
1-GTDBS	40CFR 60-A.11	115	General provisions - compliance with standards and maintenance requirements
1-GTDBS	40CFR 60-A.11 (d)	116	General provisions - compliance with standards and maintenance requirements
1-GTDBS	40CFR 60-A.12	117	General provisions - Circumvention
1-GTDBS	40CFR 60-A.13	118	General provisions - Monitoring requirements
1-GTDBS	40CFR 60-A.13 (d)	119	General provisions - Monitoring requirements
1-GTDBS	40CFR 60-A.14	120	General provisions - Modification
1-GTDBS	40CFR 60-A.15	121	General provisions -

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FACILITY	40CFR 60-A.4	88	Reconstruction General provisions - Address
1-GTDBS	40CFR 60-A.7(b)	107	Notification and Recordkeeping
1-GTDBS	40CFR 60-A.7(d)	108	Notification and Recordkeeping
1-GTDBS	40CFR 60-A.7(f)	109	Notification and Recordkeeping
1-GTDBS	40CFR 60-A.8(a)	110	Performance Tests
1-GTDBS	40CFR 60-A.8(c)	111	Performance Tests
1-GTDBS	40CFR 60-A.8(d)	112	Performance Tests
1-GTDBS	40CFR 60-A.8(e)	113	Performance Tests
1-GTDBS	40CFR 60-A.8(f)	114	Performance Tests
FACILITY	40CFR 60-Db.42b(j)	89	Exemption from Standards for Sulfur Dioxide.
1-GTDBS	40CFR 60-Db.44b(a)(4)	122	Standard for Nitrogen Oxides for Duct Burners Used in Combined Cycle Projects.
1-GTDBS	40CFR 60-Db.45b(j)	123	Compliance and Performance Test Methods and Procedures for Sulfur Dioxide.
FACILITY	40CFR 60-Db.48b(j)	90	Exemption from Emissions Monitoring
1-GTDBS	40CFR 60-GG.332(f)	124	Exemption from Section 332(a) of this Subpart.
1-GTDBS	40CFR 60-GG.334(b)	125	Monitoring of Operations: CEMS
1-GTDBS	40CFR 60-GG.334(h)(3)	126	Allowance not to monitor sulfur or nitrogen for natural gas
1-GTDBS	40CFR 60-GG.334(j)	127	Reporting Requirements
FACILITY	40CFR 63-ZZZZ.6625(f)	92	Reciprocating Internal Combustion Engine (RICE) NESHAP - non-resettable hour meter for certain existing emergency engines
FACILITY	40CFR 63- ZZZZ.6640(f)(1)	91	Reciprocating Internal Combustion Engine (RICE) NESHAP - emergency RICE operation
FACILITY	40CFR 68	20	Chemical accident prevention provisions
1-GTDBS	40CFR 72	128	Permits regulation
FACILITY	40CFR 82-F	21	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	135	Unavoidable

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FACILITY	6NYCRR 201-1.7	11	noncompliance and violations
FACILITY	6NYCRR 201-1.8	12	Recycling and Salvage Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2 (a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3 (a)	14	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	22, 93, 94	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.5	23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54	Standard Permit Requirements
1-GTDBS	6NYCRR 201-6.5	96, 97, 98, 99, 100, 101	Standard Permit Requirements
1-GTDBS/-/G01	6NYCRR 201-6.5	129	Standard Permit Requirements
1-GTDBS/-/G02	6NYCRR 201-6.5	130	Standard Permit Requirements
1-GTDBS/-/GB1	6NYCRR 201-6.5	131	Standard Permit Requirements
FACILITY	6NYCRR 201-6.5 (a) (4)	15	General conditions
FACILITY	6NYCRR 201-6.5 (a) (7)	2	General conditions Fees
FACILITY	6NYCRR 201-6.5 (a) (8)	16	General conditions
FACILITY	6NYCRR 201-6.5 (c)	3	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (c) (2)	4	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (c) (3) (ii)	5	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (d) (5)	17	Compliance schedules
FACILITY	6NYCRR 201-6.5 (e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.5 (f) (6)	18	Off Permit Changes
FACILITY	6NYCRR 201-7.1	55, 56, 57, 58, 59, 60, 61, 95	Federally Enforceable Emissions Caps
1-GTDBS/00001	6NYCRR 201-7.1	132, 133	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1	62	Emission Testing, Sampling and Analytical Determinations
1-GTDBS	6NYCRR 202-1	102, 103, 104, 105	Emission Testing, Sampling and Analytical Determinations
FACILITY	6NYCRR 202-1.1	19	Required emissions tests.

