



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

**Permit ID: 2-6102-00116/00021**  
**Renewal Number: 2**  
**06/24/2013**

**Facility Identification Data**

Name: GOWANUS GENERATING STATION  
Address: 29TH ST & 2ND AVE  
BROOKLYN, NY 11232

**Owner/Firm**

Name: ASTORIA GENERATING COMPANY LP  
Address: 18-01 20TH AVE  
LONG ISLAND CITY, NY 11105-4271, USA  
Owner Classification: Corporation/Partnership

**Permit Contacts**

Division of Environmental Permits:  
Name: ELIZABETH A CLARKE  
Address: NYSDEC  
47-40 21ST ST  
LONG ISLAND CITY, NY 11101-5407  
Phone: 7184824997

Division of Air Resources:  
Name: CICYLY T NIRAPPEL  
Address: HUNTERS POINT PLAZA  
LONG ISLAND CITY, NY 11101  
Phone: 7184824944

Air Permitting Facility Owner Contact:  
Name: DANIEL LACHMAN  
Address: ASTORIA GENERATING CO GOWANUS STATION  
420 2ND AVE  
BROOKLYN, NY 11232  
Phone: 7188323926

**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**

GOWANUS GENERATING STATION is located in the town of BROOKLYN in the county of KINGS.



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

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.)

<b>Criteria Pollutant</b>	<b>Attainment Status</b>
-----	-----
-----	-----
Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10µ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	SEVERE 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:**

GGs is an existing electric power generating plant. The existing facility operates thirty two (32) combustion turbine/electric generating sets located on four barges. Each existing combustion turbine is rated at 299 mmbtu/hr. Sixteen (16) of the turbines combust distillate oil only; the other 16 units have dual fuel capability (oil and gas). AGC is permitted to install and operate one (1) new LMS 100 combustion turbine/generator set at the GGS facility that will fire natural gas and ULSD. Emission Unit G-00001: combustion turbines and starter diesels - one (1) new LMS100 combustion turbine, emission point 00100 and thirty two (32) existing combustion turbines and starter diesels, emission points GT11 - GT18, GT21, GT31 - GT38 and GT41 - GT48.

**Permit Structure and Description of Operations**

The Title V permit for GOWANUS GENERATING STATION

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

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



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

**Permit ID: 2-6102-00116/00021**  
**Renewal Number: 2**  
**06/24/2013**

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

Emission unit G00001 - Emission Point 00100: One (1) LMS100 turbine rated at 885.8 MMBTU/hr firing natural gas and 839.2 MMBTU/hr firing ULSD.

The LMS100 will be equipped with air pollution control equipment including an SCR and a CO oxidation catalyst.

Emission Sources 0GT11 - 0GT18 and 0GT41 - 0GT 48: Sixteen (16) combustion turbines each rated at 299 MMBTU/hr. Each combustion turbine has the capability to burn distillate oil and has a diesel starter engine. Emission Points 0GT21 - 0GT28 and 0GT31 - 0GT38: Sixteen (16) combustion turbines each rated at 299 MMBTU/hr. Each combustion turbine has the capability to burn natural gas and distillate oil and has a diesel starter engine.

Emission unit G00001 is associated with the following emission points (EP): 00100, 0GT11, 0GT12, 0GT13, 0GT14, 0GT15, 0GT16, 0GT17, 0GT18, 0GT21, 0GT22, 0GT23, 0GT24, 0GT25, 0GT26, 0GT27, 0GT28, 0GT31, 0GT32, 0GT33, 0GT34, 0GT35, 0GT36, 0GT37, 0GT38, 0GT41, 0GT42, 0GT43, 0GT44, 0GT45, 0GT46, 0GT47, 0GT48, 0SD11, 0SD12, 0SD13, 0SD14, 0SD15, 0SD16, 0SD17, 0SD18, 0SD21, 0SD22, 0SD23, 0SD24, 0SD25, 0SD26, 0SD27, 0SD28, 0SD31, 0SD32, 0SD33, 0SD34, 0SD35, 0SD36, 0SD37, 0SD38, 0SD41, 0SD42, 0SD43, 0SD44, 0SD45, 0SD46, 0SD47, 0SD48

Process: D01 is located at Building PIER 1 - This process includes: 16 combustion turbines rated at 299 MMBtu/hr each. This process covers the combustion of distillate oil in these turbines.

