

Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

Facility Identification Data

Name: EMPIRE POWER PLANT Address: 75 RIVERSIDE AVE RENSSELAER, NY 12144

Owner/Firm

Name: EMPIRE GENERATING CO LLC

Address: 75 RIVERSIDE AVE

PO BOX 350

RENSSELAER, NY 12144-0375, 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: JANIS FALLON

Address: 75 RIVERSIDE AVE RENSSELAER, NY 12144

Phone:

Permit Description Introduction

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

Summary Description of Proposed Project

Application for renewal of Air Title V Facility.

Attainment Status

EMPIRE POWER PLANT is located in the town of RENSSELAER in the county of RENSSELAER.



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

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) Particulate Matter (PM) ATTAINMENT Particulate Matter (PM10) ATTAINMENT Sulfur Dioxide (SO2) ATTAINMENT Ozone* MARGINAL NON-ATTAINMENT Oxides of Nitrogen (NOx)** ATTAINMENT Carbon Monoxide (CO) ATTAINMENT

Facility Description:

This facility consists of two GE 7FA combustion turbine trains. Combustion turbines will fire natural gas and will have ultra low sulfur distillate oil available for backup use. Each train has a natural gas-fired heat recovery steam generator, oxidation catalyst/SCR for pollution control, and a separate stack. Ancillary equipment includes emergency engines (generator and fire pump), a cooling tower, and storage tanks for distillate oil and aqueous ammonia.

Permit Structure and Description of Operations

The Title V permit for EMPIRE POWER PLANT

is structured in terms of the following hierarchy: facility, emission unit, emission point, emission source and process. A facility is defined as all emission sources located at one or more adjacent or contiguous properties owned or operated by the same person or persons under common control. The facility is subdivided into one or more emission units (EU). Emission units are defined as any part or activity of a stationary facility that emits or has the potential to emit any federal or state regulated air pollutant. An emission unit is represented as a grouping of processes (defined as any activity involving one or more emission sources (ES) that emits or has the potential to emit any federal or state regulated air pollutant). An emission source is defined as any apparatus, contrivance or machine capable of causing emissions of any air contaminant to the outdoor atmosphere, including any appurtenant exhaust system or air cleaning device. [NOTE: Indirect sources of air contamination as defined in 6 NYCRR Part 203 (i.e. parking lots) are excluded from this definition]. The applicant is required to identify the principal piece of equipment (i.e., emission source) that directly results in or controls the emission of federal or state regulated air pollutants from an activity (i.e., process). Emission sources are categorized by the following types:

combustion - devices which burn fuel to generate heat, steam or power

incinerator - devices which burn waste material for disposal

control - emission control devices

process - any device or contrivance which may emit air contaminants

that is not included in the above categories.

EMPIRE POWER PLANT is defined by the following emission unit(s):

^{*} 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.



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

Emission unit 1MISCC -

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

00101, 00102, 00105

Process: C21 is located at FIRST, Building DEMINBLG - Process: C24 is located at FIRST, Building OUTSIDE -

Emission unit 1CTDBR -

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

0100A, 0100B

Process: C01 is located at FIRST, Building COGENBLG -

Process: C02 is located at FIRST, Building COGENBLG -

Title V/Major Source Status

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

EMPIRE POWER PLANT 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 EMPIRE POWER PLANT with regards to the principal air pollution regulatory programs:

Regulatory Program

Applicability

PSD	YES
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	NO
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.



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

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

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

MACT Maximum Achievable Control Technology (40 CFR 63, 6 NYCRR 200.10) - contaminant and source specific emission standards established by the 1990 CAAA. Under Section 112 of the CAAA, the US EPA is required to develop and promulgate emissions standards for new and existing sources. The standards are to be based on the best demonstrated control technology and practices in the regulated industry, otherwise known as MACT. The corresponding regulations apply to specific source types and contaminants.

