

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

Facility Identification Data

Name: GREENIDGE STATION

Address: 590 PLANT RD

DRESDEN, NY 14441

Owner/Firm

Name: GREENIDGE GENERATION LLC

Address: 590 PLANT RD

PO BOX 187

DRESDEN, NY 14441-0187, USA

Owner Classification: Corporation/Partnership

Permit Contacts

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Address: GREENIDGE GENERATION LLC

590 PLANT RD PO BOX 187

DRESDEN, NY 14441-0187

Phone:3155362359

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

The Greenidge Electricity Generating Station, located in the Town of Torrey, Yates County has submitted an application for renewal of Air Title V Facility permit. Greenidge Station is currently permitted to operate primarily on natural gas with up to 19% biomass co-firing. This title V operating permit has an

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017
Renewal Number: 1
09/09/2021

expiration date of 9/6/2021. The renewal application is essentially unchanged from the existing permit. The renewal application and draft permit do not request or allow any additional emissions. BACT Limits for carbon monoxide (CO), particulate matter (PM), particulate matter less than 10 microns in diameter (PM-10), particulate matter less than 2.5 microns in diameter (PM-2.5), and greenhouse gases (GHG) remain unchanged in the draft permit. LAER limits for oxides of nitrogen (NOx) remain unchanged in the draft permit. Sulfur dioxide (SO2) and volatile organic compounds (VOCs) caps remain in the draft permit. A complete list of changes is included in the basis for monitoring. The Department requested and received a greenhouse gas analysis with the renewal application (CLCPA).

Attainment Status

GREENIDGE STATION is located in the town of TORREY in the county of YATES. The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

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

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

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

Facility Description:

Greenidge Station is a Major Stationary Source and is required to maintain a Title V operating permit as specified in 6 NYCRR Part 201-6. Greenidge Station is comprised of Unit 4, which includes a Combustion Engineering, tangentially-fired dry bottom boiler (Boiler No. 6) with a maximum heat input rating of 1,117 MMBtu/hr, and a steam generating turbine with a maximum rated output of 107 Megawatts (MW) of electricity. The boiler is designed to operate on natural gas and up to 19% biomass. The facility is equipped with a suite of air pollution control (both pre-combustion and post-combustion) systems to control pollutant nitrogen oxides, carbon monoxide, and particulate matter (PM, PM10 and PM2.5) emissions from facility operations. Continuous Emission Monitoring Systems (CEMS) will be used to monitor compliance with NOx, CO, SO2, ammonia (NH3), and GHGs requirements. A Continuous Opacity Monitoring System (COMS) will be used to monitor compliance with opacity requirements. Greenidge Generation has previously surrendered 177 tons of NOx emission reduction credits (ERC) to offset the 153.8 tons of potential NOx emissions associated with the 2016 permit action.

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

Permit Structure and Description of Operations

The Title V permit for GREENIDGE STATION

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

- combustion - devices which burn fuel to generate heat, steam or power
- incinerator - devices which burn waste material for disposal
- control - emission control devices
- process - any device or contrivance which may emit air contaminants that is not included in the above categories.

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

Emission unit G00005 - Miscellaneous process emission sources.

Emission unit G00005 is associated with the following emission points (EP):

00005

Process: BIO Biomass handling, storage and processing.

Process: MIS General process emission sources associated with Biomass (wood) handling and processing.

Emission unit G00008 - Process operations associated with the aqueous urea system.

Process: P8U is located at Building BOILER - Aqueous urea system

Emission unit GFABAH - This emission unit includes all process emission sources and emission points of the fly and bottom ash handling, storage, and disposal system.

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

00009, 00010, 00011, 00012, 00013

Process: FBA Fly ash and bottom ash handling.

Emission unit GFUGTV - This emission unit includes all emission sources and activities at the facility that have the potential to generate fugitive particulate emissions.

Division of Air Resources
Permit Review Report

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

Emission unit GFUGTV is associated with the following emission points (EP):
00017

Process: FUG Miscellaneous fugitive sources.

Emission unit GXEMPT - This emission unit includes the following exempt sources: Emergency Diesel Generator and the Natural Gas Heater and their associated emission points.

