

**Division of Air Resources
Permit Review Report**

Permit ID: 4-3814-00029/00024
Renewal Number: 3
10/04/2022

Facility Identification Data

Name: RENSSELAER COGEN FACILITY
Address: 39 RIVERSIDE AVE
RENSSELAER, NY 12144

Owner/Firm

Name: Rensselaer Generating LLC
Address: 811 Main St Ste 3500
Houston, tx 77002, USA
Owner Classification: Corporation/Partnership

Permit Contacts

Division of Environmental Permits:
Name: Patrick Connally
Address: NYSDEC - Region 4
1130 N Westcott Rd
Schenectady, NY 12306-2014
Phone: 5183572069

Division of Air Resources:
Name: EDWARD A PELLEGRINI
Address: NYSDEC - REGION 4
1130 N WESTCOTT RD
SCHENECTADY, NY 12306

Air Permitting Contact:
Name: HARRY H BRAND
Address: RENSSELAER 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

Application for renewal of Air Title V Facility Permit and Acid Rain Program (Title IV) permit.

Attainment Status

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

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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 Cogen is a combined-cycle, electric power generating facility consisting of a combustion turbine and a heat recovery steam generator with supplemental duct burners. The combustion turbine and duct burners fire natural gas as the primary fuel and distillate (No. 1 and/or No. 2) fuel oil for backup. The facility also includes a natural gas-fired hot water boiler; a 750HP emergency diesel generator with fuel tank; a 110HP emergency diesel firewater pump engine with fuel tank; a 350,000 gallon fuel oil tank and other exempt and trivial sources. The Westinghouse Model 251B12 combustion turbine uses steam injection to minimize NOx formation. The John Zink duct burners employ Low NOx burner technology to reduce NOx production in the heat recovery steam generator. Selective catalytic reduction (SCR) with aqueous ammonia injection is used to reduce NOx emissions in the combined combustion turbine and duct burner exhaust. The facility produces electricity for sale via the NY ISO wholesale energy markets.

Permit Structure and Description of Operations

The Title V permit for RENSSSELAER COGEN FACILITY

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

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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 - Emission Unit 1-FPDSL is a 182 HP Cummins emergency firewater pump engine. The emission unit is an exempt activity per 6 NYCRR 201-3.2(c)(6) and the definition in 6 NYCRR 200.1(cq) for an emergency power generating stationary internal combustion engine with operations limited to 500 hours per year. Emission Unit 1-FPDSL is subject to federal NESHAPS requirements for reciprocating internal combustion engines in 40 CFR 63, Subpart ZZZZ.

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

Process: FP1 is located at GROUND, Building B004 - Emergency firewater pump diesel engine firing distillate oil (#1 or #2 fuel oil or a blend of #1 and #2 fuel oil).

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 distillate (#1 and/or # 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 distillate fuel oil consumption in the gas turbine shall not exceed 8.14×10^6 gallons per year and total distillate 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 distillate fuel oil is proposed as an alternate operating scenario (AOS).

Process: BW3 is located at GROUND, Building B001 - Gas turbine firing distillate (#1 and/or #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 distillate 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 distillate (#1 and/or #2) fuel oil without supplemental duct burners. Total distillate fuel oil firing in the gas turbine shall not exceed 8.14×10^6 gallons per year, calculated on a daily rolling basis.

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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 distillate (#1 and/or #2) fuel oil. SCR used for NOx control. Total distillate fuel oil consumption in the gas turbine shall not exceed 8.14×10^6 gallons per year and total distillate 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 distillate (#1 and/or #2) fuel oil and supplemental duct burners firing natural gas. SCR used for NOx control. Total distillate 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 distillate (#1 and/or #2) fuel oil while performing on-line water washing. Total distillate 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 - Natural gas or propane fired 2.1 MMBTU per hour hot water boiler used for freeze protection and fuel oil preheating. The emission unit is an exempt activity per 6 NYCRR 201-3.2(c)(1).

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

00005

Process: HB1 is located at GROUND, Building B001 - Hot water boiler firing natural gas or propane fuel.

Emission unit T00110 - Main 350,000 gallon fuel oil tank vent. The tank is 40 ft. high with a 40 ft. diameter. The main fuel oil tank is an exempt activity per 6 NYCRR 201-3.2(c)(21).

