

Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

## **Facility Identification Data**

Name: ALGONQUIN GAS SOUTHEAST COMPRESSOR STATION

Address: 142 TULIP RD BREWSTER, NY 10509

#### Owner/Firm

Name: ALGONQUIN GAS TRANSMISSION LLC

Address: PO BOX 1642

HOUSTON, TX 77251-1642, USA

Owner Classification: Corporation/Partnership

#### **Permit Contacts**

Division of Environmental Permits: Name: CHRISTOPHER LANG Address: NYSDEC - REGION 3 21 S PUTT CORNERS RD NEW PALTZ, NY 12561-5401

Phone:

Division of Air Resources:

Name: DENSFORD D ESCARPETA

Address: NYSDEC - WHITE PLAINS SUBOFFICE

100 HILLSIDE AVE STE 1W WHITE PLAINS, NY 10603

Phone:9144282505

Air Permitting Contact: Name: REGAN MAYCES

Address: 5400 WESTHEIMER CT

HOUSTON, TX 77056 Phone:7136274790

## 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 Air Title V permit renewal. The renewal includes the addition of 40 CFR Part 60, Subpart OOOOa (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution) applicable requirements along with some minor changes to the



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

existing permit. These changes include: Emission unit T-00009 renaming to T-00006 for consistency with the facility unit identification (ID) protocol, and Emission Units V-00012 (high pressure source control venting) and V-00013 (low pressure source control venting) replacement with the emission reporting unit E-I0001 to represent all vent gas releases at the facility as well as piping component fugitive emissions.

#### **Attainment Status**

ALGONQUIN GAS SOUTHEAST COMPRESSOR STATION is located in the town of SOUTHEAST in the county of PUTNAM.

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**

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Particulate Matter (PM)	ATTAINMENT
Particulate Matter< 10μ in diameter (PM10)	ATTAINMENT
Sulfur Dioxide (SO2)	ATTAINMENT
Ozone*	MODERATE NON-ATTAINMENT
Oxides of Nitrogen (NOx)**	ATTAINMENT
Carbon Monoxide (CO)	ATTAINMENT

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## **Facility Description:**

The Algonquin Gas Transmission (AGT), LLC Southeast Station is a compressor station for the bi-directional flow transmission of natural gas located in the city of Brewster, Putnam County, New York. The natural gas compressor station is one of many that span the nationwide pipeline grid that provides the necessary pressure increase to maintain flow of natural gas. The facility consists of the following emission sources and units: two 4,700 hp Solar Centaur 40-04702S1 compressor turbine (T-00001, T-00002), 15,900 hp Solar Mars 100-16002S4 compressor turbine (T-00003), one 10,320 hp Solar Taurus 70-10302S3 compressor turbine, one 7,700 hp Solar Taurus compressor turbine 60-07802S3 (combined as T-00004), and a 10,320 hp Solar Taurus 70-10302S4 compressor turbine (T-00006); exempt sources include two 585 hp Waukesha

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

<sup>\*\*</sup> NOx has a separate ambient air quality standard in addition to being an ozone precursor.



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

VGF24GL emergency generators, various process heaters and a part washer, and miscellaneous natural gas fugitive and vented components.

The Solar Mars 100-16002S4 (T-00003, Emission Source (ES)-000031) and Solar Taurus 70-10302S4 (T-00006, ES-00006) turbines (installed during Renewal 3) are subjected to NOx concentration limit of 9 ppmvd at 15% oxygen (O2) during normal operation based on manufacturer guarantee. For carbon monoxide (CO), these two turbines potential to emit (PTE) is also based on the manufacturer guaranteed emission rate of 25 ppmvd (15% O2) with oxidation catalyst control reduction efficiency of 95 percent. To assure compliance with emission rates and to demonstrate NOx and CO emission limits will remain below Significant Project Thresholds (SPT), the facility is required to conduct performance testing and maintain annual emissions below PTE limits. It should be noted that the NOx guaranteed emission rate of 9 ppmvd (15% O2) is more stringent than both 6 NYCRR Part 227-2.4(e)(1) NOx Reasonable Available Control Technology (RACT) limit of 50 ppmvd (15% O2) and New Source Performance Standards (NSPS) 40 CFR 60 Subpart KKKK (60.4320(a)) limit of 25 ppmvd (15% O2).