There are two processes associated with this emission unit:

Process EGN: Emergency Generator

Process NGH: Natural Gas Heater

Emission unit GXEMPT is associated with the following emission points (EP):
00021, 00023

Process: EGN Emergency Generator

Process: NGH Natural gas heater

Emission unit G00004 - Combustion Engineering boiler, rated at 1,117 MMBtu/hr maximum heat input, which is identified as boiler #6. The boiler predominantly fires up to 100% natural gas, but may also fire natural gas with clean unadulterated wood and/or kiln dried wood (including resinated wood) up to 19% on a heat rate basis. The boiler is equipped with advanced low NOx burners, closed-coupled and staged overfire air, SNCR, and SCR to control NOx emissions, and a baghouse to control particulate emissions.

Emission unit G00004 is associated with the following emission points (EP):
00004

Process: P65 is located at Building BOILER - Combustion of 100% natural gas.

Nitrogen oxides emissions are controlled through the use of a combination of advanced low NOx firing system (ALNFS), closed-coupled overfire air and staged overfire air combustion practices in conjunction with selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR). The SNCR and SCR shall be operated at all times, except during startup and shutdown periods as specified elsewhere in this permit. Emissions of nitrogen oxides are measured by the continuous emissions monitoring system (CEMS) on emission point 00004.

Process: P75 is located at Building BOILER - Combustion of a mixture of natural gas, and biomass [unadulterated wood, including kiln-dried wood, and resinated wood (e.g. particle board)]. The quantity of biomass present in the mixture shall not exceed: 1) 19% on an hourly heat rate basis; and 2) 15 % on an annual heat input basis. The combustion of resinated wood requires the issuance of a case-specific Beneficial Use Determination under 6 NYCRR Part 360-1.15.

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017
Renewal Number: 1
09/09/2021

Nitrogen oxides emissions are controlled through the use of a combination of advanced low NOx firing system(ALNFS), closed-coupled overfire air and staged overfire air combustion practices in conjunction with selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR). The SNCR and SCR shall be operated at all times, except during startup and shutdown periods as specified elsewhere in this permit. Particulate matter emissions are controlled by a baghouse when co-firing natural gas and biomass. Emissions of nitrogen oxides are measured by the continuous emissions monitoring system (CEMS) on emission point 00004.

Title V/Major Source Status

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

This facility is major for potential emissions of oxides of nitrogen, carbon monoxide, PM-10, HAP and greenhouse gases.

Program Applicability

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

Regulatory Program	Applicability
PSD	YES
NSR (non-attainment)	YES
NESHAP (40 CFR Part 61)	NO
NESHAP (MACT - 40 CFR Part 63)	YES
NSPS	NO
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.

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

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

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

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

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017
Renewal Number: 1
09/09/2021

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
1-01-006-01	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - NATURAL GAS Boilers > 100 MBtu/Hr except Tangential
1-01-009-01	EXTERNAL COMBUSTION BOILERS - ELECTRIC GENERATION ELECTRIC UTILITY BOILER - WOOD/BARK WASTE Bark-Fired Boiler
1-05-001-06	EXTERNAL COMBUSTION BOILERS - SPACE HEATERS INDUSTRIAL SPACE HEATER Natural Gas
2-02-001-02	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - DISTILLATE OIL (DIESEL) Reciprocating
3-05-102-99	MINERAL PRODUCTS MINERAL PRODUCTS - BULK MATERIALS STORAGE BINS Other Not Classified
3-05-103-99	MINERAL PRODUCTS MINERAL PRODUCTS - BULK MATERIALS OPEN STOCKPILES Other Not Classified
3-99-999-99	MISCELLANEOUS MANUFACTURING INDUSTRIES MISCELLANEOUS INDUSTRIAL PROCESSES SEE COMMENT **