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

00002

Process: VT1 is located at GROUND, Building B002 - Main #2 fuel oil tank vent.

Emission unit 1EDGEN - Emission Unit 1-EDGEN is a 750 HP Cummins Onan emergency diesel generator engine. The emission unit is an exempt activity per 6 NYCRR 201-3.2(c)(6) and the definition in 6 NYCRR 200.1(cq) for an emergency power generating stationary internal combustion engine with operations limited to 500 hours per year. Emission Unit 1-EDGEN is subject to federal NESHAPS requirements for reciprocating internal combustion engines in 40 CFR 63, Subpart ZZZZ.

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

00003

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Process: DG1 is located at GROUND, Building B003 - Emergency diesel generator engine firing distillate oil (#1 or #2 fuel oil or a blend of #1 and #2 fuel oil).

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

The facility is major because its potential to emit for NOx exceeds the major source title V threshold of 50 tons per year.

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

NOTES:

PSD Prevention of Significant Deterioration (40 CFR 52, 6 NYCRR 231-7, 231-8) - requirements which pertain to major stationary sources located in areas which are in attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NSR New Source Review (6 NYCRR 231-5, 231-6) - requirements which pertain to major stationary sources located in areas which are in non-attainment of National Ambient Air Quality Standards (NAAQS) for specified pollutants.

NESHAP National Emission Standards for Hazardous Air Pollutants (40 CFR 61, 6 NYCRR 200.10) - contaminant and source specific emission standards established prior to the Clean Air Act Amendments of 1990 (CAAA) which were developed for 9 air contaminants (inorganic arsenic, radon, benzene, vinyl chloride, asbestos, mercury, beryllium, radionuclides, and volatile HAP's).

MACT Maximum Achievable Control Technology (40 CFR 63, 6 NYCRR 200.10) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA,

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the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

NSPS New Source Performance Standards (40 CFR 60, 6 NYCRR 200.10) - standards of performance for specific stationary source categories developed by the US EPA under Section 111 of the CAAA. The standards apply only to those stationary sources which have been constructed or modified after the regulations have been proposed by publication in the Federal Register and only to the specific contaminant(s) listed in the regulation.

Title IV Acid Rain Control Program (40 CFR 72 thru 78, 6 NYCRR 201-6) - regulations which mandate the implementation of the acid rain control program for large stationary combustion facilities.

Title VI Stratospheric Ozone Protection (40 CFR 82, Subpart A thru G, 6 NYCRR 200.10) - federal requirements that apply to sources which use a minimum quantity of CFC's (chlorofluorocarbons), HCFC's (hydrofluorocarbons) or other ozone depleting substances or regulated substitute substances in equipment such as air conditioners, refrigeration equipment or motor vehicle air conditioners or appliances.

RACT Reasonably Available Control Technology (6 NYCRR Parts 212-3, 220-1.6, 220-1.7, 220-2.3, 220-2.4, 226, 227-2, 228, 229, 230, 233, 234, 235, 236) - the lowest emission limit that a specific source is capable of meeting by application of control technology that is reasonably available, considering technological and economic feasibility. RACT is a control strategy used to limit emissions of VOC's and NOx for the purpose of attaining the air quality standard for ozone. The term as it is used in the above table refers to those state air pollution control regulations which specifically regulate VOC and NOx emissions.

SIP State Implementation Plan (40 CFR 52, Subpart HH, 6 NYCRR 200.10) - as per the CAAA, all states are empowered and required to devise the specific combination of controls that, when implemented, will bring about attainment of ambient air quality standards established by the federal government and the individual state. This specific combination of measures is referred to as the SIP. The term here refers to those state regulations that are approved to be included in the SIP and thus are considered federally enforceable.

Compliance Status

Facility is in compliance with all requirements.

SIC Codes

SIC or Standard Industrial Classification code is an industrial code developed by the federal Office of Management and Budget for use, among other things, in the classification of establishments by the type of activity in which they are engaged. Each operating establishment is assigned an industry code on the basis of its primary activity, which is determined by its principal product or group of products produced or distributed, or services rendered. Larger facilities typically have more than one SIC code.