Process: GAS is located at LMS100 POWER BLOCK, Building LMS100 - One (1) LMS100 Combustion Turbine/ Electric Generator rated at 885.8 MMBTU/hr firing natural gas. This process covers the combustion of Natural Gas in this turbine.

Process: OGT This process include 16 turbines of 299mm btu/hr burning natural gas or oil.

Process: OIL is located at LMS100 POWER BLOCK, Building LMS100 - One (1) LMS100 Combustion Turbine/ Electric Generator rated at 839.2 MMBTU/hr firing ULSD. This process covers the combustion of ultr low sulfur diesel(ULSD) in this turbine.

Process: SEP is located at Building PIER 1 - This process includes 32 diesel starter engines rated at 600hp. Each 299mmbtu/hr turbine has a starter engine.

**Title V/Major Source Status**

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

Facility potential of NOx, CO, VOC, PM and SO2 are greater than the major source size thresholds.

**Program Applicability**



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

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

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

**NOTES:**

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

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

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

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

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



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

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

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

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

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

**Compliance Status**

Facility is in compliance with all requirements.

**SIC Codes**

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

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

**SIC Code**

**Description**

4911  
4931  
5171

ELECTRIC SERVICES  
ELEC & OTHER SERVICES COMBINED  
PETROLEUM BULK STATIONS & TERMINALS

**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**

2-01-001-01

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

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



**Permit ID: 2-6102-00116/00021**  
**Renewal Number: 2**  
**06/24/2013**

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
2-01-002-01	INTERNAL COMBUSTION ENGINES - ELECTRIC GENERATION ELECTRIC UTILITY INTERNAL COMBUSTION ENGINE - NATURAL GAS Turbine

**Facility Emissions Summary**

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

Cas No.	Contaminant Name	PTE lbs/yr	Range
000106-99-0	1,3-BUTADIENE		> 0 but < 10 tpy
000075-07-0	ACETALDEHYDE		> 0 but < 10 tpy
000107-02-8	ACROLEIN		> 0 but < 10 tpy
007664-41-7	AMMONIA		>= 10 tpy but < 25 tpy
007440-38-2	ARSENIC		> 0 but < 10 tpy
000071-43-2	BENZENE		> 0 but < 10 tpy
007440-41-7	BERYLLIUM		> 0 but < 10 tpy
007440-43-9	CADMIUM		> 0 but < 10 tpy
000630-08-0	CARBON MONOXIDE		>= 250 tpy but < 75,000 tpy
016065-83-1	CHROMIUM (III)		> 0 but < 10 tpy
000100-41-4	ETHYLBENZENE		> 0 but < 10 tpy
000050-00-0	FORMALDEHYDE		>= 10 tpy
0NY100-00-0	HAP		>= 10 tpy but < 25 tpy
007439-92-1	LEAD		> 0 but < 10 tpy
007439-96-5	MANGANESE		>= 10 tpy
007439-97-6	MERCURY		> 0 but < 10 tpy



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

000091-20-3	NAPHTHALENE	> 0 but < 10 tpy
007440-02-0	NICKEL METAL AND INSOLUBLE COMPOUNDS	> 0 but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN	>= 250 tpy but < 75,000 tpy
0NY075-00-0	PARTICULATES	>= 250 tpy but < 75,000 tpy
0NY075-02-5	PM 2.5	>= 250 tpy but < 75,000 tpy
0NY075-00-5	PM-10	>= 250 tpy but < 75,000 tpy
130498-29-2	POLYCYCLIC AROMATIC HYDROCARBONS	> 0 but < 10 tpy
007782-49-2	SELENIUM	> 0 but < 10 tpy
007446-09-5	SULFUR DIOXIDE	>= 250 tpy but < 75,000 tpy
000108-88-3	TOLUENE	> 0 but < 10 tpy
0NY998-00-0	VOC	>= 50 tpy but < 100 tpy
001330-20-7	XYLENE, M, O & P MIXT.	> 0 but < 10 tpy

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

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

An emergency constitutes an affirmative defense to an action brought for noncompliance with emissions limitations or permit conditions for all facilities in New York State.

