

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

Facility Identification Data

Name: TENNESSEE GAS PIPELINE CO COMPRESSOR STATION 229
Address: 7586 EAST EDEN RD
EDEN, NY 14057

Owner/Firm

Name: TENNESSEE GAS PIPELINE COMPANY
Address: 1001 LOUISIANA ST
PO BOX 2511
HOUSTON, TX 77002, USA
Owner Classification: Corporation/Partnership

Permit Contacts

Division of Environmental Permits:
Name: DOUGLAS E BORSCHEL
Address: 270 MICHIGAN AVE
BUFFALO, NY 14203-2999

Division of Air Resources:
Name: CHERYL WEBSTER
Address: NYSDEC -R9
270 MICHIGAN AVE
BUFFALO, NY 14203-2999

Air Permitting Contact:
Name: ROB S REDMOND
Address: TENNESSEE GAS PIPELINE COMPANY
7586 EAST EDEN RD
EDEN, NY 14057
Phone:7166495610

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.

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

Attainment Status

TENNESSEE GAS PIPELINE CO COMPRESSOR STATION 229 is located in the town of EDEN in the county of ERIE.

The attainment status for this location is provided below. (Areas classified as attainment are those that meet all ambient air quality standards for a designated criteria air pollutant.)

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

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

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

Facility Description

The facility includes nine natural gas fired reciprocating compressor engines and a natural gas dehydrator. The engines supply power to compress natural gas for pipeline transportation and for auxiliary electricity. The dehydrator uses a regenerative glycol system to remove water that accumulates in the natural gas during underground storage at the facility. There are additional activities at the facility that are trivial or exempt.

Permit Structure and Description of Operations

The Title V permit for TENNESSEE GAS PIPELINE CO COMPRESSOR STATION 229 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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

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.

TENNESSEE GAS PIPELINE CO COMPRESSOR STATION 229 is defined by the following emission unit(s):

Emission unit R22901 - Six 1400 HP Worthington compressor engines. Each fires natural gas and has been retrofitted with a low emissions combustion.

Emission unit R22901 is associated with the following emission points (EP):
R001A, R002A, R003A, R004A, R005A

It is further defined by the following process(es):

Process: RC1 is located at GROUND, Building 1 - The operation of six 1400 HP Worthington compressor engines.

Emission unit R22902 - Three 438 HP Worthington auxiliary engines. Each fires natural gas.

Emission unit R22902 is associated with the following emission points (EP):
R0007, R0008, R0009

It is further defined by the following process(es):

Process: RC2 is located at GROUND, Building 1 - The operation of three 438 HP Worthington auxiliary engines.

Emission unit R2290D - Natural gas dehydrator system rated at 120 MMscfd consisting of an absorber, tower, triethylene glycol (TEG) regenerator, 1.5 MMBtu/hr reboiler, and an air-cooled regenerative vent gas vapor recovery unit (VRU). VOC and HAP emissions are controlled by the VRU and combustion in the reboiler firebox.

Emission unit R2290D is associated with the following emission points (EP):
R0010, R0011

It is further defined by the following process(es):

Process: RC3 Natural gas dehydrator system rated at 120 MMscfd consisting of an absorber tower and triethylene glycol (TEG) regenerator, a 1.5 MMBtu/hr reboiler, and an air-cooled regenerator vent gas vapor recovery unit (VRU). Vent gases produced during TEG regeneration are routed to the VRU. Condensed vapor and flash gas are burned in the reboiler firebox as supplemental fuel. Uncondensed vapors are vented to the atmosphere.

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

Title V/Major Source Status

TENNESSEE GAS PIPELINE CO COMPRESSOR STATION 229 is subject to Title V requirements. This determination is based on the following information:

The Tennessee Gas Pipeline Compressor Station 229 has the potential-to-emit oxides of nitrogen and carbon monoxide at a rate of greater than 250 tons per year. This emission rate is above the major source threshold of 100 tons per year.