SIC Code

Description

4911

ELECTRIC SERVICES

SCC Codes

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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 true CAS No.'s but rather an identification which has been developed by the department to identify groups of contaminants which ordinary CAS No.'s do not do. As an example, volatile organic compounds or VOC's are identified collectively by the NY CAS No. 0NY998-00-0.] The PTE refers to the Potential to Emit. This is defined as the maximum capacity of a facility or air contaminant source to emit any air contaminant under its physical and operational design. Any physical or operational limitation on the capacity of the facility or air contamination source to emit any air contaminant, including air pollution control equipment and/or restrictions on the hours of operation, or on the type or amount or material combusted, stored, or processed, shall be treated as part of the design only if the limitation is contained in federally enforceable permit conditions. The PTE for each contaminant that is displayed represents the facility-wide PTE in tons per year (tpy) or pounds per year (lbs/yr). In some instances the PTE represents a federally enforceable emissions cap or limitation for that contaminant. The term 'HAP' refers to any of the hazardous air pollutants listed in section 112(b) of the Clean Air Act Amendments of 1990. Total emissions of all hazardous air pollutants are listed under the special NY CAS No. 0NY100-00-0. In addition, each individual hazardous air pollutant is also listed under its own specific CAS No. and is identified in the list below by the (HAP) designation.

Cas No.	Contaminant	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
000106-99-0	1,3-BUTADIENE	20			
000075-07-0	ACETALDEHYDE	184			

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000107-02-8	ACROLEIN	29	
007664-41-7	AMMONIA		47
007440-38-2	ARSENIC	13	
000071-43-2	BENZENE	122	
007440-41-7	BERYLLIUM	1	
007440-43-9	CADMIUM	7	
000124-38-9	CARBON		430816
	DIOXIDE		
000630-08-0	CARBON		156
	MONOXIDE		
007440-47-3	CHROMIUM	14	
007440-48-4	COBALT	0.1	
025321-22-6	DICHLOROBENZE NE	1	
000100-41-4	ETHYLBENZENE	147	
000050-00-0	FORMALDEHYDE	3688	
000110-54-3	HEXANE	1682	
007439-92-1	LEAD	18	
007439-96-5	MANGANESE	895	
007439-97-6	MERCURY	2	
000091-20-3	NAPHTHALENE	48	
007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS	8	
0NY210-00-0	OXIDES OF NITROGEN		176
0NY075-00-0	PARTICULATES		71
0NY075-00-5	PM-10		59
130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS	5	
000075-56-9	PROPANE, 1,2- EPOXY-	133	
007782-49-2	SELENIUM	31	
007446-09-5	SULFUR DIOXIDE		13
007664-93-9	SULFURIC ACID		2
000108-88-3	TOLUENE	601	
0NY100-00-0	TOTAL HAP		3.97
0NY998-00-0	VOC		42
001330-20-7	XYLENE, M, O & P MIXT.	294	

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)
The Department will make available to the public any permit application, compliance plan, permit, and monitoring and compliance certification report pursuant to Section 503(e) of the Act, except for information entitled to confidential treatment pursuant to 6 NYCRR Part 616 - Public Access to records and Section 114(c) of the Act.

Item B: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(a)(4)
Owners and/or operators of facilities having an issued Title V permit shall submit a

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complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

- Item C: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)**
Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- Item D: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)**
The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
- Item E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)**
This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- Item F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)**
It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.
- Item G: Property Rights - 6 NYCRR 201-6.4(a)(6)**
This permit does not convey any property rights of any sort or any exclusive privilege.
- Item H: Severability - 6 NYCRR Part 201-6.4(a)(9)**
If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.
- Item I: Permit Shield - 6 NYCRR Part 201-6.4(g)**
All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the conditions of the permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that such applicable requirements are included and are specifically identified in the permit, or the Department, in acting on the permit application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

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

Item J: Reopening for Cause - 6 NYCRR Part 201-6.4(i)

This Title V permit shall be reopened and revised under any of the following circumstances:

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 201-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

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

Item K: Permit Exclusion - ECL 19-0305

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way affecting any legal, administrative or equitable rights or claims, actions, suits, causes of action or demands whatsoever that the Department may have against the Applicant for

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violations based on facts and circumstances alleged to have occurred or existed prior to the effective date of this permit, including, but not limited to, any enforcement action authorized pursuant to the provisions of applicable federal law, the Environmental Conservation Law of the State of New York (ECL) and Chapter III of the Official Compilation of the Codes, Rules and Regulations of the State of New York (NYCRR). The issuance of this permit also shall not in any way affect pending or future enforcement actions under the Clean Air Act brought by the United States or any person.