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

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

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

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

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

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

**Item C: Timely Application for the Renewal of Title V Permits -6 NYCRR Part 201-6.3(a)(4)**



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

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

**Item D: Certification by a Responsible Official - 6 NYCRR Part 201-6.3(d)(12)**

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

**Item E: Requirement to Comply With All Conditions - 6 NYCRR Part 201-6.5(a)(2)**

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

**Item F: Permit Revocation, Modification, Reopening, Reissuance or Termination, and Associated Information Submission Requirements - 6 NYCRR Part 201-6.5(a)(3)**

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

**Item G: Cessation or Reduction of Permitted Activity Not a Defense - 6 NYCRR 201-6.5(a)(5)**

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

**Item H: Property Rights - 6 NYCRR 201-6.5(a)(6)**

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

**Item I: Severability - 6 NYCRR Part 201-6.5(a)(9)**

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

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

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





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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

or revoking the permit pursuant to 6 NYCRR Part 621 or from exercising its summary abatement authority. Nothing in this permit shall alter or affect the following:

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

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

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

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

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

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

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

The issuance of this permit by the Department and the receipt thereof by the Applicant does not and shall not be construed as barring, diminishing, adjudicating or in any way

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



**Permit ID: 2-6102-00116/00021**  
**Renewal Number: 2**  
**06/24/2013**

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

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

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

**NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS**

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

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

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

**Regulatory Analysis**

Location Facility/EU/EP/Process/ES	Regulation	Condition	Short Description
-----			
-- FACILITY	ECL 19-0301	121	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 52-A.21	25, 27, 28, 29	Prevention of Significant Deterioration
G-00001/-/OGT	40CFR 52-A.21	63	Prevention of Significant Deterioration



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

G-00001/00100	40CFR 60-A.12	77	General provisions - Circumvention
G-00001/00100	40CFR 60-A.13	78	General provisions - Monitoring requirements
G-00001/00100	40CFR 60-A.14	79	General provisions - Modification
G-00001/00100	40CFR 60-A.15	80	General provisions - Reconstruction
G-00001/00100	40CFR 60-A.4	71	General provisions - Address
G-00001/00100	40CFR 60-A.7(a)	72	Notification and Recordkeeping
G-00001/00100	40CFR 60-A.7(b)	73	Notification and Recordkeeping
G-00001/00100	40CFR 60-A.7(c)	74	Notification and Recordkeeping
G-00001/00100	40CFR 60-A.8(a)	75	Performance Tests
G-00001/00100	40CFR 60-A.9	76	General provisions - Availability of information
G-00001/00100/GAS	40CFR 60-KKKK.4325	92	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
G-00001/00100/OIL	40CFR 60-KKKK.4325	108	Stationary Combustion Turbine NSPS - NOx emission limits when firing multiple fuels
G-00001/00100	40CFR 60-KKKK.4330	81	Stationary Combustion Turbine NSPS - SO2 emission limits
G-00001/00100	40CFR 60-KKKK.4345	82	Stationary Combustion Turbine NSPS - CEM system equipment requirements
G-00001/00100	40CFR 60-KKKK.4350	83	Stationary Combustion Turbine NSPS - identifying excess emissions using CEM equipment
G-00001/00100	40CFR 60-KKKK.4355	84	Stationary Combustion Turbine NSPS - establishing and documenting a proper parameter monitoring plan
G-00001/00100	40CFR 60-KKKK.4360	85	Stationary Combustion Turbine NSPS - determining total sulfur content of a turbine's combustion fuel
G-00001/00100	40CFR 60-KKKK.4370	86	Stationary Combustion Turbine NSPS - determining fuel sulfur content
G-00001/00100	40CFR 60-KKKK.4375	87	Stationary Combustion Turbine NSPS - report requirement for excess emissions and monitor downtime
G-00001/00100	40CFR 60-KKKK.4400	88	Stationary Combustion Turbine NSPS - NOx



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

G-00001/00100	40CFR 60-KKKK.4405	89	performance test requirements
			Stationary Combustion Turbine NSPS - performance test requirement for NOx diluent CEMs
G-00001/00100	40CFR 60-KKKK.4415	90	Stationary Combustion Turbine NSPS - conducting performance tests for sulfur
FACILITY	40CFR 68	20	Chemical accident prevention provisions
G-00001/00100	40CFR 72	91	Permits regulation
FACILITY	40CFR 82-F	21	Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 200.7	10	Maintenance of equipment.
FACILITY	6NYCRR 201-1.4	122, 123	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
FACILITY	6NYCRR 201-6	22, 54, 55	Title V Permits and the Associated Permit Conditions
G-00001	6NYCRR 201-6	57, 58	Title V Permits and the Associated Permit Conditions
G-00001/-/SEP	6NYCRR 201-6	67	Title V Permits and the Associated Permit Conditions
G-00001/00100/GAS/LMS01	6NYCRR 201-6	93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107	Title V Permits and the Associated Permit Conditions
G-00001/00100/OIL/LMS01	6NYCRR 201-6	109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.5(a)(4)	15	General conditions
FACILITY	6NYCRR 201-6.5(a)(7)	2	General conditions
FACILITY	6NYCRR 201-6.5(a)(8)	16	Fees
FACILITY	6NYCRR 201-6.5(c)	3	General conditions
			Permit conditions for Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.5(c)(2)	4	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring

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



**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

FACILITY	6NYCRR 201-6.5 (c) (3) (ii)	5	Permit conditions for Recordkeeping and Reporting of
FACILITY	6NYCRR 201-6.5 (d) (5)	17	Compliance Monitoring
FACILITY	6NYCRR 201-6.5 (e)	6	Compliance schedules
FACILITY	6NYCRR 201-6.5 (f) (6)	18	Compliance Certification
FACILITY	6NYCRR 201-7	23, 24, 25, 26, 27, 28, 29, 56	Off Permit Changes
G-00001/-/OGT	6NYCRR 201-7	63	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-1.1	19	Federally Enforceable Emissions Caps
FACILITY	6NYCRR 202-2.1	7	Required emissions tests.
FACILITY	6NYCRR 202-2.5	8	Emission Statements - Applicability
FACILITY	6NYCRR 207	30	Emission Statements - record keeping requirements.
FACILITY	6NYCRR 211.1	31	Control Measures for an Air Pollution Episode
FACILITY	6NYCRR 211.2	124	General Prohibitions - air pollution prohibited
FACILITY	6NYCRR 215.2	9	General Prohibitions - visible emissions limited.
FACILITY	6NYCRR 225.7 (a)	32	Open Fires - Prohibitions
G-00001	6NYCRR 225-1.7 (c)	59	Reports, Sampling and Analysis
G-00001	6NYCRR 225-1.7 (e)	60	Emission and fuel monitoring.
G-00001/-/D01	6NYCRR 227.2 (b) (1)	62	Emission and fuel monitoring.
G-00001/-/OGT	6NYCRR 227.2 (b) (1)	65	Particulate emissions.
G-00001/-/OIL/LMS01	6NYCRR 227.2 (b) (1)	66	Particulate emissions.
G-00001/-/SEP	6NYCRR 227.2 (b) (1)	69	Particulate emissions.
G-00001/-/D01	6NYCRR 227-1.3 (a)	61	Smoke Emission Limitations.
G-00001/-/OGT	6NYCRR 227-1.3 (a)	64	Smoke Emission Limitations.
G-00001/-/SEP	6NYCRR 227-1.3 (a)	68	Smoke Emission Limitations.
G-00001/00100	6NYCRR 227-1.3 (a)	70	Smoke Emission Limitations.
FACILITY	6NYCRR 227-2.5 (b)	125	System averaging plan.
FACILITY	6NYCRR 227-2.6	33, 34	Testing, monitoring, and reporting requirements
FACILITY	6NYCRR 231-2	26	New Source Review in Nonattainment Areas and Ozone Transport Region
G-00001/-/OGT	6NYCRR 231-2	63	New Source Review in Nonattainment Areas and Ozone Transport

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



**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

FACILITY	6NYCRR 231-2.2	23, 24	Region
FACILITY	6NYCRR 242-1.5	126, 127, 128	Applicability
			CO2 Budget Trading
			Program - Standard
			requirements
FACILITY	6NYCRR 243-1.6 (a)	35	Permit Requirements -
			CAIR NOx Ozone Season
			Trading Program
FACILITY	6NYCRR 243-1.6 (b)	36	Monitoring
			Requirements - CAIR
			NOx Ozone Season
			Trading Program
FACILITY	6NYCRR 243-1.6 (c)	37	NOx Ozone Season
			Emission Requirements
			- CAIR NOx Ozone
			Season Trading
			Program
FACILITY	6NYCRR 243-1.6 (d)	38	Excess Emission
			Requirements - CAIR
			NOx Ozone Season
			Trading Program
FACILITY	6NYCRR 243-1.6 (e)	39	Recordkeeping and
			reporting
			requirements - CAIR
			NOx Ozone Season
			Trading Program
FACILITY	6NYCRR 243-2.1	40	Authorization and
			responsibilities -
			CAIR Designated
			Representative
FACILITY	6NYCRR 243-2.4	41	Certificate of
			representation - CAIR
			Designated
			Representative
FACILITY	6NYCRR 243-8.1	42, 43	General Requirements
			- Monitoring and
			Reporting
FACILITY	6NYCRR 243-8.3	44	Out of control
			periods - Monitoring
			and Reporting
FACILITY	6NYCRR 243-8.5 (d)	45	Quarterly reports re:
			recordkeeping and
			reporting -
			Monitoring and
			Reporting
FACILITY	6NYCRR 243-8.5 (e)	46	Compliance
			certification re:
			recordkeeping and
			reporting -
			Monitoring and
			Reporting
FACILITY	6NYCRR 244-1	47	CAIR NOx Ozone Annual
			Trading Program
			General Provisions
FACILITY	6NYCRR 244-2	48	CAIR Designated
			Representative for
			CAIR NOx Sources
FACILITY	6NYCRR 244-8	49	Monitoring and
			Reporting CAIR NOx
			Allowances
FACILITY	6NYCRR 245-1	50, 51	CAIR SO2 Trading
			Program General
			Provisions
FACILITY	6NYCRR 245-2	52	CAIR Designated