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FACILITY	6NYCRR 202-1.3	63	Acceptable procedures.
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	64	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	136	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 215.2	9	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.4	65	Exceptions contingent upon fuel shortage.
FACILITY	6NYCRR 225-1.7 (d)	66	Emission and fuel monitoring.
FACILITY	6NYCRR 225-1.8	67	Reports, sampling and analysis.
FACILITY	6NYCRR 227-1.3 (a)	68	Smoke Emission Limitations.
1-GTDBS	6NYCRR 227-2.6	106	Testing, monitoring, and reporting requirements
FACILITY	6NYCRR 242-1.5	137	CO2 Budget Trading Program - Standard requirements
1-GTDBS	6NYCRR 242-4	138	CO2 Budget Trading Program - Compliance certification
1-GTDBS	6NYCRR 242-8	139	CO2 Budget Trading Program - Monitoring and reporting
1-GTDBS	6NYCRR 242-8.5	140	CO2 Budget Trading Program - Reporting and recordkeeping
FACILITY	6NYCRR 243-1.6 (a)	69	Permit Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (b)	70	Monitoring Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (c)	71	NOx Ozone Season Emission Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (d)	72	Excess Emission Requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-1.6 (e)	73	Recordkeeping and reporting requirements - CAIR NOx Ozone Season Trading Program
FACILITY	6NYCRR 243-2.1	74	Authorization and responsibilities - CAIR Designated Representative
FACILITY	6NYCRR 243-2.4	75	Certificate of



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FACILITY	6NYCRR 243-8.1	76, 77	representation - CAIR Designated Representative General Requirements - Monitoring and Reporting
FACILITY	6NYCRR 243-8.5 (d)	78	Quarterly reports re: recordkeeping and reporting - Monitoring and Reporting
FACILITY	6NYCRR 243-8.5 (e)	79	Compliance certification re: recordkeeping and reporting - Monitoring and Reporting
FACILITY	6NYCRR 244-1	80, 81	CAIR NOx Ozone Annual Trading Program
FACILITY	6NYCRR 244-2	82	General Provisions CAIR Designated Representative for
FACILITY	6NYCRR 244-8	83	CAIR NOx Sources Monitoring and Reporting CAIR NOx Allowances
FACILITY	6NYCRR 245-1	84, 85	CAIR SO2 Trading Program General Provisions
FACILITY	6NYCRR 245-2	86	CAIR Designated Representative for
FACILITY	6NYCRR 245-8	87	CAIR SO2 Sources Monitoring and Reporting for CAIR SO2 Trading Program

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.



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6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

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

6 NYCRR 201-3.3 (a)

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

6 NYCRR Subpart 201-6

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

6 NYCRR 201-6.5 (a) (4)

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

6 NYCRR 201-6.5 (a) (7)

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

6 NYCRR 201-6.5 (a) (8)

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

6 NYCRR 201-6.5 (c)

This requirement specifies, in general terms, what information must be contained in any required compliance monitoring records and reports. This includes the date, time and place of any sampling,



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measurements and analyses; who performed the analyses; analytical techniques and methods used as well as any required QA/QC procedures; results of the analyses; the operating conditions at the time of sampling or measurement and the identification of any permit deviations. All such reports must also be certified by the designated responsible official of the facility.