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

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

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	0.04			
000075-07-0	ACETALDEHYDE	1			
000107-02-8	ACROLEIN	2045			
007664-41-7	AMMONIA	87000			
007440-38-2	ARSENIC	2			
000071-43-2	BENZENE	18610			
007440-41-7	BERYLLIUM	0.12			
007440-43-9	CADMIUM	10			
000124-38-9	CARBON DIOXIDE	1278702000			
0NY750-00-0	CARBON DIOXIDE EQUIVALENTS	1283756000			
000630-08-0	CARBON MONOXIDE	929600			
007440-47-3	CHROMIUM	14			
007440-48-4	COBALT	0.8			
000050-00-0	FORMALDEHYDE	10047			
000110-54-3	HEXANE	17200			
007647-01-0	HYDROGEN CHLORIDE	4648			
007439-92-1	LEAD	12			
007439-96-5	MANGANESE	4			
007439-97-6	MERCURY	2			
000091-20-3	NAPHTHALENE	6			
007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS	20			
0NY210-00-0	OXIDES OF NITROGEN	307600			
0NY075-00-0	PARTICULATES	97800			
0NY075-02-5	PM 2.5	303400			
0NY075-00-5	PM-10	303400			
0NY505-00-0	POLYCYCLIC ORGANIC MATTER (POM)	0.2			
007782-49-2	SELENIUM	0.2			
007446-09-5	SULFUR DIOXIDE	78000			
000108-88-3	TOLUENE	40			
0NY100-00-0	TOTAL HAP	64080			
0NY998-00-0	VOC	98000			
001330-20-7	XYLENE, M, O & P MIXT.	0.4			

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.

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

All permittees granted a Title V facility permit shall be covered under the protection of a permit shield, except as provided under 6 NYCRR Subpart 201-6. Compliance with the 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

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

application or revision, determines in writing that other requirements specifically identified are not applicable to the major stationary source, and the permit includes the determination or a concise summary thereof. Nothing herein shall preclude the Department from revising or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

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

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

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

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

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

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

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

Item K: Permit Exclusion - ECL 19-0305

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

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

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

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6 NYCRR 201-1.5

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

- (a) The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) An emergency occurred and that the facility owner or operator can identify the cause(s) of the emergency;
 - (2) The equipment at the permitted facility causing the emergency was at the time being properly operated and maintained;
 - (3) During the period of the emergency the facility owner or operator took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - (4) The facility owner or operator notified the Department within two working days after the event occurred. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.
- (b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017
Renewal Number: 1
09/09/2021

(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 Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
FACILITY	ECL 19-0301	86	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 63-A	31	Subpart A - General Provisions apply to all NESHAP affected sources
G-00004	40CFR 63-DDDDD	47	Boilers and Process Heaters Major Source NESHAP rule (current version)
FACILITY	40CFR 63-ZZZZ	32	Reciprocating Internal Combustion Engine (RICE) NESHAP
FACILITY	40CFR 68	18	Chemical accident prevention provisions
G-00004	40CFR 72-A.6 (a) (1)	48	The Title IV Phase 1 units are at Dunkirk, Greenidge, Milliken, Northport and Port Jefferson stations only.
G-00004	40CFR 75-B.10 (a)	49	Continuous emission monitoring - general operating requirements
G-00004	40CFR 75-B.10 (b)	50	Continuous emission monitoring - general operating requirements
G-00004	40CFR 75-B.10 (c)	51	Continuous emission monitoring - general operating requirements

**Division of Air Resources
Permit Review Report**

**Permit ID: 8-5736-00004/00017
Renewal Number: 1
09/09/2021**

G-00004	40CFR 75-B.10 (d)	52	operating requirements Continuous emission monitoring - general operating requirements
G-00004	40CFR 75-B.13 (a)	53	Continuous emission monitoring - specific provisions for monitoring CO2 emissions
G-00004	40CFR 75-C.20	54	CEM operation and maintenance requirements - certification and recertification procedures
G-00004	40CFR 75-G.64 (a)	55	CEM reporting requirements - quarterly reports
FACILITY	40CFR 82-F	19	Protection of Stratospheric Ozone - recycling and emissions reduction
G-00004	40CFR 97-AAAAA.406	56	Transport Rule (TR) NOx Annual Trading Program Standard Requirements
G-00004	40CFR 97-CCCCC.606	57	Transport Rule (TR) SO2 Group 1 Trading Program Standard Requirements
FACILITY	40CFR 97-GGGGG.1006	33	CSAPR NOx Ozone Season Group 3 Trading Program Standard Requirements
FACILITY	40CFR 98	34	Mandatory Greenhouse Gas Reporting
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	87	Unavoidable noncompliance and violations
FACILITY	6NYCRR 201-1.7	11	Recycling and Salvage
FACILITY	6NYCRR 201-1.8	12	Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2 (a)	13	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3 (a)	14	Trivial Activities - proof of eligibility
G-00004/-/P65	6NYCRR 201-5.4	95	Permit Modifications
G-00004/-/P75	6NYCRR 201-5.4	96	Permit Modifications
FACILITY	6NYCRR 201-6	20, 35, 36	Title V Permits and the Associated Permit Conditions
G-00004/-/P65	6NYCRR 201-6	58	Title V Permits and the Associated Permit Conditions
G-00004/-/P75	6NYCRR 201-6	64	Title V Permits and