The facility also has the potential-to-emit formaldehyde, which is an individual Hazardous Air Pollutant (HAP), at a rate of greater than 10 tons per year, and total HAPs at a rate of greater than 25 tons per year but less than 40 tons per year. These emission rates are above the major source thresholds of 10 tons of any individual HAP per year and 25 tons total HAPs per year.

Therefore, the facility requires this Title V operating permit.

Program Applicability

The following chart summarizes the applicability of TENNESSEE GAS PIPELINE CO COMPRESSOR STATION 229 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	NO
TITLE IV	NO
TITLE V	YES
TITLE VI	NO
RACT	YES
SIP	YES

NOTES:

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1

02/22/2006



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.

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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1

02/22/2006



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

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
2-02-002-52	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - NATURAL GAS INTERNAL COMBUSTION ENGINE - INDUSTRIAL: NATURAL GAS:2-CYCLE LEAN BURN
2-02-002-53	INTERNAL COMBUSTION ENGINES - INDUSTRIAL INDUSTRIAL INTERNAL COMBUSTION ENGINE - NATURAL GAS INTERNAL COMBUSTION ENGINE-INDUSTRIAL: NATURAL GAS: 4-CYCLE RICH BURN
3-10-002-27	OIL AND GAS PRODUCTION OIL AND GAS PRODUCTION - NATURAL GAS PRODUCTION OIL AND GAS PRODUCTION GLYCOL DEHYDRATOR REBOILER STILL STACK

Facility Emissions Summary

In the following table, the CAS No. or Chemical Abstract Series 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

New York State Department of Environmental Conservation



Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1

02/22/2006

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 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
000071-43-2	BENZENE (HAP)		> 0 but < 10 tpy
000630-08-0	CARBON MONOXIDE		>= 250 tpy
000050-00-0	FORMALDEHYDE (HAP)		>= 10 tpy
0NY100-00-0	HAP		>= 25 tpy but < 40 tpy
000110-54-3	HEXANE (HAP)		> 0 but < 10 tpy
007439-92-1	LEAD (HAP)		> 0 but < 10 tpy
0NY210-00-0	OXIDES OF NITROGEN		>= 250 tpy
0NY075-00-0	PARTICULATES		>= 10 tpy but < 25 tpy
0NY075-00-5	PM-10		>= 10 tpy but < 25 tpy
007446-09-5	SULFUR DIOXIDE		> 0 but < 2.5 tpy
000108-88-3	TOLUENE (HAP)		> 0 but < 10 tpy
0NY998-00-0	VOC		>= 40 tpy but < 50 tpy

NOTIFICATION OF GENERAL PERMITTEE OBLIGATIONS

Item A: Emergency Defense - 6NYCRR Part 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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

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 - 6NYCRR Part 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 6NYCRR 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)

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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

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 - 6NYCRR Part 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 Part 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 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:

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

- 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.

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

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 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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

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	Short Description	Condition
FACILITY	ECL 19-0301	Powers and Duties of the Department with respect to air pollution control	36
R-2290D	40CFR 63-HHH.1274 (d) (2)	Control, monitoring, recordkeeping, and reporting requirement exemption based on benzene emission limit.	35
FACILITY	40CFR 68	Chemical accident prevention provisions	21
FACILITY	40CFR 82	Protection of Stratospheric Ozone	26
FACILITY	40CFR 82-F	Protection of Stratospheric Ozone - recycling and emissions reduction	22
FACILITY	6NYCRR 200.6	Acceptable ambient air quality.	1
FACILITY	6NYCRR 200.7	Maintenance of equipment.	10
FACILITY	6NYCRR 201-1.4	Unavoidable noncompliance and violations	37
FACILITY	6NYCRR 201-1.7	Recycling and Salvage	11
FACILITY	6NYCRR 201-1.8	Prohibition of reintroduction of collected contaminants to the air	12
FACILITY	6NYCRR 201-3.2(a)	Exempt Activities - Proof of eligibility	13
FACILITY	6NYCRR 201-3.3(a)	Trivial Activities - proof of eligibility	14
FACILITY	6NYCRR 201-6	Title V Permits and the Associated Permit Conditions	23, 27, 28
FACILITY	6NYCRR 201-6.5(a) (4)	General conditions	15
FACILITY	6NYCRR 201-6.5(a) (7)	General conditions	