6 NYCRR 201-6.5 (c) (2)

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

6 NYCRR 201-6.5 (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 201-6.5 (d) (5)

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

6 NYCRR 201-6.5 (e)

Sets forth the general requirements for compliance certification content; specifies an annual submittal frequency; and identifies the EPA and appropriate regional office address where the reports are to be sent.

6 NYCRR 201-6.5 (f) (6)

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

6 NYCRR 202-1.1

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

6 NYCRR 202-2.1

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

6 NYCRR 202-2.5

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



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6 NYCRR 215.2

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

40 CFR Part 68

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

40 CFR Part 82, Subpart F

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

Facility Specific Requirements

In addition to Title V, RENSSELAER COGEN FACILITY 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

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

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

This regulation specifies how monitoring shall be performed and which methods and appendices are used to determine if the monitoring is adequate and in compliance with the regulated standards.

40 CFR 60.13 (d)



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

40 CFR 60.14

This regulation defines the term modification and what is and is not considered to be a modification, for the purpose of rule applicability.

40 CFR 60.15

This regulation defines the term reconstruction and what is and is not considered to be a reconstruction project, for the purpose of rule applicability.

40 CFR 60.332 (f)

This regulation allows gas turbines using water or steam injection to control NOx to be exempt from section 332.a when ice fog is deemed a traffic hazard.

40 CFR 60.334 (b)

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

40 CFR 60.334 (h) (3)

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

40 CFR 60.334 (j)

This regulation sets forth the reporting requirements for affected units that continuously monitor parameters or emissions or those that periodically determine the sulfur and/or nitrogen content of the fuel burned in a gas turbine.

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 60.42b (j)

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

40 CFR 60.44b (a) (4)

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



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40 CFR 60.45b (j)

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

40 CFR 60.48b (j)

This citations allows the use of vender fuel certifications instead of emissions monitoring for PM.

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 (d)

This condition specifies the required information and format for a summary report form and details when either a summary form and/or excess emissions reports are required.

40 CFR 60.7 (f)

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 60.8 (a)

This regulation contains the requirements for the completion date and reporting of Performance Testing (stack testing), at the facility. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, the owner or operator of the facility must conduct performance test(s) and furnish a written report of the test results.

40 CFR 60.8 (c)

This condition contains the requirements for operating conditions, of the emission source, during performance testing.

40 CFR 60.8 (d)

This regulation contains the requirements for advance notification of Performance (stack) testing.

40 CFR 60.8 (e)

This regulation requires the facility to provide appropriate sampling ports, safe platforms and utilities as necessary for Performance (stack) testing.

40 CFR 60.8 (f)



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This regulation requires that Performance (stack) tests consist of three runs unless otherwise specified. The rule also designates the allowable averaging methods for the analysis of the results.

40 CFR 63.6625 (f)

40 CFR 63.6640 (f) (1)

This regulation sets forth the compliance provisions for the operation of reciprocating internal combustion engines in emergency situations.

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 SO₂ and NO_x (sulfur dioxide and oxides of nitrogen). Fossil fuel burning electric utility companies are a major source of these 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 SO₂ 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 SO₂. The utilities are required to limit SO₂ 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 201-6.5

This section of the Title V permitting requirements details the following information: general conditions; permit conditions for monitoring, recordkeeping and reporting of compliance monitoring; compliance certification; operational flexibility; permit shield; term of permits; and reopening for cause.

6 NYCRR 201-7.1

This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit, capping is in place to assure that the facility emissions remain below the PSD threshold.

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.



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6 NYCRR 211.1

It is unlawful to allow harmful emissions to the atmosphere or to interfere with another persons reasonable comfortable enjoyment of there property because of harmful air emissions.

6 NYCRR 225-1.4

This regulation allows the Commissioner of the NYSDEC to issue an order granting a temporary variance from the sulfur-in-fuel limitations in 6 NYCRR Part 225-1 where it can be shown, to the commissioner's satisfaction, that there is an insufficient supply of conforming fuel, either of the proper type required for use in a particular air contamination source or generally throughout an area of the State.