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

G-00005	6NYCRR 201-6	77	the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4 (a) (4)	15	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4 (a) (7)	2	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4 (a) (8)	16	General Conditions - Fees
FACILITY	6NYCRR 201-6.4 (c)	3	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4 (c) (2)	4	Recordkeeping and Reporting of Compliance Monitoring Records of Monitoring, Sampling and Measurement
FACILITY	6NYCRR 201-6.4 (c) (3) (ii)	5	Reporting Requirements - Deviations and Noncompliance
FACILITY	6NYCRR 201-6.4 (d) (4)	21	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4 (e)	6	Compliance Certification
FACILITY	6NYCRR 201-6.4 (f)	22	Operational Flexibility
FACILITY	6NYCRR 201-7	23	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1.1	17	Required emissions tests.
FACILITY	6NYCRR 202-2.1	7	Emission Statements - Applicability
FACILITY	6NYCRR 202-2.5	8	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	88	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 211.2	24	General Prohibitions - visible emissions limited.
G-00005	6NYCRR 212-1.6 (a)	78	Limiting of Opacity
FACILITY	6NYCRR 215.2	9	Open Fires - Prohibitions
FACILITY	6NYCRR 225-1.2 (d)	25	Sulfur-in-Fuel Limitation - Distillate Oil
FACILITY	6NYCRR 225-1.5 (c)	26	Fuel Monitoring
G-00004/00004/P65	6NYCRR 227-1.4 (a)	75	Opacity Standard
G-00004/00004/P75	6NYCRR 227-1.4 (a)	76	Opacity Standard
G-00004	6NYCRR 231-5.4	39	Lowest achievable emission rate (LAER)
G-00004/-/P65	6NYCRR 231-5.4	59	Lowest achievable emission rate (LAER)
G-00004/-/P75	6NYCRR 231-5.4	66, 67	Lowest achievable emission rate (LAER)
FACILITY	6NYCRR 231-5.5	27	Emission offset requirements
G-00005	6NYCRR 231-7	79	New Major Facilities and Mod to Existing Non-major Facilities in Attainment Areas

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

G-FABAH	6NYCRR 231-7	80	(PSD) New Major Facilities and Mod to Existing Non-major Facilities in Attainment Areas (PSD)
G-FUGTV	6NYCRR 231-7	81	New Major Facilities and Mod to Existing Non-major Facilities in Attainment Areas (PSD)
G-XEMPT	6NYCRR 231-7	82, 83	New Major Facilities and Mod to Existing Non-major Facilities in Attainment Areas (PSD)
G-XEMPT/-/EGN	6NYCRR 231-7	84	New Major Facilities and Mod to Existing Non-major Facilities in Attainment Areas (PSD)
G-XEMPT/-/NGH	6NYCRR 231-7	85	New Major Facilities and Mod to Existing Non-major Facilities in Attainment Areas (PSD)
FACILITY	6NYCRR 231-7.5	28, 29, 30	Permit content and terms of issuance
G-00004	6NYCRR 231-7.5	40, 41, 42, 43, 44	Permit content and terms of issuance
G-00004/-/P65	6NYCRR 231-7.5	60, 61, 62	Permit content and terms of issuance
G-00004/-/P75	6NYCRR 231-7.5	68, 69, 70	Permit content and terms of issuance
G-00004	6NYCRR 231-7.6	45, 46	Best available control technology (BACT)
G-00004/-/P65	6NYCRR 231-7.6	63	Best available control technology (BACT)
G-00004/-/P75	6NYCRR 231-7.6	71, 72, 73, 74	Best available control technology (BACT)
FACILITY	6NYCRR 242-1.4 (b)	89	CO2 Budget Trading Program - Limited exemption - units w/ electrical output to the grid restricted by permit conditions
FACILITY	6NYCRR 242-1.5	90, 91, 92	CO2 Budget Trading Program - Standard requirements
FACILITY	6NYCRR 242-4	93	CO2 Budget Trading Program - Compliance certification
FACILITY	6NYCRR 242-8.5	94	CO2 Budget Trading Program - Recordkeeping and reporting