Fees 2



New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1

02/22/2006

FACILITY	6NYCRR 201-6.5(a)(8)	General conditions	16
FACILITY	6NYCRR 201-6.5(c)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	3
FACILITY	6NYCRR 201-6.5(c)(2)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	4
FACILITY	6NYCRR 201-6.5(c)(3)(ii)	Permit conditions for Recordkeeping and Reporting of Compliance Monitoring	5
FACILITY	6NYCRR 201-6.5(d)(5)	Compliance schedules	17
FACILITY	6NYCRR 201-6.5(e)	Compliance Certification	6, 24
FACILITY	6NYCRR 201-6.5(f)(6)	Off Permit Changes	18
FACILITY	6NYCRR 201-7	Federally Enforceable Emissions Caps	29
R-2290D	6NYCRR 201-7	Federally Enforceable Emissions Caps	35
FACILITY	6NYCRR 202-1.1	Required emissions tests.	19
FACILITY	6NYCRR 202-2.1	Emission Statements - Applicability	7
FACILITY	6NYCRR 202-2.5	Emission Statements - record keeping requirements.	8
FACILITY	6NYCRR 211.2	General Prohibitions - air pollution prohibited.	38
FACILITY	6NYCRR 211.3	General Prohibitions - visible emissions limited	20
FACILITY	6NYCRR 215	Open Fires	9
FACILITY	6NYCRR 227-1.3(a)	Smoke Emission Limitations.	25
R-22902	6NYCRR 227-2.4(f)(1)(ii)	Emission limitation for rich burn internal combustion engines	33, 34
R-22901	6NYCRR 227-2.5(c)	Alterative emission limits	30, 31, 32

Applicability Discussion:

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

ECL 19-301.

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.

6NYCRR Part 200-.6

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

6NYCRR Part 200-.7

Anyone owning or operating an air contamination source which is equipped with an

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

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

6NYCRR Part 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.

6NYCRR Part 201-1.7

Requires the recycle and salvage of collected air contaminants where practical

6NYCRR Part 201-1.8

Prohibits the reintroduction of collected air contaminants to the outside air

6NYCRR Part 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.

6NYCRR Part 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.

6NYCRR Part 201-6

This regulation applies to those terms and conditions which are subject to Title V permitting. It establishes the applicability criteria for Title V permits, the information to be included in all Title V permit applications as well as the permit content and terms of permit issuance. This rule also specifies the compliance, monitoring, recordkeeping, reporting, fee, and procedural requirements that need to be met to obtain a Title V permit, modify the permit and demonstrate conformity with

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

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.

6NYCRR 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.

6NYCRR 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.

6NYCRR 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.

6NYCRR Part 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.

6NYCRR Part 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.

6NYCRR Part 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

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

any corrective actions or preventive measures taken.

6NYCRR 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.

6NYCRR Part 201-6.5(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.

6NYCRR 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.

6NYCRR Part 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.

6NYCRR Part 202-2.1

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

6NYCRR Part 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.

6NYCRR Part 211-.2

This regulation prohibits any emissions of air contaminants to the outdoor atmosphere which may be detrimental to human, plant or animal life or to property, or which unreasonably interferes with the comfortable enjoyment of life or property regardless of the existence of any specific air quality standard or emission limit.

6 NYCRR Part 211.3

This condition requires that the opacity (i.e., the degree to which emissions other than water reduce the transmission of light) of the emissions from any air contamination source be less than 20 percent (six minute average) except for one continuous six-minute period per hour of not more than 57 percent.

6 NYCRR Part 215

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

Prohibits open fires at industrial and commercial sites.