6 NYCRR 225-1.7 (d)

This regulation requires that data collected pursuant to 6 NYCRR Part 225-1.7 be tabulated and summarized in a form acceptable to the commissioner, and must be retained for at least three years.

6 NYCRR 225-1.8

This regulation requires an owner or operator of a facility which purchases and fires coal and/or oil to submit reports to the commissioner containing fuel analysis data, information on the quantity of the fuel received, burned, and results of any stack sampling, stack monitoring and any other procedures to ensure compliance with the provisions of 6 NYCRR Part 225-1.

6 NYCRR 227-1.3 (a)

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

6 NYCRR 227-2.6

This regulation establishes the compliance testing, monitoring, and reporting requirements for NOx RACT affected stationary combustion installations.

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 CO₂ 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.



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6 NYCRR 243-1.6 (a)

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

6 NYCRR 243-1.6 (b)

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

6 NYCRR 243-1.6 (c)

This citation explains the general provisions of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program. This ozone season NOx 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 NOx Ozone Season allowances that is not less than the total tons of NOx emissions for the ozone season.

6 NYCRR 243-1.6 (d)

This citation for the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains some of the penalties that can be imposed on a CAIR NOx Ozone Season source that does not surrender enough CAIR NOx Ozone Season allowances to cover their NOx Ozone Season emissions.

6 NYCRR 243-1.6 (e)

This citation for the Clean Air Interstate Rule (CAIR) NOx 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) NOx Ozone Season Trading Program explains that an CAIR NOx Ozone Season designated representative must be selected to submit, sign and certify each submission on behalf of the source for the this program.

6 NYCRR 243-2.4

This condition describes the required elements of the "Certificate of Representation" for the CAIR program and the certifying language required with submissions to the Department.

6 NYCRR 243-8.1

This citation of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains that CAIR NOx 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.



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6 NYCRR 243-8.5 (d)

This citation of the Clean Air Interstate Rule (CAIR) NO_x 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_x Ozone Season Trading Program explains the compliance certification requirements the source must follow for each quarterly report.

6 NYCRR Subpart 202-1

This subpart of Part 202 establishes the general criteria for verifying emissions by means of emissions sampling, testing and associated analytical determinations.

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.

6 NYCRR Subpart 242-8

Citation 6NYCRR Part 242-8.5 requires that the record keeping and reporting requirements of 40 CFR Part 75.73 and 6NYCRR Part 242-2.1(e) be followed, that a CO₂ monitoring plan(s) be submitted, that the CO₂ emission monitor(s) be certified, and that CO₂ emissions be reported quarterly in an electronic format.

6 NYCRR Subpart 244-1

This subpart explains the general provisions of the Clean Air Interstate Rule (CAIR) Nitrogen Oxide (NO_x) Annual Trading Program. The control period for this annual NO_x 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 NO_x allowances that is not less than the total tons of NO_x emissions for the control period.

6 NYCRR Subpart 244-2

Each Clean Air Interstate Rule (CAIR) NO_x source shall have one CAIR designated representative and may have one alternate representative. Each submission for the CAIR NO_x 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 NO_x



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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.

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.

Compliance Certification

Summary of monitoring activities at RENSSELAER COGEN FACILITY:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring

1-GTDBS	118	record keeping/maintenance procedures
1-GTDBS	119	record keeping/maintenance procedures
FACILITY	89	record keeping/maintenance procedures
1-GTDBS	123	record keeping/maintenance procedures
FACILITY	90	record keeping/maintenance procedures
1-GTDBS	126	record keeping/maintenance procedures
1-GTDBS	127	record keeping/maintenance procedures
FACILITY	92	record keeping/maintenance procedures
FACILITY	91	record keeping/maintenance procedures
FACILITY	23	continuous emission monitoring (cem)
FACILITY	24	work practice involving specific operations
FACILITY	25	record keeping/maintenance procedures
FACILITY	26	intermittent emission testing
FACILITY	27	intermittent emission testing
FACILITY	28	intermittent emission testing
FACILITY	29	intermittent emission testing
FACILITY	30	intermittent emission testing
FACILITY	31	intermittent emission testing