Applicability Discussion:

Mandatory Requirements: The following facility-wide regulations are included in all Title V permits:

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

ECL 19-0301

This section of the Environmental Conservation Law establishes the powers and duties assigned to the Department with regard to administering the air pollution control program for New York State.

6 NYCRR 200.6

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

6 NYCRR 200.7

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

6 NYCRR 201-1.4

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

6 NYCRR 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6 NYCRR 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6 NYCRR 201-3.2 (a)

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

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.

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

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 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.

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

6 NYCRR 202-2.1

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

6 NYCRR 202-2.5

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

6 NYCRR 211.2

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

6 NYCRR 215.2

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

40 CFR Part 68

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

40 CFR Part 82, Subpart F

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

40 CFR 72.6 (a) (1)

This section references a table containing the list of utilities affected by Phase I of Title IV of the Clean Air Act.

40 CFR 75.10 (a)

This section specifies the primary measurement requirements for opacity, and all SO₂, NO_x, and CO₂ emissions form the facility. It details how often measurements are to be made and the general type of systems to be used.

40 CFR 75.10 (b)

This section requires the facility to meet the equipment, installation, and performance specifications in appendix A ; and the quality assurance and quality control procedures of appendix B to this part.

Division of Air Resources
Permit Review Report

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

40 CFR 75.10 (c)

This section requires heat input measurements, for every hour or part of an hour any fuel is combusted, following the procedures in appendix F to this part.

40 CFR 75.10 (d)

This section specifies the operating requirements of the monitoring systems. It requires the facility to ensure that all monitoring systems in operation and functioning as specified, at all times fuel is being burned, except as provided in § 75.11(e) and during other specified periods.

40 CFR 75.13 (a)

This section specifies requirements in addition to the general monitoring requirements for the measurement of CO₂.

40 CFR 75.20

This section requires the facility to ensure that each emission or opacity monitoring system, including automated data acquisition and handling systems, meet the initial certification requirements of this section. It requires that all applicable initial certification tests are completed by the deadlines specified in § 75.4 and prior to use in the Acid Rain Program.

40 CFR 75.64 (a)

This section requires the electronic submission of specific information. It details what information must be reported and when.

40 CFR 97.1006

40 CFR Part 97 Subpart GGGGG the NO_x Ozone Season Cross State Air Pollution Rule (CSAPR) requires additional NO_x reductions from power plants located in twelve (12) states beginning with the 2021 ozone season. It is designed to reduce NO_x 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 NO_x Ozone Trading Programs. The final rule does not include ozone season NO_x emission limits for non-EGUs.

40 CFR 97.406

This condition provides the general requirements for implementing EPA's Transport Rule (TR) 40 CFR Part 97, Subpart AAAAA; intended to reduce the interstate transport of fine particulate matter and ozone. This particular condition requires facilities to measure and report their emissions of Nitrogen Oxide (NO_x) and to hold TR annual NO_x 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.

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

40 CFR 97.606

This condition provides the general requirements for implementing EPA's 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 A

The General Provisions in 40CFR63, Subpart A apply to facilities subject to other National Emission Standards for Hazardous Air Pollutants for Source Categories (NESHAP) regulations in 40 CFR 63. These rules are also known as MACT rules since they are based on attaining Maximum Achievable Control Technology. Each MACT rule has a table or section that describe which portions of the General Provisions apply to facilities covered by that particular rule and which portions are overridden or do not apply. Note that NESHAP regulations found in 40CFR61 do **not** trigger the general provisions of 40CFR63.