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



**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

FACILITY

6NYCRR 245-8

53

Representative for  
CAIR SO<sub>2</sub> Sources  
Monitoring and  
Reporting for CAIR  
SO<sub>2</sub> Trading Program

**Applicability Discussion:**

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

ECL 19-0301

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

6 NYCRR 200.6

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

6 NYCRR 200.7

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

6 NYCRR 201-1.4

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

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



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

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

6 NYCRR 201-6.5 (a) (4)

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

6 NYCRR 201-6.5 (a) (7)

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

6 NYCRR 201-6.5 (a) (8)

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

6 NYCRR 201-6.5 (c)

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

6 NYCRR 201-6.5 (c) (2)

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

6 NYCRR 201-6.5 (c) (3) (ii)

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

6 NYCRR 201-6.5 (d) (5)

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

6 NYCRR 201-6.5 (e)





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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

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

6 NYCRR 201-6.5 (f) (6)

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

6 NYCRR 202-1.1

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

6 NYCRR 202-2.1

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

6 NYCRR 202-2.5

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

6 NYCRR 211.2

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

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, GOWANUS GENERATING STATION has been determined to be subject to the following regulations:

40 CFR 52.21



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

This citation applies to facilities that are subject to Prevention of Significant Deterioration provisions;  
ie: facilities that are located in an attainment area and that emit pollutants which are listed in 40 CFR 52.21(b)(23)(i) .

40 CFR 60.12

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

40 CFR 60.13

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

40 CFR 60.14

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

40 CFR 60.15

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

40 CFR 60.4

This condition lists the USEPA Region 2 address for the submittal of all communications to the "Administrator". In addition, all such communications must be copied to NYSDEC Bureau of Quality Assurance (BQA).

40 CFR 60.4325

40 CFR 60.4330

This regulation specifies that the emission limit for sulfur dioxide from a stationary combustion turbine is 0.060 lb SO<sub>2</sub>/MMBtu heat input.

40 CFR 60.4345

40 CFR 60.4350

This regulation outlines the procedures used to identify excess emissions from data supplied by a continuous emissions monitor.



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

40 CFR 60.4355

This regulation requires that the steam or water to fuel ratio or other parameters that are continuously monitored as described in 40 CFR 60.4335 and 60.4340 must be monitored during the performance test required under 40 CFR 60.8, to establish acceptable values and ranges.

40 CFR 60.4360

This regulation specifies how the total sulfur content of fuel should be determined.

40 CFR 60.4370

This regulation specifies the frequency of monitoring the sulfur content of fuel used in a combustion turbine.

40 CFR 60.4375

This condition specifies CEMS's excess emission and downtime reporting requirements and annual performance test reporting requirements.

40 CFR 60.4400

Condition specifies initial and annual NOx testing requirements.

40 CFR 60.4405

This regulation allows for different performance testing for facilities that use diluent continuous emissions monitors for NOx monitoring.

40 CFR 60.4415

This condition specifies initial and subsequent performance testing requirements for sulfur.

40 CFR 60.7 (a)

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

40 CFR 60.7 (b)

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



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

40 CFR 60.7 (c)

This requirement details the information to be submitted in excess emissions and monitoring systems performance reports which must be submitted at least semi-annually for sources with compliance monitoring systems.

40 CFR 60.8 (a)

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

40 CFR 60.9

This rule citation allows the public access to any information submitted to the EPA Administrator (or state contact), in conjunction with a project subject to this section of the regulation.