Emission Units T-00001 and T-00002 are subjected to 6 NYCRR Part 227-2.4 (e) (1) NOx RACT limit. Emission Units T-00004 (installed during Renewal 2) are subjected 40 CFR 60 Subpart KKKK but are required to demonstrate compliance with manufacturer guaranteed NOx emission rate of 15 ppmvd @ 15% O2. During the term of the permit, these units will undergo performance testing according to respective regulatory requirements.

### **Permit Structure and Description of Operations**

The Title V permit for ALGONQUIN GAS SOUTHEAST COMPRESSOR 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.



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

ALGONQUIN GAS SOUTHEAST COMPRESSOR STATION is defined by the following emission unit(s):

Emission unit T00006 -

Emission unit T00006 is associated with the following emission points (EP):

00009

Process: 106 is located at Building 3 - Process: T06 is located at Building 3 -

Emission unit G00001 - One Waukesha (585 bhp) natural gas fired emergency generator. The emergency generator as defined in section 6 NYCRR Part 200.1(cq) is an exempt source under 6 NYCRR Part 201-3.2, however, subject to the applicable requirements of 40 CFR Part 60, Subpart JJJJ.

Emission unit G00001 is associated with the following emission points (EP): G0001

Process: G02 is located at Building 1 - Waukesha VGF24GL 585 bhp natural gas fired emergency genarator.

Emission unit G00002 - One Waukesha (585 bhp) natural gas fired emergency generator (manufactured and installed in 2008). The emergency generator as defined in section 6 NYCRR Part 200.1(cq) is an exempt source under 6 NYCRR Part 201-3.2. The engine is required to meet the requirements for emergency engines under 40 CFR Part 63.6640(f) and exempt from the requirements of 40 CFR Part 60, Subpart JJJJ.

Emission unit G00002 is associated with the following emission points (EP): G0002

Process: G03 is located at Building 1 - Waukesha VGF24GL 585 bhp natural gas fired emergency generator

Emission unit T00001 - One 47.29 MMbtu/hr Solar Centaur 40-04702S1 compressor turbine firing pipeline natural gas.

Emission unit T00001 is associated with the following emission points (EP): 00001

Process: GS1 One Solar Centaur 40-04702S1 compressor turbine firing pipeline natural gas...

Emission unit T00002 - One 47.29 MMbtu/hr Solar Centaur 40-04702S1 compressor turbine firing pipeline gas.

Emission unit T00002 is associated with the following emission points (EP): 00002

Process: GS2 One Solar Centaur 40-04702S1 compressor turbine firing pipeline natural gas.



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

Emission unit T00003 - One Solar Mars 100-16002S4 compressor turbine rated at 15,900 hp. The turbines will fire pipeline natural gas only and is equipped with SoLoNox dry low emission technology and oxidation catalyst.

Emission unit T00003 is associated with the following emission points (EP): 00031

Process: 103 is located at Building 1 - One Solar Mars 100-16002S4 natural gas turbine operating at temperatures above 0 F at all operating mode. Design capacity is representative of operating at the annual average temperature.

Process: T03 is located at Building 1 - One Solar Mars 100-16002S4 natural gas turbine operating at temperatures below 0 F at all operating loads. Design capacity is representative of operating at the annual average temperature with an approximate heat input of 149 MMbtu/hr for operating at -20 degrees F.

Emission unit T00004 - One 98.61 MMbtu/hr Solar Taurus 70-10302S3 compressor turbine fired with pipeline quality natural gas.

Emission unit T00004 is associated with the following emission points (EP): 00041, 00042

Process: 104 is located at Building 2 - One Solar Taurus 60-07802S3 compressor turbine and one Solar Taurus 70-10302S3 compressor turbine firing pipeline natural gas and operating above 0 degrees F at all operating loads. Design capacities is representative of operating at the annual average temperature.

Process: T04 is located at Building 2 - Solar Taurus 70-10302S3 compressor turbine firing pipeline natural gas and operating at or below 0 degrees F at all operating loads. Design capacity is representative of operating at the annual average temperature. Emission source 00042 has an approximate heat input of 104 MMbtu/hr at -20 degrees F.

Emission unit EI0001 - Fugitive emissions from all gas releases and from piping components.

Process: E06 Gas releases and fugtive emissions from pipeline components.

#### Title V/Major Source Status

ALGONQUIN GAS SOUTHEAST COMPRESSOR STATION is subject to Title V requirements. This determination is based on the following information:

Algonquin Southeast compressor station is located in an ozone attainment area (Putnam County) but within the State ozone transport region. For attainment areas of the State within the ozone transport region, any stationary sources with the potential to emit (PTE) 100 tons per year (tpy) or any stationary source with the PTE 100 tpy or more of any air pollutant or regulated air contaminant is considered major. The Algonquin Southeast compressor station PTE exceeds major source threshold limits for NOx, VOC, and CO.