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

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5

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

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

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

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

(c) This provision is in addition to any emergency or upset provision contained in any applicable requirement. item_02

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

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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	114	Powers and Duties of the Department with respect to air pollution control
1-GTDBS	40CFR 60-A.11	96	General provisions - compliance with standards and maintenance requirements
1-GTDBS	40CFR 60-A.11 (d)	97	General provisions - compliance with standards and maintenance requirements
1-GTDBS	40CFR 60-A.12	98	General provisions - Circumvention
1-GTDBS	40CFR 60-A.13	99	General provisions - Monitoring requirements
1-GTDBS	40CFR 60-A.13 (d)	100	General provisions - Monitoring requirements
1-GTDBS	40CFR 60-A.14	101	General provisions - Modification
FACILITY	40CFR 60-A.15	67	General provisions - Reconstruction
FACILITY	40CFR 60-A.4	66	General provisions - Address
1-GTDBS	40CFR 60-A.7 (b)	89	Notification and Recordkeeping
1-GTDBS	40CFR 60-A.7 (d)	90	Notification and Recordkeeping
1-GTDBS	40CFR 60-A.8 (a)	91	Performance Tests
1-GTDBS	40CFR 60-A.8 (c)	92	Performance Tests
1-GTDBS	40CFR 60-A.8 (d)	93	Performance Tests
1-GTDBS	40CFR 60-A.8 (e)	94	Performance Tests
1-GTDBS	40CFR 60-A.8 (f)	95	Performance Tests
FACILITY	40CFR 60-Db.42b (j)	68	Exemption from

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1-GTDBS	40CFR 60-Db.44b (a) (4)	102	Standards for Sulfur Dioxide.
1-GTDBS	40CFR 60-Db.45b (j)	103	Standard for Nitrogen Oxides for Duct Burners Used in Combined Cycle Projects.
FACILITY	40CFR 60-Db.48b (j)	69	Compliance and Performance Test Methods and Procedures for Sulfur Dioxide.
1-GTDBS	40CFR 60-GG.332 (f)	104	Exemption from Emissions Monitoring
1-GTDBS	40CFR 60-GG.334 (b)	105	Exemption from Section 332(a) of this Subpart.
1-GTDBS	40CFR 60-GG.334 (h) (3)	106	Monitoring of Operations: CEMS Allowance not to monitor sulfur or nitrogen for natural gas
1-GTDBS	40CFR 60-GG.334 (j)	107	Reporting Requirements
FACILITY	40CFR 63-ZZZZ	70	Reciprocating Internal Combustion Engine (RICE) NESHAP
FACILITY	40CFR 63-ZZZZ.6625 (f)	71	Reciprocating Internal Combustion Engine (RICE) NESHAP - non-resettable hour meter for certain existing emergency engines
FACILITY	40CFR 68	17	Chemical accident prevention provisions
FACILITY	40CFR 82-F	18	Protection of Stratospheric Ozone - recycling and emissions reduction
1-GTDBS	40CFR 97-AAAAA.406	108	Transport Rule (TR) NOx Annual Trading Program Standard
1-GTDBS	40CFR 97-CCCC.606	109	Transport Rule (TR) SO2 Group 1 Trading Program Standard
FACILITY	40CFR 97-GGGGG.1006	72	Requirments CSAPR NOx Ozone Season Group 3 Trading Program
FACILITY	6NYCRR 200.6	1	Standard Requirements
FACILITY	6NYCRR 200.7	9	Acceptable ambient air quality.
FACILITY	6NYCRR 201-1.4	115	Maintenance of equipment.
FACILITY	6NYCRR 201-1.7	10	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.8	11	Recycling and Salvage
			Prohibition of reintroduction of collected contaminants to the