40 CFR Part 63, Subpart DDDDD

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

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.

40 CFR Part 98

40 CFR Part 98 sets forth the reporting requirements for facilities that are subject to the mandatory reporting of greenhouse gases.

6 NYCRR 201-5.4

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

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 211.1

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

6 NYCRR 212-1.6 (a)

This provisions requires that the facility owner or operator not cause or allow emissions having an average opacity during any six consecutive minutes of 20 percent or greater from any process emission source or emission point, except for the emission of uncombined water.

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 225-1.5 (c)

This subdivision requires specific measurements of the fuel fired at a facility that employs a CEM.

6 NYCRR 227-1.4 (a)

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

6 NYCRR 231-5.4

This section outlines what LAER is and how it is determined.

6 NYCRR 231-5.5

This section states what the emission offset requirements are for a facility subject to this

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

Subpart.

6 NYCRR 231-7.5

This section states what an applicant's permit must and will contain for conditions.

6 NYCRR 231-7.6

This section outlines what BACT is and how it is determined.

6 NYCRR 242-1.4 (b)

This regulation requires that any unit that, on or before December 1, 2008, applies for a enforceable permit condition restricting the supply of the unit's annual electrical output to the electric grid to less than or equal to 10 percent of the annual gross generation of the unit, and that from and after January 1, 2009 complies with the 10 percent restriction and the provisions in Paragraph (b)(3) of this Section, shall be exempt from the requirements of 6 NYCRR Part 242, except for the provisions of this Section, Sections 242-1.2, 242-1.3, and 242-1.6 of this Part

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 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 231-7

This Subpart applies to new major facilities and modifications to existing non-major

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

facilities in attainment areas (prevention of significant deterioration (PSD)).

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 GREENIDGE STATION:

Location Facility/EU/EP/Process/ES	Cond No.	Type of Monitoring
G-00004	47	monitoring of process or control device parameters as surrogate
FACILITY	32	record keeping/maintenance procedures
G-00004	48	record keeping/maintenance procedures
G-00004	49	record keeping/maintenance procedures
G-00004	50	record keeping/maintenance procedures
G-00004	51	record keeping/maintenance procedures
G-00004	52	record keeping/maintenance procedures
G-00004	53	record keeping/maintenance procedures
G-00004	54	record keeping/maintenance procedures
G-00004	55	record keeping/maintenance procedures
G-00004	56	record keeping/maintenance procedures
G-00004	57	record keeping/maintenance procedures
FACILITY	33	record keeping/maintenance procedures
G-00004/-/P65	95	continuous emission monitoring (cem)
G-00004/-/P75	96	continuous emission monitoring (cem)
G-00004/-/P65	58	continuous emission monitoring (cem)
G-00004/-/P75	64	record keeping/maintenance procedures
G-00005	77	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
G-00004	37	continuous emission monitoring (cem)
G-00004	38	continuous emission monitoring (cem)
G-00004/-/P75	65	intermittent emission testing
FACILITY	7	record keeping/maintenance procedures
G-00005	78	monitoring of process or control device parameters as surrogate
FACILITY	25	work practice involving specific operations
FACILITY	26	record keeping/maintenance procedures
G-00004/00004/P65	75	monitoring of process or control device parameters as surrogate
G-00004/00004/P75	76	monitoring of process or control device parameters as surrogate
G-00004	39	continuous emission monitoring (cem)
G-00004/-/P65	59	continuous emission monitoring (cem)
G-00004/-/P75	66	continuous emission monitoring (cem)
G-00004/-/P75	67	continuous emission monitoring (cem)
FACILITY	27	record keeping/maintenance procedures
G-00005	79	record keeping/maintenance procedures
G-FABAH	80	record keeping/maintenance procedures
G-FUGTV	81	record keeping/maintenance procedures