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

### **Program Applicability**

The following chart summarizes the applicability of ALGONQUIN GAS SOUTHEAST COMPRESSOR 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	NO
TITLE V	YES
TITLE VI	NO
RACT	YES
SIP	YES

#### NOTES:

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

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

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

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



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

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

4922 NATURAL GAS TRANSMISSION

#### **SCC Codes**

2-02-002-01

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

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



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

	Turbine
2-02-002-02	INTERNAL COMBUSTION ENGINES - INDUSTRIAL
	INDUSTRIAL INTERNAL COMBUSTION ENGINE -
	NATURAL GAS
	Reciprocating
2-03-002-02	INTERNAL COMBUSTION ENGINES -
	COMMERCIAL/INSTITUTIONAL
	COMMERCIAL/INSTITUTIONAL IC ENGINE -
	NATURAL GAS
	Turbine
3-10-888-01	OIL AND GAS PRODUCTION
	OIL AND GAS PRODUCTION - FUGITIVE EMISSIONS
	Specify in Comments Field

### **Facility Emissions Summary**

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

<b>Cas No.</b> 0NY750-00-0	Contaminant CARBON DIOXIDE EQUIVALENTS	PTE lbs/yr 569070000	PTE tons/yr	Actual lbs/yr	Actual tons/yr
000630-08-0	CARBON MONOXIDE	478300			
0NY210-00-0	OXIDES OF NITROGEN	263620			
0NY075-00-0	PARTICULATES	27220			
0NY075-00-5	PM-10	27220			
007446-09-5	SULFUR DIOXIDE	57693			
0NY100-00-0 0NY998-00-0	TOTAL HAP VOC	31460 158722			

## NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

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



Permit ID: 3-3730-00060/00013

Renewal Number: 4 11/23/2020

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

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

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

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

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

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

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

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

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 ID: 3-3730-00060/00013

Renewal Number: 4 11/23/2020

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

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

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

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

- i. If additional applicable requirements under the Act become applicable where this permit's remaining term is three or more years, a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the original permit or any of its terms and conditions has been extended by the Department pursuant to the provisions of Part 2 01-6.7 and Part 621.
- ii. The Department or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- iii. The Department or the Administrator determines that the Title V permit must be revised or reopened to assure compliance with applicable requirements.
- iv. If the permitted facility is an "affected source" subject to the requirements of Title IV of the Act, and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.

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

Reopenings shall not be initiated before a notice of such intent is provided to the facility by the Department at least thirty days in advance of the date that the



Permit ID: 3-3730-00060/00013

Renewal Number: 4 11/23/2020

permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency.

#### Item K: Permit Exclusion - ECL 19-0305

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

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

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

### NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

## 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.



Permit ID: 3-3730-00060/00013

Renewal Number: 4 11/23/2020

- (b) In any enforcement proceeding, the facility owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- (c) This provision is in addition to any emergency or upset provision contained in any applicable requirement. item\_02

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

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

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

## **Regulatory Analysis**

Location Facility/EU/EP/Process		Condition	Short Description
 FACILITY	ECL 19-0301	49	Powers and Duties of the Department with respect to air pollution control
FACILITY	40CFR 60-GG.334(h)(2)	30	Nitrogen content of fuel in a gas turbine
G-00001/-/G02/EG001	40CFR 60-JJJJ.4233(e)	37, 38, 39	Emission limits for IC Engines > 100 HP
G-00001/-/G02/EG001	40CFR 60-JJJJ.4244	40	Test methods and procedures
G-00001/-/G02/EG001	40CFR 60-JJJJ.4245(a)	41	Notification, reporting and recordkeeping requirements
G-00001/-/G02/EG001	40CFR 60-JJJJ.4245(c)	42	Initial notification for engines > 500 HP
G-00001/-/G02/EG001	40CFR 60-JJJJ.4245(d)	43	Performance test requirements
FACILITY	40CFR 60-KKKK.4365(a)	31	Stationary Combustion Turbine NSPS - Exemption from monitoring total sulfur content of fuel
FACILITY	40CFR 60- 0000a.5410a(j)	32	NSPS for Crude Oil and Natural Gas



## Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

FACILITY	40CFR 60-	33	Facilities - Fugitive Emissions Standards NSPS for Crude Oil
	0000a.5415a(h)		and Natural Gas Facilities - Fugitive Emission Standards
FACILITY	40CFR 68	18	Chemical accident
FACILITY	40CFR 82-F	19	prevention provisions Protection of Stratospheric Ozone - recycling and emissions reduction
FACILITY	6NYCRR 200.6	1	Acceptable ambient air quality.
FACILITY	6NYCRR 201-1.4	50	Unavoidable noncompliance and violations
FACILITY FACILITY	6NYCRR 201-1.7 6NYCRR 201-1.8	10 11	Recycling and Salvage Prohibition of reintroduction of collected contaminants to the air
FACILITY	6NYCRR 201-3.2(a)	12	Exempt Activities - Proof of eligibility
FACILITY	6NYCRR 201-3.3(a)	13	Trivial Activities - proof of eligibility
FACILITY	6NYCRR 201-6	20, 21, 22, 23, 24, 25, 34, 35	Title V Permits and the Associated Permit Conditions
FACILITY	6NYCRR 201-6.4(a)(4)	14	General Conditions - Requirement to Provide Information
FACILITY	6NYCRR 201-6.4(a)(7)	2	General Conditions - Fees
FACILITY	6NYCRR 201-6.4(a)(8)	15	General Conditions - Right to Inspect
FACILITY	6NYCRR 201-6.4(c)	3	Recordkeeping and Reporting of Compliance Monitoring
FACILITY	6NYCRR 201-6.4(c)(2)	4	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)	26	Compliance Schedules - Progress Reports
FACILITY	6NYCRR 201-6.4(e)	6	Compliance Certification
FACILITY FACILITY	6NYCRR 201-6.4(f)(6) 6NYCRR 201-6.5(a)	16 51	Off Permit Changes State Enforceable Requirements
FACILITY	6NYCRR 201-7	36	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	52	General Prohibitions - air pollution



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

			prohibited
FACILITY	6NYCRR 211.2	27	General Prohibitions
			- visible emissions
			limited.
FACILITY	6NYCRR 215.2	9	Open Fires -
			Prohibitions
FACILITY	6NYCRR 227-1.3(a)	28	Smoke Emission
			Limitations.
FACILITY	6NYCRR 227-2.4(e)(1)	29	Simple cycle
			combustion turbines.

#### **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 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



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

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

#### 6 NYCRR 201-6.4 (a) (4)

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

## 6 NYCRR 201-6.4 (a) (7)

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

## 6 NYCRR 201-6.4 (a) (8)

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

## 6 NYCRR 201-6.4 (c)

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



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

#### 6 NYCRR 201-6.4 (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, ALGONQUIN GAS SOUTHEAST COMPRESSOR STATION has been determined to be subject to the following regulations:

#### 40 CFR 60.334 (h) (2)

This regulation requires the owner or operator of a gas turbine to monitor the nitrogen content of the fuel burned in the gas turbine.



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

## 40 CFR 60.4233 (e)

This regulation sets the emission limit for internal combustion engines greater than 100 horsepower.

#### 40 CFR 60.4244

This regulation specifies the test methods and procedures to be used by owners or operators of spark iginted internal combustion engines.

## 40 CFR 60.4245 (a)

This regulation sets forth the notification, reporting and recordkeeping requirements for 40 CFR 60 Subpart JJJJ, for owners and operators of stationary spark ignited internal combustion engines.

### 40 CFR 60.4245 (c)

This regulation sets forth the notification requirements for engines larger than 500 horsepower.

### 40 CFR 60.4245 (d)

Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.

### 40 CFR 60.4365 (a)

This section provides an exemption from monitoring total sulfur content of the fuel used by a facility.

## 40 CFR 60.5410a (j)

This section describes the procedures that the owner or operator of fugitive emissions components at an oil or natural gas facility subject to the requirements of 40 CFR 60 Subpart OOOOa must follow to demonstrate initial compliance with Subpart OOOOa.

## 40 CFR 60.5415a (h)

This section describes the procedures that the owner or operator of fugitive emissions components at an oil or natural gas facility subject to the requirements of 40 CFR 60 Subpart OOOOa must follow to demonstrate continuous compliance with Subpart OOOOa.

### 6 NYCRR 201-6.5 (a)

This section identifies state enforceable requirements for Title V permits.



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

## 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 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 227-2.4 (e) (1)

Presumptive NOx RACT emission limits for simple cycle combustion turbines.