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

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

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

RACT Reasonably Available Control Technology (6 NYCRR Parts 212-3, 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



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

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
4931 ELEC & OTHER SERVICES COMBINED

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

2-01-001-02	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION
	ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL)
	Reciprocating
2-01-001-09	INTERNAL COMBUSTION ENGINES - ELECTRIC
	GENERATION
	ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE
	- DISTILLATE OIL (DIESEL)
	TURBINE: EXHAUST
2-01-002-09	INTERNAL COMBUSTION ENGINES - ELECTRIC
	GENERATION
	ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE
	- NATURAL GAS
	TURBINE: EXHAUST
3-85-882-01	COOLING TOWER
	VEQ
	MECHANICAL DRAFT

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



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

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. 007664-41-7	Contaminant AMMONIA	PTE lbs/yr	PTE tons/yr	Actual lbs/yr	Actual tons/yr
000124-38-9	CARBON DIOXIDE		2834898		
000630-08-0	CARBON MONOXIDE		78		
0NY210-00-0	OXIDES OF NITROGEN		215		
0NY075-00-0	PARTICULATES		249.6		
0NY075-00-5	PM-10		247.4		
007446-09-5	SULFUR DIOXIDE		148		
007664-93-9	SULFURIC ACID		59		
0NY100-00-0	TOTAL HAP		19		
0NY998-00-0	VOC		71		

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Public Access to Recordkeeping for Title V Facilities - 6 NYCRR 201-1.10(b)

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

Item B: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.2(a)(4)

Owners and/or operators of facilities having an issued Title V permit shall submit a complete application at least 180 days, but not more than eighteen months, prior to the date of permit expiration for permit renewal purposes.

Item C: Certification by a Responsible Official - 6 NYCRR Part 201-6.2(d)(12)

Any application, form, report or compliance certification required to be submitted pursuant to the federally enforceable portions of this permit shall contain a certification of truth, accuracy and completeness by a responsible official. This certification shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Item D: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.4(a)(2)

The permittee must comply with all conditions of the Title V facility permit. Any permit non-compliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

Item E: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.4(a)(3)



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Item F: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.4(a)(5)

It shall not be a defense for a permittee in an enforcement action to claim that a cessation or reduction in the permitted activity would have been necessary in order to maintain compliance with the conditions of this permit.

Item G: Property Rights - 6 NYCRR 201-6.4(a)(6)

This permit does not convey any property rights of any sort or any exclusive privilege.

Item H: Severability - 6 NYCRR Part 201-6.4(a)(9)

If any provisions, parts or conditions of this permit are found to be invalid or are the subject of a challenge, the remainder of this permit shall continue to be valid.

Item I: Permit Shield - 6 NYCRR Part 201-6.4(g)

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

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

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

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

i. If additional applicable requirements under the Act become applicable where



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

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 2 01-6.7 and Part 621.

- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

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

Item K: Permit Exclusion - ECL 19-0305

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

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

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

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 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 Regulation Condition Short Description



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

Facility/EU/EP/Process/ES

 FACILITY	ECL 19-0301	128	Powers and Duties of the Department with respect to air
1-CTDBR/-/C01	40CFR 52-A.21	77	pollution control Prevention of Significant
1-CTDBR/-/C02	40CFR 52-A.21	90	Deterioration Prevention of Significant
1-CTDBR/-/C03	40CFR 52-A.21	106	Deterioration Prevention of Significant
FACILITY	40CFR 52-A.21(j)	29, 30, 31, 32, 33, 34	Deterioration Best Available Control Technology
1-CTDBR	40CFR 52-A.21(j)	70, 71	Best Available
1-CTDBR/-/C01	40CFR 52-A.21(j)	78, 79, 80, 81, 82, 83, 84, 85, 86	Control Technology Best Available Control Technology
1-CTDBR/-/C02	40CFR 52-A.21(j)	91, 92, 93, 94, 95, 96, 97, 98, 99, 100,	Best Available
1-CTDBR/-/C03	40CFR 52-A.21(j)	101, 102 107, 108, 109, 110, 111, 112, 113, 114,	Best Available Control Technology
1-MISCC/-/C21	40CFR 52-A.21(j)	115 125	Best Available
FACILITY	40CFR 60-A.12	36	Control Technology General provisions -
FACILITY	40CFR 60-A.15	37	Circumvention General provisions - Reconstruction
FACILITY	40CFR 60-A.19	38	General provisions - General notification and reporting
FACILITY	40CFR 60-A.4	35	requirements General provisions - Address
1-MISCC/-/C21/EDG01	40CFR 60-IIII.4205(b)	126	Emission Standards - 2007 or later Emergency Non Fire Pump Stationary CI-IC Engines Displacing < 30 liters/cylinder
1-MISCC/-/C21/FIRE1	40CFR 60-IIII.4205(c)	127	Emission Standards - Stationary CI-IC Fire Pump Engines Displacing < 30
FACILITY	40CFR 60-IIII.4206	39	liters/cylinder Stationary Compression Ignition IC Engines - Duration
1-MISCC	40CFR 60-IIII.4207(b)	117	of Emission Standards Stationary Compression Ignition IC Engines - Fuel Requirements beginning October 1, 2010
1-MISCC	40CFR 60-IIII.4209(a)	118	Monitoring requirement - Emergency stationary