40 CFR Part 72

In order to reduce acid rain the the U.S. and Canada, Title IV of the Clean Air Act Amendments of 1990 requires the establishment of a program to reduce emissions of SO<sub>2</sub> and NO<sub>x</sub> (sulfur dioxide and oxides of nitrogen). Fossil fuel burning electric utility companies are a major source of these contaminants in the US. These sources were regulated in a phased approach. Phase I, which began in 1995, requires 110 of the higher-emitting utility plants in the eastern and Midwest states to meet intermediate SO<sub>2</sub> emission limitations. Phase II, which began in 2000, tightens the emission limitations and expands the coverage to most fossil fuel burning utilities. The utilities are given "allowances" which is a limited authorization to emit one ton of SO<sub>2</sub>. The utilities are required to limit SO<sub>2</sub> emissions to the number of allowances they hold. Some can benefit however by reducing their emissions and selling their excess allowances. Part 72 contains the means of implementing this portion of Title IV of the Clean Air Act.

6 NYCRR 211.1

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

6 NYCRR 225.7 (a)

The commissioner may require an owner of an air contamination source to retain for up to three years, and to submit to him, fuel analyses, information on the quantity of fuel received, burned or sold, and results of stack sampling, stack monitoring and other procedures to ensure compliance with the provisions of the Part. **NOTE: This citation has been replaced by requirements cited under 225-1.8(a) and is no longer a part of current State regulations, however, it remains as part of New York State's approved State Implementation Plan (SIP).**

6 NYCRR 225-1.7 (c)

This regulation requires that measurements be made daily of the rate of each fuel burned, the gross



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

heat content and ash content of each fuel burned (determined at least once per week), and the average electrical output (daily) and hourly generation rate.

6 NYCRR 225-1.7 (e)

This regulation requires source owners subject to 6 NYCRR Part 225-1 to submit a written report of the fuel sulfur content exceeding the applicable sulfur-in-fuel limitation, or of measured emissions exceeding the applicable equivalent emission rate, and the nature and cause of such excesses if known, for the calendar quarter

6 NYCRR 227.2 (b) (1)

This regulation is from the 1972 version of Part 227 and still remains as part of New York's SIP. The rule establishes a particulate limit of 0.10 lbs/mmBtu based on a 2 hour average emission for any oil fired stationary combustion installation.

6 NYCRR 227-1.3 (a)

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

6 NYCRR 227-2.5 (b)

System averaging plan NOx RACT compliance option.

6 NYCRR 227-2.6

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

6 NYCRR 231-2.2

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

The purpose of Section 231-2.2 is to define what new or modified facilities are subject to the requirements set forth in the other sections of the rule. In addition, certain exemptions to the rule are also defined in this section.

6 NYCRR 242-1.5

His regulation requires that the facility hold enough carbon dioxide allowances in their carbon dioxide budget at least equal to the amount of carbon dioxide emitted from the facility each year.



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

6 NYCRR 243-1.6 (a)

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

6 NYCRR 243-1.6 (b)

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

6 NYCRR 243-1.6 (c)

This citation explains the general provisions of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program. This ozone season NOx cap and trade program runs from May 1 through September 30 each year, starting in 2009. Each source shall hold a tonnage equivalent in CAIR NOx Ozone Season allowances that is not less than the total tons of NOx emissions for the ozone season.

6 NYCRR 243-1.6 (d)

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

6 NYCRR 243-1.6 (e)

This citation for the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program requires that all reports be submitted as required by this program, and that copies of all records and submissions made for this program be kept on site for at least five years.

6 NYCRR 243-2.1

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

6 NYCRR 243-2.4

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

6 NYCRR 243-8.1

This citation of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains that CAIR NOx Ozone Season Trading Program sources must install, certify and operate monitoring systems the meet the monitoring, recordkeeping, and reporting requirements in Subpart 6 NYCRR 243-8 and in Subpart H of 40 CFR Part 75.

6 NYCRR 243-8.3

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



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

what to do when an emission monitoring system fails quality assurance, quality control, or data validation requirements.

6 NYCRR 243-8.5 (d)

This citation of the Clean Air Interstate Rule (CAIR) NOx Ozone Season Trading Program explains what requirements the quarterly reports must meet.

6 NYCRR 243-8.5 (e)

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

6 NYCRR Part 207

This regulation requires the owner or operator to submit an episode action plan to the Department in accordance with the requirements of 6NYCRR Part 207. The plan must contain detailed steps which will be taken by the facility to reduce air contaminant emissions during each stage of an air pollution episode. Once approved, the facility shall take whatever actions are prescribed by the episode action plan when an air pollution episode is in effect.