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FACILITY	6NYCRR 201-3.2 (a)	12	air
FACILITY	6NYCRR 201-3.3 (a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-6	19, 73, 74	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6.4	20, 21, 22, 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	Title V Permits and the Associated Permit Conditions
1-GTDBS	6NYCRR 201-6.4	76, 77, 78, 79, 80, 81, 82, 83	Standard Permit Requirements
1-GTDBS/-/G01	6NYCRR 201-6.4	110	Standard Permit Requirements
1-GTDBS/-/G02	6NYCRR 201-6.4	111	Standard Permit Requirements
1-GTDBS/-/GB1	6NYCRR 201-6.4	112	Standard Permit Requirements
FACILITY	6NYCRR 201-6.4 (a) (4)	14	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4 (a) (7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4 (a) (8)	15	General Conditions - Right to Inspect
1-GTDBS	6NYCRR 201-6.4 (b)	84, 85, 86	Permit Conditions for Monitoring
FACILITY	6NYCRR 201-6.4 (c)	3	Recordkeeping and Reporting of
FACILITY	6NYCRR 201-6.4 (c) (2)	4	Compliance Monitoring Records of
FACILITY	6NYCRR 201- 6.4 (c) (3) (ii)	5	Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201- 6.4 (c) (3) (iii)	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4 (d) (4)	54	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4 (e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4 (f)	55	Operational Flexibility
FACILITY	6NYCRR 201-6.5 (a)	116	State Enforceable Requirements
FACILITY	6NYCRR 201-7	75	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1	59	Emission Testing, Sampling and Analytical
FACILITY	6NYCRR 202-1.1	16	Determinations Required emissions tests.
FACILITY	6NYCRR 202-1.3	60	Acceptable procedures.
FACILITY	6NYCRR 202-2.1	61	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.4 (a) (3)	62	Emission statement methods and procedures

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FACILITY	6NYCRR 202-2.5	7	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	117	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	63	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 215.2	8	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2 (d)	64	Sulfur-in-Fuel Limitation - Distillate Oil
FACILITY	6NYCRR 227-1.4 (a)	65	Opacity Standard
1-GTDBS	6NYCRR 227-2.4	87	Control requirements.
1-HWBLR	6NYCRR 227-2.4 (d)	113	Small boilers, small combustion turbines, and small stationary internal combustion engines.
1-GTDBS	6NYCRR 227-2.6	88	Testing, monitoring, and reporting requirements
FACILITY	6NYCRR 242-1.5	118	CO2 Budget Trading Program - Standard requirements
1-GTDBS	6NYCRR 242-4	119	CO2 Budget Trading Program - Compliance certification
1-GTDBS	6NYCRR 242-8.5	120	CO2 Budget Trading Program - Recordkeeping and reporting
1-GTDBS	6NYCRR 251.3 (b)	121	Emission limits for non-modified sources.

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 201-6.4 (a) (4)

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

6 NYCRR 201-6.4 (a) (7)

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

6 NYCRR 201-6.4 (a) (8)

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

6 NYCRR 201-6.4 (c)

This requirement specifies, in general terms, what information must be contained in any required

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

6 NYCRR 201-6.4 (c) (2)

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

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

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

6 NYCRR 201-6.4 (d) (4)

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

6 NYCRR 201-6.4 (e)

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

6 NYCRR 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 202-2.5

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

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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 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)

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.

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40 CFR 60.332 (f)

This regulation allows gas turbines using water or steam injection to control NO_x 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 NO_x 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.

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.

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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 60.8 (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)

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)

This condition reduces the emission of hazardous air pollutants by requiring existing emergency engines greater than or equal to 500 brake horsepower located at a major source of HAP emissions and existing emergency engines located at an area source of HAP emissions to install a non-resettable hour meter.

40 CFR 97.1006

40 CFR Part 97 Subpart GGGGG the NOx Ozone Season Cross State Air Pollution Rule (CSAPR) requires additional NOx reductions from power plants located in twelve (12) states beginning with the 2021 ozone season. It is designed to reduce NOx emissions during the ozone season (May - September) for large fossil fuel fired electric generating units that have a nameplate capacity of greater than 25 megawatts electrical and produce electricity for sale. The new Group 3 Trading Program would be in addition to the existing Groups 1 and 2 NOx Ozone Trading Programs. The final rule does not include ozone season NOx emission limits for non-EGUs.