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

G-XEMPT	82	record keeping/maintenance procedures
G-XEMPT	83	record keeping/maintenance procedures
G-XEMPT/-/EGN	84	record keeping/maintenance procedures
G-XEMPT/-/NGH	85	record keeping/maintenance procedures
FACILITY	28	monitoring of process or control device parameters as surrogate
FACILITY	29	monitoring of process or control device parameters as surrogate
FACILITY	30	monitoring of process or control device parameters as surrogate
G-00004	40	continuous emission monitoring (cem)
G-00004	41	continuous emission monitoring (cem)
G-00004	42	continuous emission monitoring (cem)
G-00004	43	record keeping/maintenance procedures
G-00004	44	continuous emission monitoring (cem)
G-00004/-/P65	60	intermittent emission testing
G-00004/-/P65	61	intermittent emission testing
G-00004/-/P65	62	intermittent emission testing
G-00004/-/P75	68	intermittent emission testing
G-00004/-/P75	69	intermittent emission testing
G-00004/-/P75	70	intermittent emission testing
G-00004	45	continuous emission monitoring (cem)
G-00004	46	continuous emission monitoring (cem)
G-00004/-/P65	63	continuous emission monitoring (cem)
G-00004/-/P75	71	record keeping/maintenance procedures
G-00004/-/P75	72	monitoring of process or control device parameters as surrogate
G-00004/-/P75	73	continuous emission monitoring (cem)
G-00004/-/P75	74	continuous emission monitoring (cem)
FACILITY	89	record keeping/maintenance procedures
FACILITY	91	record keeping/maintenance procedures
FACILITY	92	record keeping/maintenance procedures
FACILITY	93	record keeping/maintenance procedures
FACILITY	94	record keeping/maintenance procedures

Basis for Monitoring

The permit issued in 2016 is the product of extensive collaborative discussions between the Department, USEPA Region II, and the applicant. The 2021 renewal process is intended to extend permit limitations with minor changes.

Boiler #6 will utilize continuous emission monitors (CEMs) to monitor actual emissions of NOx, GHG, CO, NH3 and SO2 to show compliance with permit limits and emissions caps.

Boiler #6 is permitted to operate under 2 different processes, Process P65 operating fully on natural gas, and Process P75 , operating on natural gas with up to 19% biomass. From 2016-2021 the facility has not implemented the equipment necessary to burn biomass and operate process P75. Many conditions and initial performance testing for this unused process remain in the permit.

It should be noted that this permit contains NOx limits considered LAER, as required by 6 NYCRR Part 231-5, that are more stringent than the NOx RACT requirements of 6 NYCRR Part 227-2. That being the case, only the most stringent NOx limitations (LAER) are included in the permit to avoid conflicting NOx emission limits for Boiler #6.

The permit also establishes annual emission limitations as LAER for NOx and as BACT for CO, PM, PM-2.5, PM-10 and GHG. Each of them are maximum annual limits on a rolling 12-month basis. There are also emission caps for VOC and SO2 to remain below the major source applicability thresholds of

Division of Air Resources
Permit Review Report

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

nonattainment new source review and PSD respectively. These two caps are also annual maximums on a rolling 12-month basis.

The fly ash and bottom ash handling, storage and disposal systems (emission unit G-FABAH) have BACT limits established for PM, PM-2.5 and PM-10. Compliance with the opacity limit of 20% and compliance with the specified operating limitations and work practices shall be sufficient for demonstration of compliance with the BACT emission limits. Visible emissions testing (EPA Reference Method 9) of these systems is required.

The biomass handling, storage and processing systems (emission unit G-00005) have BACT limits established for PM, PM-2.5 and PM-10. Compliance with the opacity limit of 20% and compliance with the specified operating limitations and work practices shall be sufficient for demonstration of compliance with the BACT emission limits. Visible emissions testing (EPA Reference Method 9) of these systems is required.

The emergency generator, emergency fire pump, and natural gas heater (emission unit G-XEMPT) have an established LAER limit for NO_x, and BACT limits for CO, PM, PM-2.5, PM-10 and GHG. Compliance with the opacity limit of 20% and compliance with the specified operating limitations and work practices shall be sufficient for demonstration of compliance with the LAER and BACT emission limits. Visible emissions testing (EPA Reference Method 9) of these emission sources shall be conducted on an annual basis. The emergency generator and emergency fire pump are limited to 500 hours/year operation which is monitored by a non-resettable hour meter. They are also limited to combustion of only ultra-low sulfur diesel (ULSD) fuel.