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 231-2

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

6 NYCRR Subpart 244-1

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

6 NYCRR Subpart 244-2

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

6 NYCRR Subpart 244-8



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

**Permit ID: 2-6102-00116/00021**  
**Renewal Number: 2**  
**06/24/2013**

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

6 NYCRR Subpart 245-1

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

6 NYCRR Subpart 245-2

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

6 NYCRR Subpart 245-8

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

**Compliance Certification**

**Summary of monitoring activities at GOWANUS GENERATING STATION:**

<b>Location</b>	<b>Cond No.</b>	<b>Type of Monitoring</b>
<b>Facility/EU/EP/Process/ES</b>		
-----		
---		
G-00001/00100	74	record keeping/maintenance procedures
G-00001/00100/GAS	92	continuous emission monitoring (cem)
G-00001/00100/OIL	108	continuous emission monitoring (cem)
G-00001/00100	81	intermittent emission testing
G-00001/00100	82	record keeping/maintenance procedures
G-00001/00100	84	record keeping/maintenance procedures
G-00001/00100	86	record keeping/maintenance procedures
G-00001/00100	87	record keeping/maintenance procedures
G-00001	57	monitoring of process or control device parameters as surrogate
G-00001	58	record keeping/maintenance procedures
G-00001/-/SEP	67	record keeping/maintenance procedures
G-00001/00100/GAS/LMS01	93	monitoring of process or control device parameters as surrogate
G-00001/00100/GAS/LMS01	94	monitoring of process or control device parameters as surrogate



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



**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

G-00001/00100/GAS/LMS01	95	intermittent emission testing
G-00001/00100/GAS/LMS01	96	intermittent emission testing
G-00001/00100/GAS/LMS01	97	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	98	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	99	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	100	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	101	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	102	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	103	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	104	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	105	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	106	continuous emission monitoring (cem)
G-00001/00100/GAS/LMS01	107	continuous emission monitoring (cem)
G-00001/00100/OIL/LMS01	109	monitoring of process or control device parameters as surrogate
G-00001/00100/OIL/LMS01	110	record keeping/maintenance procedures
G-00001/00100/OIL/LMS01	111	monitoring of process or control device parameters as surrogate
G-00001/00100/OIL/LMS01	112	intermittent emission testing
G-00001/00100/OIL/LMS01	113	intermittent emission testing
G-00001/00100/OIL/LMS01	114	continuous emission monitoring (cem)
G-00001/00100/OIL/LMS01	115	continuous emission monitoring (cem)
G-00001/00100/OIL/LMS01	116	continuous emission monitoring (cem)
G-00001/00100/OIL/LMS01	117	continuous emission monitoring (cem)
G-00001/00100/OIL/LMS01	118	continuous emission monitoring (cem)
G-00001/00100/OIL/LMS01	119	continuous emission monitoring (cem)
G-00001/00100/OIL/LMS01	120	continuous emission monitoring (cem)
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
FACILITY	23	monitoring of process or control device parameters as surrogate
FACILITY	24	monitoring of process or control device parameters as surrogate
FACILITY	25	monitoring of process or control device parameters as surrogate
FACILITY	26	monitoring of process or control device parameters as surrogate
FACILITY	27	monitoring of process or control device parameters as surrogate
FACILITY	28	monitoring of process or control device parameters as surrogate
FACILITY	29	monitoring of process or control device parameters as surrogate
G-00001/-/OGT	63	monitoring of process or control device parameters as surrogate
FACILITY	7	record keeping/maintenance procedures
FACILITY	32	record keeping/maintenance procedures
G-00001	59	record keeping/maintenance procedures
G-00001/-/D01	62	intermittent emission testing
G-00001/-/OGT	65	intermittent emission testing
G-00001/-/OIL/LMS01	66	intermittent emission testing
G-00001/-/SEP	69	intermittent emission testing
G-00001/-/D01	61	monitoring of process or control device parameters as surrogate
G-00001/-/OGT	64	monitoring of process or control device parameters as surrogate
G-00001/-/SEP	68	monitoring of process or control device parameters as surrogate
G-00001/00100	70	monitoring of process or control device parameters as surrogate
FACILITY	125	record keeping/maintenance procedures
FACILITY	33	record keeping/maintenance procedures
FACILITY	34	record keeping/maintenance procedures
FACILITY	127	record keeping/maintenance procedures



New York State Department of Environmental Conservation  
Permit Review Report

Permit ID: 2-6102-00116/00021

Renewal Number: 2

06/24/2013

FACILITY	128	record keeping/maintenance procedures
FACILITY	49	record keeping/maintenance procedures

-----

----

**Basis for Monitoring**

6 NYCRR 201-6.5(c)(3)(ii) is a facility-wide condition that applies to monitoring conditions in all Title V Permits. All facilities that are subject to the Title V requirements must submit reports of any required monitoring to the NYSDEC every six months.