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40 CFR 97.406

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

40 CFR 97.606

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

40 CFR Part 63, Subpart ZZZZ

Subpart ZZZZ applies to reciprocating internal combustion engines. Sources subject to Subpart ZZZZ must limit emissions of carbon monoxide and formaldehyde. Sources must also comply with work practice standards and operating limits.

6 NYCRR 201-6.4

This section identifies all standard requirements for Title V permits.

6 NYCRR 201-6.4 (b)

Each title V facility permit issued under this Part shall include the provisions pertaining to monitoring.

6 NYCRR 201-6.4 (f)

This section describes the potential for certain operational changes to be made by the facility owner or operator without first obtaining a permit modification. Changes made pursuant to this provision must meet all of the criteria described in this section to qualify for consideration as operational flexibility. The Department reserves the right to require the facility owner or operator to obtain a permit modification prior to making any changes at the facility pursuant to this section.

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6 NYCRR 201-6.5 (a)

This subdivision states that the Department shall include state enforceable conditions in Title V permits. State enforceable conditions related to regulations developed pursuant to the Climate Leadership and Community Protection Act (CLCPA) and Article 75 of New York State Environmental Conservation Law may be included in future versions of this permit, as applicable.

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 202-2.4 (a) (3)

Once a facility is required to submit annual emission statements electronically, emission statements must be submitted to the department per the specified schedule, in this regulation beginning the reporting year that a Title V permit containing a condition mandating electronic submittal is issued.

6 NYCRR 211.1

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

6 NYCRR 225-1.2 (d)

This subdivision sets the sulfur-in-fuel limitation for distillate oil fired emission sources throughout the State.

6 NYCRR 227-1.4 (a)

This subdivisions sets the opacity standard for subject stationary combustion installations.

6 NYCRR 227-2.4

This section specifies control requirements for boilers, turbines, and reciprocating engines.

6 NYCRR 227-2.4 (d)

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

6 NYCRR 227-2.6

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

6 NYCRR 242-1.5

This 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.

6 NYCRR 251.3 (b)

Emission limits for non-modified sources.

6 NYCRR Subpart 201-7

This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit that cap is

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.

Compliance Certification

Summary of monitoring activities at RENSSELAER COGEN FACILITY:

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

1-GTDBS	99	record keeping/maintenance procedures
1-GTDBS	100	record keeping/maintenance procedures
FACILITY	68	record keeping/maintenance procedures
1-GTDBS	102	intermittent emission testing
1-GTDBS	103	record keeping/maintenance procedures
FACILITY	69	record keeping/maintenance procedures
1-GTDBS	106	record keeping/maintenance procedures
1-GTDBS	107	record keeping/maintenance procedures
FACILITY	71	record keeping/maintenance procedures
1-GTDBS	108	record keeping/maintenance procedures
1-GTDBS	109	record keeping/maintenance procedures
FACILITY	72	record keeping/maintenance procedures
FACILITY	20	intermittent emission testing
FACILITY	21	continuous emission monitoring (cem)
FACILITY	22	intermittent emission testing
FACILITY	23	intermittent emission testing
FACILITY	24	intermittent emission testing
FACILITY	25	intermittent emission testing
FACILITY	26	intermittent emission testing
FACILITY	27	continuous emission monitoring (cem)
FACILITY	28	continuous emission monitoring (cem)
FACILITY	29	continuous emission monitoring (cem)
FACILITY	30	intermittent emission testing
FACILITY	31	intermittent emission testing
FACILITY	32	continuous emission monitoring (cem)
FACILITY	33	continuous emission monitoring (cem)
FACILITY	34	continuous emission monitoring (cem)
FACILITY	35	continuous emission monitoring (cem)
FACILITY	36	record keeping/maintenance procedures
FACILITY	37	continuous emission monitoring (cem)
FACILITY	38	continuous emission monitoring (cem)
FACILITY	39	continuous emission monitoring (cem)
FACILITY	40	continuous emission monitoring (cem)
FACILITY	41	intermittent emission testing
FACILITY	42	intermittent emission testing
FACILITY	43	continuous emission monitoring (cem)
FACILITY	44	record keeping/maintenance procedures
FACILITY	45	intermittent emission testing
FACILITY	46	continuous emission monitoring (cem)
FACILITY	47	intermittent emission testing
FACILITY	48	intermittent emission testing
FACILITY	49	intermittent emission testing
FACILITY	50	intermittent emission testing
FACILITY	51	intermittent emission testing
FACILITY	52	continuous emission monitoring (cem)
FACILITY	53	intermittent emission testing
1-GTDBS	76	continuous emission monitoring (cem)
1-GTDBS	77	continuous emission monitoring (cem)
1-GTDBS	78	continuous emission monitoring (cem)
1-GTDBS	79	continuous emission monitoring (cem)
1-GTDBS	80	work practice involving specific operations
1-GTDBS	81	continuous emission monitoring (cem)
1-GTDBS	82	record keeping/maintenance procedures
1-GTDBS	83	record keeping/maintenance procedures
1-GTDBS/-/G01	110	continuous emission monitoring (cem)
1-GTDBS/-/G02	111	continuous emission monitoring (cem)
1-GTDBS/-/GB1	112	continuous emission monitoring (cem)