40 CFR Part 68.

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

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, TENNESSEE GAS PIPELINE CO COMPRESSOR STATION 229 has been determined to be subject to the following regulations:

40CFR 63-HHH.1274 (d) (2)

This rule is the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Natural Gas Transmission and Storage Facilities. It sets record keeping, reporting, monitoring and control requirements. This facility has accepted an emission cap of 0.90 megagrams per year (1 ton per year) of benzene which keeps the facility below the applicability threshold of this rule.

40CFR 82

The purpose of this regulation is to implement standards on the protection of stratospheric ozone through the control of chlorofluorocarbons (CFCs).

6NYCRR 201-7

This regulation sets forth an emission cap that cannot be exceeded by the facility. In this permit that cap is 0.90 megagrams per year of benzene from the glycol dehydrator. This cap keeps the facility below the applicability threshold of 40CFR63 Subpart HHH.

6NYCRR 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.



New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1

02/22/2006

6NYCRR 227-2.4 (f) (1) (ii)

This regulation sets a NOx emission limit of 1.5 grams per brake horsepower-hour for rich burn internal combustion engines. The limit is effective April 1, 2005.

6NYCRR 227-2.5 (c)

This regulation prescribes an alternative compliance option for sources which the owner or operator have demonstrated that the presumptive RACT limit is not economically or technically feasible. This rule is effective April 1, 2005.

Compliance Certification

Summary of monitoring activities at TENNESSEE GAS PIPELINE CO COMPRESSOR STATION 229:

Location Facility/EU/EP/Process/ES	Type of Monitoring	Cond No.
FACILITY	record keeping/maintenance procedures	5
FACILITY	record keeping/maintenance procedures	6
R-2290D	monitoring of process or control device parameters as surrogate	35
FACILITY	record keeping/maintenance procedures	7
FACILITY	monitoring of process or control device parameters as surrogate	25
R-22902	monitoring of process or control device parameters as surrogate	33
R-22902	intermittent emission testing	34
R-22901	intermittent emission testing	30
R-22901	monitoring of process or control device parameters as surrogate	31
R-22901	monitoring of process or control device parameters as surrogate	32

Basis for Monitoring

Most of the monitoring requirements contained in this permit are based on specific monitoring methods and observations as prescribed in the applicable rules. Facility specific monitoring conditions were written to assure that reliable information is obtained representing the facility's compliance status for the following issues:

Opacity - The compressor engines at this facility are all fueled exclusively by natural gas. They are incapable of burning any other fuel. Engine efficiency and control is monitored and maintained in accordance with the Tennessee Gas Pipeline (TGP) Best Management Practices and Engine Analysis Programs. Although there is no expectation that any of the emission sources will create opacity above the 20% limit, monthly monitoring of all emission sources is required to determine if any abnormal level of emissions are detected.

NOx RACT Compliance - This facility has two different types of compressor and auxiliary power engines. Each type of engine is demonstrating compliance with NOx RACT in a different way.

Per 6NYCRR 227-2.4(f)(1)(ii), performance testing completed on March 15 & 16, 2005, showed that all three 438 HP Worthington auxiliary engines are in compliance with the new 1.5 g/bhp-hr emission limit.

New York State Department of Environmental Conservation

Permit Review Report

Permit ID: 9-1440-00034/00021 Renewal Number: 1



02/22/2006

The next performance test is due to be completed prior to March 16, 2010.

The six 1400 HP Worthington UTC compressor engines are demonstrating an alternative NO_x RACT limit per 6NYCRR 227-2.5(c). Per the NO_x RACT Compliance Plan submitted by TGP on March 17, 2004, the six engines will be retrofit with an enhanced mixing modification to reduce the NO_x emissions from the previously approved alternative NO_x RACT limit of 7 g/bhp-hr to the new limit of 6 g/bhp-hr. The retrofit work will be completed so that the engines are in compliance with the new limit by January 1, 2007. Compliance with the alternative NO_x RACT emission limit of 6 g/bhp-hr will be verified prior to January 1, 2007, via performance testing.