Permit ID: 4-3814-00052/00009 Renewal Number: 1 12/17/2021

FACILITY	40CFR 60-IIII.4211(a)	40	CI-IC engine Stationary Compression Ignition Engines - Compliance
FACILITY	40CFR 60-IIII.4211(c)	41	Requirements Stationary Compression Ignition Engines - Compliance
FACILITY	40CFR 60-IIII.4211(f)	42, 43, 44	Demonstration Stationary Compression Ignition IC Engines - Emergency Engine
1-MISCC	40CFR 60-IIII.4211(f)	119	Operation Stationary Compression Ignition IC Engines - Emergency Engine Operation
FACILITY	40CFR 60-IIII.4214(b)	45	Notification, Recordkeeping Requirements - Emergency stationary
FACILITY	40CFR 60-IIII.4218	46	CI-IC engines Stationary Compression Ignition IC Engines - applicability of NSPS
FACILITY	40CFR 60-IIII.4219	47	general provisions Stationary Compression Ignition IC Engines - definitions
1-MISCC	40CFR 60-IIII.4219	120, 121	Stationary Compression Ignition IC Engines - definitions
FACILITY	40CFR 60-KKKK.4320(a)	48, 49	Stationary Combustion Turbine NSPS - Table 1 NOx emission limits
FACILITY	40CFR 60-KKKK.4330	50, 51	Stationary Combustion Turbine NSPS - SO2 emission limits
FACILITY	40CFR 60-KKKK.4333	52	Stationary Combustion Turbine NSPS - general compliance requirements
1-CTDBR	40CFR 60-KKKK.4365(a)	72	Stationary Combustion Turbine NSPS - Exemption from monitoring total sulfur content of fuel
FACILITY	40CFR 60-KKKK.4375	53	Stationary Combustion Turbine NSPS - report requirement for excess emissions and
FACILITY	40CFR 60-KKKK.4380	54	monitor downtime Stationary Combustion Turbine NSPS - defining excess emissions and monitor
FACILITY	40CFR 63-ZZZZ.6590(c)	55	downtime for NOx Reciprocating Internal Combustion



Engine (RICE) NESHAP

Division of Air Resources Permit Review Report

Permit ID: 4-3814-00052/00009 Renewal Number: 1 12/17/2021

			- Stationary RICE subject to
			Regulations under 40
FACILITY	40CFR 68	18	CFR Part 60 Chemical accident prevention provisions
1-CTDBR	40CFR 72-A.6(a)(3)(i)	73	The applicability provisions in Title IV for new
FACILITY	40CFR 82-F	19	facilities. Protection of Stratospheric Ozone - recycling and
FACILITY	40CFR 97-AAAAA.406	56	emissions reduction Transport Rule (TR) NOx Annual Trading Program Standard
FACILITY	40CFR 97-CCCCC.606	57	Requirments Transport Rule (TR) SO2 Group 1 Trading Program Standard
FACILITY	40CFR 97-GGGGG.1006	58	Requirments CSAPR NOx Ozone Season Group 3
1-MISCC	6NYCRR 200.1(cq)	116	Trading Program Standard Requirements Definition for
FACILITY	6NYCRR 200.6	1	Emergency Generator Acceptable ambient
FACILITY	6NYCRR 200.7	10	air quality. Maintenance of
FACILITY	6NYCRR 201-1.4	129	equipment. Unavoidable noncompliance and violations
FACILITY FACILITY	6NYCRR 201-1.7 6NYCRR 201-1.8	11 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 -
FACILITY	6NYCRR 201-6	20, 59, 60	proof of eligibility Title V Permits and the Associated Permit
1-CTDBR	6NYCRR 201-6	61, 62, 63, 64, 65, 66, 67, 68, 69	Conditions Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	15	General Conditions - Requirement to
FACILITY	6NYCRR 201-6.4(a)(7)	2	Provide Information General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	16	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of
FACILITY	6NYCRR 201-6.4(c)(2)	4	Compliance Monitoring Records of Monitoring, Sampling and Measurement