## 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

## **Compliance Certification**

Summary of monitoring activities at ALGONQUIN GAS SOUTHEAST COMPRESSOR STATION:

Location Facility/EU/EP/Process/ES	Cond I	No. Type of Monitoring
FACILITY	30	record keeping/maintenance procedures
G-00001/-/G02/EG001	37	intermittent emission testing
G-00001/-/G02/EG001	38	intermittent emission testing
G-00001/-/G02/EG001	39	intermittent emission testing
G-00001/-/G02/EG001	41	record keeping/maintenance procedures
G-00001/-/G02/EG001	42	record keeping/maintenance procedures
FACILITY	31	work practice involving specific operations
FACILITY	32	record keeping/maintenance procedures
FACILITY	33	record keeping/maintenance procedures
FACILITY	21	record keeping/maintenance procedures
FACILITY	22	intermittent emission testing
FACILITY	23	intermittent emission testing
FACILITY	24	intermittent emission testing
FACILITY	25	record keeping/maintenance procedures
FACILITY	5	record keeping/maintenance procedures
FACILITY	6	record keeping/maintenance procedures
T-00003	44	monitoring of process or control device parameters as surrogate
T-00003	45	monitoring of process or control device parameters as surrogate
T-00004	46	monitoring of process or control device parameters



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

FACILITY	29	as surrogate intermittent emission testing
FACILITY	28	monitoring of process or control device parameters
FACTLITTY	7	as surrogate record keeping/maintenance procedures
T-00006	48	as surrogate monitoring of process or control device parameters
T-00006	47	as surrogate monitoring of process or control device parameters

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#### **Basis for Monitoring**

Algonquin Southeast compressor station is required to perform the following monitoring operation: record turbine monthly fuel usage, firing rates, hours of start-up and shutdown, and hours of operation; monitor the release of natural gas from each turbine, station wide blowdown, and component piping fugitive emissions; in addition, fugitive emissions components at the station must undergoes periodic monitoring and reporting as required by 40 CFR 60 Subpart OOOOa. It should be noted that sulfur and nitrogen monitoring is no longer required since the facility utilizes only pipeline gas and the NOx standard was calculated using a F-value of zero.

## Turbine requirements:

Turbine emission units T-00001 and T-00002 (installed in 1995) are subject to the Part 227-2.4 (NOx RACT) emission limit of 50 ppmvd @ 15% Oxygen (O2). To verify compliance, the facility is required to conduct stack testing on one of the two turbines. Based on past stack testing results as well as manufacturer information, historical compliance with NOx RACT limit has been demonstrated. Therefore, future stack testing is required only once during the term of the permit.

Turbine emission unit T-00004 (installed in 2008 during Renewal 2) are subjected to New Source Performance Standards (NSPS) 40 CFR 60 Subpart KKKK but are required to demonstrate compliance with the manufacturer guarantee NOx limit of 15 ppmvd @ 15% O2. The manufacturer guaranteed NOx limit is more stringent than both the Subpart 25 ppmvd @ 15% O2 limit during operation at temperatures above 0 degrees Fahrenheit (F) and the Part 227-2.4 NOx RACT limit. Total NOx potential to emit (PTE) (used instead of projected actual emissions) from these two turbines are limited to 34.3 tons/year (t/y) to stay below New Source Review (NSR) Part 231 significant project threshold (SPT) for an attainment area in the ozone transport region.

Turbine emission units T-00003 and T-00006 (installed in 2016 during Renewal 3) are also subjected to 40 CFR 60 Subpart KKKK but are required to demonstrate compliance with the more stringent manufacturer guaranteed NOx limit of 9 ppmvd @ 15% O2 during steady state operation at 50-100% engine load at all ambient temperatures above 0 degrees F. Total NOx PTE (used instead of projected actual emissions) from these two turbines are limited to 31.8 t/y to stay below NSR Part 231 SPT. In addition, these units must also demonstrate compliance with carbon monoxide (CO) limit based on the manufacturer guaranteed emission rate of 25 ppmvd (15%O2) and a total CO PTE limit of 53.4 t/y to stay below Prevention of Significant Deterioration (PSD) Part 231 SPT.



Permit ID: 3-3730-00060/00013 Renewal Number: 4 11/23/2020

Emission units T-00003, T-00004 and T-00006 NOx annual performance testing must be conducted in accordance with 40 CFR 60 Subpart KKKK §60.4400. The Subpart allows for reduce frequency of subsequent performance test to once every 2 years if test result is less than or equal to 75 percent of the Subpart NOx limit.