6 NYCRR 201-6.5(e) is a facility-wide record keeping requirement that applies to all Title V facilities. These facilities must submit an annual compliance certification to the NYSDEC and the USEPA.

6 NYCRR 202-2.1 is a requirement for all Title V facilities. These facilities must submit an annual emission statement by April 15th of each year.

6 NYCRR 225-1.7). This condition requires the facility to record daily the rate of each fuel burned at the facility, the daily fuel usage, the average electrical output, and the hourly generation rate. Also, for each fuel delivery to the facility, the facility must determine the gross heat content and the ash content.

6 NYCRR 227-1.2(a)(1) This condition establishes a particulate emission limit in terms of lbs per mmBtu of heat input for stationary combustion units of greater than 250 mmBtu/hr heat input capacity which fire oil.

6 NYCRR 227-1.3(a) This condition prohibits any person from operating a stationary combustion installation which emits smoke equal to or greater than 20% opacity (six minute average), except for one six-minute period per hour of not more than 27% opacity.

6 NYCRR 227-2.5 (b) This condition states that the system-wide averaging of NOx emissions, done by the Astoria Generating Company from its three facilities (Astoria, Gowanus, and Narrows generating stations), must comply with the most recently approved NOx RACT Compliance and Operating Plan dated June 30, 2004 (a letter dated September 26, 2012 reassured compliance with the revised NYCRR Part 227-2 regulation). The system-wide average shall consist of a weighted average allowable emission rate based upon the weighted average of actual emissions from units that are operating. Excess reductions utilized in the system-wide average may only be counted from the lowest allowable emission rate. Simply put, if there is a more stringent emission limit than RACT already in place on the unit, then excess



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**

reductions may only be counted from below that emission rate. Thirty two simple cycle combustion turbines and its starter engines are included in the averaging plan.

6NYCRR 227-2.6 This condition establishes the compliance testing, monitoring, and reporting requirements for NOx RACT affected stationary combustion installations.

6 NYCRR Part 243. This regulation requires facilities to obtain at least as many 'allocations' of oxides of nitrogen (NOx) as they emit into the atmosphere during a specified period of time. An 'allocation' is a unit of pollution which is limited by a budget established by the regulation. The Department developed this regulation in response to the United States Environmental Protection Agency's (EPA's) "Clean Air Interstate Rule" (CAIR). This regulation is included in New York's 'State Implementation Plan' (SIP) which has been approved by EPA as required by the Clean Air Act of 1990.

6 NYCRR Parts 201-6 and 201-7: Upon the operation of LMS100, GGS's NOx, CO and SO2 emissions will be lower than facility's existing maximum annual potential. The VOC, PM2.5 and PM10 emission increases are also less than any applicability thresholds or New Source Review(NSR) and Prevention of Significant Deterioration(PSD). The permit has conditions limiting facility's yearly and short term air emissions. Capping conditions limit facility wide yearly emissions of NOx, CO, SO2, PM2.5 and lead emissions at 441.74, 60.19, 7.62, 29.25 and 0.01 tons respectively. The facility is required to install and operate continuous emission monitoring system(CEM) for LMS100 to monitor NOx, CO and NH3. Other contaminants will be verified using fuel data, stack test results and approved emission factors.

LMS100 turbine will also be subjected to the NOx limit of 6 NYCRR Part 227-2 and 40 CFR 60 KKKK., but this permit has more stringent NOx limit(applicant proposed) of 2.5 ppmvd for gas firing and 3.5 ppmvd for oil firing. LM100, the 100 MW peaking unit is also subject to 6 NYCRR parts 242, 243, 244 and 245 monitoring, reporting and record keeping requirements.

GGS is also restricted to use ultra low sulfur diesel oil with a sulfur content of 15 ppm. The usage of low sulfur oil will reduce PM2.5 and SO2 emissions.



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

**Permit ID: 2-6102-00116/00021**

**Renewal Number: 2**

**06/24/2013**