Permit ID: 4-3814-00052/00009 Renewal Number: 1 12/17/2021

FACILITY	6NYCRR 201- 6.4(c)(3)(ii	5	Reporting Requirements -
			Deviations and
			Noncompliance
FACILITY	6NYCRR 201-6.4(d)(4)	21	Compliance Schedules
			- Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance
			Certification
FACILITY	6NYCRR 201-6.4(f)	22	Operational
		100	Flexibility
FACILITY	6NYCRR 201-6.5(a)	130	State Enforceable
		4.5	Requirements
FACILITY	6NYCRR 202-1.1	17	Required emissions
		_	tests.
FACILITY	6NYCRR 202-2.1	7	Emission Statements -
			Applicability
FACILITY	6NYCRR 202-2.4	23	Emission Statement -
			methods and
			procedures
FACILITY	6NYCRR 202-2.5	8	Emission Statements -
			record keeping
			requirements.
FACILITY	6NYCRR 211.1	131	General Prohibitions
			- air pollution
	CVVICED 011 0	0.4	prohibited
FACILITY	6NYCRR 211.2	24	General Prohibitions
			- visible emissions
-		_	limited.
FACILITY	6NYCRR 215.2	9	Open Fires -
	S 005 4 0 / 1)	0.5	Prohibitions
FACILITY	6NYCRR 225-1.2(d)	25	Sulfur-in-Fuel
			Limitation -
	CWYCDD 007 1 4/)	0.6	Distillate Oil
FACILITY	6NYCRR 227-1.4(a)	26	Opacity Standard
FACILITY	6NYCRR 231-2.5(a)	27, 28	LAER
1-CTDBR/-/C01	6NYCRR 231-2.5(a)	74, 75, 76	LAER
1-CTDBR/-/C02	6NYCRR 231-2.5(a)	87, 88, 89	LAER
1-CTDBR/-/C03	6NYCRR 231-2.5(a)	103, 104, 105	LAER
1-MISCC/-/C21	6NYCRR 231-2.5(a)	122, 123, 124	LAER
FACILITY	6NYCRR 242-1.5	132, 133	CO2 Budget Trading
			Program - Standard
D3 077 7897	CARLODD 040 4	1 2 4	requirements
FACILITY	6NYCRR 242-4	134	CO2 Budget Trading
			Program - Compliance
DACTI TIMY	CMMCDD 242 0	135	certification
FACILITY	6NYCRR 242-8	133	CO2 Budget Trading
			Program - Monitoring
PACTITMY	6NYCRR 242-8.5	136	and reporting
FACILITY	UNICKR 242-8.3	T 7 Q	CO2 Budget Trading Program -
			Recordkeeping and
			= =
1-CTDBR	6NYCDD 251 3/h)	137	reporting Emission limits for
T CIDDU	6NYCRR 251.3(b)	10/	non-modified sources.
			mon-mourried 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.



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

6 NYCRR 200.6

Acceptable ambient air quality - prohibits contravention of ambient air quality standards without mitigating measures

6 NYCRR 200.7

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

6 NYCRR 201-1.4

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

6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

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

6 NYCRR 201-3.3 (a)

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

6 NYCRR Subpart 201-6

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

6 NYCRR 201-6.4 (a) (4)

This mandatory requirement applies to all Title V facilities. It requires the permittee to provide information that the Department may request in writing, within a reasonable time, in order to determine



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. The request may include copies of records required to be kept by the permit.