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1-GTDBS	84	record keeping/maintenance procedures
1-GTDBS	85	record keeping/maintenance procedures
1-GTDBS	86	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	56	monitoring of process or control device parameters as surrogate
FACILITY	57	monitoring of process or control device parameters as surrogate
FACILITY	58	work practice involving specific operations
FACILITY	59	record keeping/maintenance procedures
FACILITY	61	record keeping/maintenance procedures
FACILITY	64	work practice involving specific operations
FACILITY	65	record keeping/maintenance procedures
1-GTDBS	87	record keeping/maintenance procedures
1-HWBLR	113	record keeping/maintenance procedures
1-GTDBS	88	record keeping/maintenance procedures
FACILITY	118	record keeping/maintenance procedures
1-GTDBS	119	record keeping/maintenance procedures
1-GTDBS	120	record keeping/maintenance procedures
1-GTDBS	121	continuous emission monitoring (cem)

Basis for Monitoring

Basis for Monitoring

This facility is an electrical generating facility which makes its operations subject to the monitoring provisions as stated in 40 CFR Part 75. This requires the facility to continuously monitor NOx, carbon monoxide, and ammonia slip in order to demonstrate compliance with the PSD limits.

6 NYCRR Part 227-2, NOx RACT: The combustion turbines and duct burners in this permit are subject to LAER requirements for NOx which are more stringent than the applicable NOx RACT requirements. Further, the LAER conditions currently in the permit require the facility to install, maintain, and operate NOx CEMS in accordance with 40 CFR Part 75. Accordingly, the Department has streamlined this permit to include only the the more stringent LAER conditions for NOx emissions. By complying with these requirements the facility is also complying with the applicable provisions of NOx RACT.

40 CFR Part 60, Subpart KKKK - Standards of Performance for Stationary Combustion Turbines - Although there are some conditions with NOx and SO2 limits with regards to subpart KKKK, many of the requirements on subpart KKKK are less stringent than the corresponding requirements that LAER imposes. The LAER conditions currently in the permit already require the facility to install, maintain, and operate NOx and SO2 CEMS in accordance with Part 75. Accordingly, the Department has streamlined this permit to include mostly the more stringent LAER conditions for NOx and SO2 emissions. By complying with these requirements the facility is also complying with the applicable provisions of Subpart KKKK.

40 CFR Part 64 - Compliance Assurance Monitoring (CAM) - Pre-control emissions of NOx, CO, and VOC from this facility exceed the major source thresholds, are subject to a federal emissions standard, and are equipped with active controls (SCR and oxidation catalyst). However, NOx and CO are exempt from CAM because they are measured with CEMs as described at 40 CFR 64.2(b)(1)(iv). Additionally, the facility uses the CO

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CEMs as a surrogate to assess the performance of the oxidation catalyst, which in turn assures that VOC emissions are being appropriately controlled. Accordingly, VOC is also exempt from CAM as described in 40 CFR 64.2(b)(1)(iv). CAM does not apply to emissions of SO₂, H₂SO₄, or PM from this facility because the facility does not operate active controls for these pollutants.

40 CFR Part 60 Subpart TTTT - Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units - This rule doesn't apply to this facility because this facility was built prior to January 8, 2014 and has not reconstructed or modified to an extent that would make the facility subject to this regulation.