Lastly, the facility fugitive particulate emission sources (emission unit G-FUGTV) contain BACT annual emission limits, based on a 12-month rolling total, for PM, PM-2.5 and PM-10. The facility must track and calculate annual emissions from the facility fugitive particulate emission sources. In order to reduce fugitive emissions the facility must follow prescribed operating and work practice standards and conduct daily visible emission checks and weekly inspections of the ash and biomass handling and processing buildings to identify any potential leaks.

Changes made from the 2016 issued permit, noted as Renewal 0, to this permit, noted Renewal 1 include the following:

Removed diesel fire pump, process, emission point, emission source, and 1 compliance certification.
Removed diesel fire pump descriptions.

Ren 0 condition #17, Part 201-6.4(f)(6) replaced with mandatory condition at Part 201-6.4(f).

Ren 0 condition #25, Part 225-1.2(h) replaced with 225-1.2(d) (rule changed) wording of library condition changed, no change in requirement.

Ren 0 condition #26, Part 225-1.5(c) wording of library condition changed, no change in requirement.

Ren 0 condition # 27, Part 230 requirement removed, the facility does not have a gasoline dispensing tank and is not a gasoline dispensing site.

Ren 0 condition #38, annual VOC testing while firing natural gas. Condition changed to show compliance with the cap through monthly emissions calculation utilizing continuous flow data and performance testing results. Annual VOC performance testing requirement moved to Process P75, burning gas and biomass.

**Division of Air Resources
Permit Review Report**

Permit ID: 8-5736-00004/00017

Renewal Number: 1

09/09/2021

Ren 0 condition #39 removed, no longer applicable dealt with SCR initial startup period (commissioning).

Ren 0 condition #40 removed, Part 227-1 was rewritten. Two appropriate conditions for Part 227-1.4 opacity added, an annual Method 9 for process P65 and compliance with use of COM for process P75.

Ren 0 condition #43, a citation under 231-5.4 for NO_x control during the commissioning phase of the converted gas boiler, was satisfied in 2016 and removed from this permit, Ren 1.

Ren 0 condition #44, a citation under 231-7.5 for PM-10. Condition contained annual limit and possibility of modifying the limit after startup and testing. Greenidge complied, condition will be edited down to just the initial limit of 151.7 tpy PM-10. Ongoing compliance through use of stack test data and continuous flow meter.

Ren 0 condition #45, a citation under 231-7.5 for PM-2.5. Condition contained annual limit and possibility of modifying the limit after startup and testing. Greenidge complied, condition will be edited down to just the initial limit of 151.7 tpy PM-2.5. Ongoing compliance through use of stack test data and continuous flow meter.

Ren 0 condition #47 edited to remove completed one-time items.

Ren 0 condition #49 required annual PM testing for BACT limit while firing natural gas. This emission level is impossible while firing just gas, verified by 5 years of stack testing. Condition removed for natural gas operation and reproduced as an annual testing requirement when co-firing biomass, Process P75.

Ren 0 condition #61, 40CFR97.506 (BBBBB) no longer appropriate as the ozone season trading program has changed over time. Condition replaced with GGGGG.97.5B.

Ren 0 condition #65, a citation under 231-7.5 for PM-2.5 for Process P65 (natural gas only). Condition required initial stack test. Compliance was achieved and demonstrated, condition modified to remove the one time testing requirement and request additional testing. The demonstration of ongoing compliance through the use of continuous flow meter portion of the condition remains.

Ren 0 condition #66, a citation under 231-7.5 for PM-10 for Process P65. Condition required initial stack test. Compliance was achieved and demonstrated, condition modified to remove the one time testing requirement and request additional testing. The demonstration of ongoing compliance through the use of continuous flow meter portion of the condition remains.

Ren 0 condition #67, a citation under 231-7.5 for Particulates. Condition required initial stack test. Compliance was achieved and demonstrated, condition modified to require testing once per permit term, the demonstration of ongoing compliance through the use of continuous flow meter portion of the condition remains.