6 NYCRR 201-6.4 (a) (7)

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

6 NYCRR 201-6.4 (a) (8)

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

6 NYCRR 201-6.4 (c)

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

6 NYCRR 201-6.4 (c) (2)

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

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

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

6 NYCRR 201-6.4 (d) (4)

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

6 NYCRR 201-6.4 (e)

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

6 NYCRR 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.



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

6 NYCRR 202-2.5

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

6 NYCRR 211.2

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

6 NYCRR 215.2

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

40 CFR Part 68

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

40 CFR Part 82, Subpart F

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

regulations: 40 CFR 52.21 40 CFR 52.21 (j) 40 CFR 60.12 40 CFR 60.15 40 CFR 60.19

40 CFR 60.4

40 CFR 60.4205 (b)



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

40 CFR 60.4205 (c)
40 CFR 60.4206
40 CFR 60.4207 (b)
40 CFR 60.4209 (a)
40 CFR 60.4211 (a)
40 CFR 60.4211 (c)
40 CFR 60.4211 (f)
40 CFR 60.4214 (b)
40 CFR 60.4218
40 CFR 60.4219
40 CFR 60.4320 (a)
40 CFR 60.4330
40 CFR 60.4333 This citation states the general requirements for complying with Subpart KKKK.
40 CFR 60.4365 (a)
40 CFR 60.4375 This citation states the reporting requirements of Subpart KKKK.



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

40 CFR 60.4380

This citation states definitions of excess emissions and monitor downtime for nitrogen oxides.

40 CFR 63.6590 (c)

40 CFR 72.6 (a) (3) (i)

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.

40 CFR 97.406

40 CFR 97.606

6 NYCRR 200.1 (cq)

This condition defines an emergency engine under New York State regulations.

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.

6 NYCRR 201-6.5 (a)

This section identifies state enforceable requirements for Title V permits.

6 NYCRR 202-2.4



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

This regulation specifies that any required emission statement must be submitted to the Department before April 15 each year for emissions of the previous calendar year. The regulation also establishes a set of acceptable emissions estimation methods that may be used including the use of monitoring methods, if accepted by the department, and the transmittal of the emission statement information to the Department. Finally, such information may be designated as confidential, as per department approval, except for the following information: emissions, estimated emissions method, and the Source Classification Code.

6 NYCRR 211.1

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 231-2.5 (a)

6 NYCRR 242-1.5

6 NYCRR 242-8.5

6 NYCRR 251.3 (b)

Emission limits for carbon dioxide at non-modified sources that are major for carbon dioxide.

6 NYCRR Subpart 242-4

6 NYCRR Subpart 242-8

Compliance Certification
Summary of monitoring activities at EMPIRE POWER PLANT:

Location Cond No. Type of Monitoring



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

Facility/EU/EP/Process/ES

1-CTDBR/-/C01	77	continuous emission monitoring (cem)
1-CTDBR/-/C02	90	continuous emission monitoring (cem)
1-CTDBR/-/C03	106	continuous emission monitoring (cem)
FACILITY	29	record keeping/maintenance procedures
FACILITY	30	record keeping/maintenance procedures
FACILITY	31	record keeping/maintenance procedures
FACILITY	32	record keeping/maintenance procedures
FACILITY	33	record keeping/maintenance procedures
FACILITY	34	record keeping/maintenance procedures
1-CTDBR 1-CTDBR	70 71	record keeping/maintenance procedures
	71	record keeping/maintenance procedures
1-CTDBR/-/C01	78	monitoring of process or control device parameters as surrogate
1-CTDBR/-/C01	79	continuous emission monitoring (cem)
1-CTDBR/-/C01	80	continuous emission monitoring (cem)
1-CTDBR/-/C01	81	intermittent emission testing
1-CTDBR/-/C01	82	monitoring of process or control device parameters
		as surrogate
1-CTDBR/-/C01	83	intermittent emission testing
1-CTDBR/-/C01	84	intermittent emission testing
1-CTDBR/-/C01	8.5	intermittent emission testing
1-CTDBR/-/C01	86	intermittent emission testing
1-CTDBR/-/C02	91	record keeping/maintenance procedures
1-CTDBR/-/C02	92	record keeping/maintenance procedures
1-CTDBR/-/C02	93	monitoring of process or control device parameters
		as surrogate
1-CTDBR/-/C02	94	continuous emission monitoring (cem)
1-CTDBR/-/C02	95	continuous emission monitoring (cem)
1-CTDBR/-/C02	96	monitoring of process or control device parameters
		as surrogate
1-CTDBR/-/C02	97	monitoring of process or control device parameters
		as surrogate
1-CTDBR/-/C02	98	intermittent emission testing
1-CTDBR/-/C02	99	intermittent emission testing
1-CTDBR/-/C02	100	intermittent emission testing
1-CTDBR/-/C02	101	intermittent emission testing
1-CTDBR/-/C02	102	intermittent emission testing
1-CTDBR/-/C03	107	monitoring of process or control device parameters
1-CTDBR/-/C03	108	as surrogate continuous emission monitoring (cem)
1-CTDBR/-/C03	109	continuous emission monitoring (cem)
1-CTDBR/-/C03	110	monitoring of process or control device parameters
I CIDDIO / COS	110	as surrogate
1-CTDBR/-/C03	111	intermittent emission testing
1-CTDBR/-/C03	112	intermittent emission testing
1-CTDBR/-/C03	113	intermittent emission testing
1-CTDBR/-/C03	114	intermittent emission testing
1-CTDBR/-/C03	115	intermittent emission testing
1-MISCC/-/C21	125	work practice involving specific operations
1-MISCC/-/C21/EDG01	126	record keeping/maintenance procedures
1-MISCC/-/C21/FIRE1	127	record keeping/maintenance procedures
1-MISCC	117	work practice involving specific operations
1-MISCC	118	record keeping/maintenance procedures
FACILITY	40	record keeping/maintenance procedures
FACILITY	41	record keeping/maintenance procedures
FACILITY	43	monitoring of process or control device parameters
		as surrogate
FACILITY	44	record keeping/maintenance procedures
1-MISCC	119	monitoring of process or control device parameters
		as surrogate