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FACILITY	32	intermittent emission testing
FACILITY	33	intermittent emission testing
FACILITY	34	intermittent emission testing
FACILITY	35	intermittent emission testing
FACILITY	36	intermittent emission testing
FACILITY	37	intermittent emission testing
FACILITY	38	intermittent emission testing
FACILITY	39	intermittent emission testing
FACILITY	40	continuous emission monitoring (cem)
FACILITY	41	continuous emission monitoring (cem)
FACILITY	42	continuous emission monitoring (cem)
FACILITY	43	continuous emission monitoring (cem)
FACILITY	44	continuous emission monitoring (cem)
FACILITY	45	continuous emission monitoring (cem)
FACILITY	46	continuous emission monitoring (cem)
FACILITY	47	continuous emission monitoring (cem)
FACILITY	48	continuous emission monitoring (cem)
FACILITY	49	continuous emission monitoring (cem)
FACILITY	50	continuous emission monitoring (cem)
FACILITY	51	continuous emission monitoring (cem)
FACILITY	52	continuous emission monitoring (cem)
FACILITY	53	continuous emission monitoring (cem)
FACILITY	54	continuous emission monitoring (cem)
1-GTDBS	96	work practice involving specific operations
1-GTDBS	97	record keeping/maintenance procedures
1-GTDBS	98	record keeping/maintenance procedures
1-GTDBS	99	continuous emission monitoring (cem)
1-GTDBS	100	continuous emission monitoring (cem)
1-GTDBS	101	continuous emission monitoring (cem)
1-GTDBS/-/G01	129	continuous emission monitoring (cem)
1-GTDBS/-/G02	130	continuous emission monitoring (cem)
1-GTDBS/-/GB1	131	continuous emission monitoring (cem)
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	55	continuous emission monitoring (cem)
FACILITY	56	continuous emission monitoring (cem)
FACILITY	57	work practice involving specific operations
FACILITY	58	work practice involving specific operations
FACILITY	59	continuous emission monitoring (cem)
FACILITY	60	monitoring of process or control device parameters as surrogate
FACILITY	61	continuous emission monitoring (cem)
1-GTDBS/00001	132	continuous emission monitoring (cem)
1-GTDBS/00001	133	continuous emission monitoring (cem)
FACILITY	62	record keeping/maintenance procedures
1-GTDBS	102	record keeping/maintenance procedures
1-GTDBS	103	record keeping/maintenance procedures
1-GTDBS	104	record keeping/maintenance procedures
1-GTDBS	105	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	66	record keeping/maintenance procedures
FACILITY	67	record keeping/maintenance procedures
FACILITY	68	monitoring of process or control device parameters as surrogate
1-GTDBS	106	record keeping/maintenance procedures
FACILITY	137	record keeping/maintenance procedures
1-GTDBS	138	record keeping/maintenance procedures
1-GTDBS	139	record keeping/maintenance procedures
1-GTDBS	140	record keeping/maintenance procedures
FACILITY	83	record keeping/maintenance procedures
FACILITY	87	record keeping/maintenance procedures



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Basis for Monitoring

A Title V Air Permit application renewal is submitted by Rensselaer Cogen Facility to continue operation of a nominal 79.6 megawatt combined cycle power generation facility located in Rensselaer, Rensselaer County, New York. The facility is classified as a major source as defined by 6 NYCRR Part 201. This facility is subject to 6 NYCRR Parts 243 (NOX Budget), 244 (Acid Deposition NOx Trading), 245 Sulfur Dioxide Trading) and, 40 CFR Parts 60 (NSPS) and 75 (Acid Rain).

Emission monitoring is required to demonstrate compliance with the requirements of each of the aforementioned regulations. Monitoring may be of the following types; continuous monitoring, usually involving a continuous emission monitor, intermittent monitoring usually involving stack testing, work practice monitoring or record keeping.