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

FACILITY	45	record keeping/maintenance procedures
FACILITY	47	record keeping/maintenance procedures
1-MISCC	120	record keeping/maintenance procedures
1-MISCC	121	record keeping/maintenance procedures
FACILITY	48	continuous emission monitoring (cem)
FACILITY	49	continuous emission monitoring (cem)
FACILITY	50	monitoring of process or control device parameters
		as surrogate
FACILITY	51	monitoring of process or control device parameters
		as surrogate
FACILITY	52	record keeping/maintenance procedures
1-CTDBR	72	record keeping/maintenance procedures
FACILITY	53	record keeping/maintenance procedures
FACILITY	54	record keeping/maintenance procedures
FACILITY	56	record keeping/maintenance procedures
FACILITY	57	record keeping/maintenance procedures
FACILITY	58	record keeping/maintenance procedures
1-MISCC	116	record keeping/maintenance procedures
1-CTDBR	61	continuous emission monitoring (cem)
1-CTDBR	62	monitoring of process or control device parameters
		as surrogate
1-CTDBR	63	record keeping/maintenance procedures
1-CTDBR	64	monitoring of process or control device parameters
		as surrogate
1-CTDBR	65	continuous emission monitoring (cem)
1-CTDBR	66	continuous emission monitoring (cem)
1-CTDBR	67	continuous emission monitoring (cem)
1-CTDBR	68	continuous emission monitoring (cem)
1-CTDBR	69	continuous emission monitoring (cem)
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	7	record keeping/maintenance procedures
FACILITY	25	work practice involving specific operations
FACILITY	26	record keeping/maintenance procedures
FACILITY	27	record keeping/maintenance procedures
FACILITY	28	record keeping/maintenance procedures
1-CTDBR/-/C01	74	intermittent emission testing
1-CTDBR/-/C01	75	continuous emission monitoring (cem)
1-CTDBR/-/C01	76	continuous emission monitoring (cem)
1-CTDBR/-/C02	87	intermittent emission testing
1-CTDBR/-/C02	88	continuous emission monitoring (cem)
1-CTDBR/-/C02	89	continuous emission monitoring (cem)
1-CTDBR/-/C03	103	continuous emission monitoring (cem)
1-CTDBR/-/C03	104	intermittent emission testing
1-CTDBR/-/C03	105	continuous emission monitoring (cem)
1-MISCC/-/C21	122	monitoring of process or control device parameters
		as surrogate
1-MISCC/-/C21	123	record keeping/maintenance procedures
1-MISCC/-/C21	124	record keeping/maintenance procedures
FACILITY	132	record keeping/maintenance procedures
FACILITY	133	record keeping/maintenance procedures
FACILITY	134	record keeping/maintenance procedures
FACILITY	135	record keeping/maintenance procedures
FACILITY	136	record keeping/maintenance procedures
1-CTDBR	137	monitoring of process or control device parameters
		as surrogate

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



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021

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 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 extant that would make the facility subject to this regulation.



Permit ID: 4-3814-00052/00009

Renewal Number: 1 12/17/2021