



**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM**

**STATE ONLY NATURAL MINOR OPERATING PERMIT**

Issue Date: January 12, 2023

Effective Date: January 26, 2023

Expiration Date: January 12, 2028

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated.

**State Only Permit No: 30-00234**

Natural Minor

Federal Tax Id - Plant Code: 25-1776875-19

**Owner Information**

Name: EQUITRANS LP  
Mailing Address: 2200 ENERGY DR  
CANONSBURG, PA 15317

**Plant Information**

Plant: EQUITRANS LP/REDHOOK COMPRESSOR STATION  
Location: 30 Greene County 30908 Franklin Township  
SIC Code: 4923 Trans. & Utilities - Gas Transmission And Distribution

**Responsible Official**

Name: JACK MACKIN  
Title: VP OPR  
Phone: (412) 395 - 3576 Email: jmackin@equitransmidstream.com

**Permit Contact Person**

Name: MATT KRAUS  
Title:  
Phone: (412) 260 - 1723 Email: mkraus@equitransmidstream.com

[Signature] \_\_\_\_\_

*MARK R. GOROG, P.E., ENVIRONMENTAL PROGRAM MANAGER, SOUTHWEST REGION*



## SECTION A. Table of Contents

### Section A. Facility/Source Identification

Table of Contents  
Site Inventory List

### Section B. General State Only Requirements

- #001 Definitions.
- #002 Operating Permit Duration.
- #003 Permit Renewal.
- #004 Operating Permit Fees under Subchapter I.
- #005 Transfer of Operating Permits.
- #006 Inspection and Entry.
- #007 Compliance Requirements.
- #008 Need to Halt or Reduce Activity Not a Defense.
- #009 Duty to Provide Information.
- #010 Revising an Operating Permit for Cause.
- #011 Operating Permit Modifications
- #012 Severability Clause.
- #013 De Minimis Emission Increases.
- #014 Operational Flexibility.
- #015 Reactivation
- #016 Health Risk-based Emission Standards and Operating Practice Requirements.
- #017 Circumvention.
- #018 Reporting Requirements.
- #019 Sampling, Testing and Monitoring Procedures.
- #020 Recordkeeping.
- #021 Property Rights.
- #022 Alternative Operating Scenarios.
- #023 Reporting
- #024 Report Format

### Section C. Site Level State Only Requirements

- C-I: Restrictions
- C-II: Testing Requirements
- C-III: Monitoring Requirements
- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
- C-VI: Work Practice Standards
- C-VII: Additional Requirements
- C-VIII: Compliance Certification
- C-IX: Compliance Schedule

### Section D. Source Level State Only Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements
- D-VI: Work Practice Standards
- D-VII: Additional Requirements

Note: These same sub-sections are repeated for each source!

### Section E. Source Group Restrictions

- E-I: Restrictions



## **SECTION A. Table of Contents**

- E-II: Testing Requirements
- E-III: Monitoring Requirements
- E-IV: Recordkeeping Requirements
- E-V: Reporting Requirements
- E-VI: Work Practice Standards
- E-VII: Additional Requirements

### **Section F. Alternative Operating Scenario(s)**

- F-I: Restrictions
- F-II: Testing Requirements
- F-III: Monitoring Requirements
- F-IV: Recordkeeping Requirements
- F-V: Reporting Requirements
- F-VI: Work Practice Standards
- F-VII: Additional Requirements

### **Section G. Emission Restriction Summary**

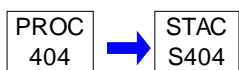
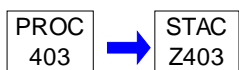
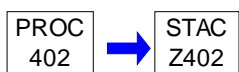
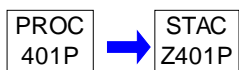
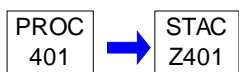
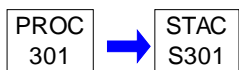
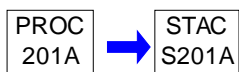
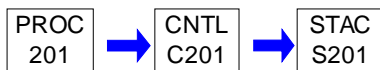
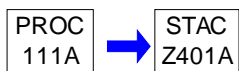
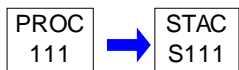
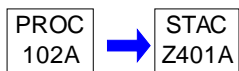
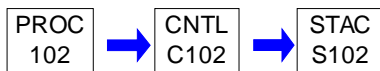
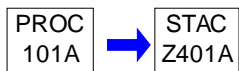
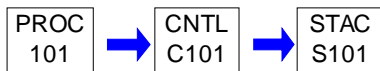
### **Section H. Miscellaneous**

**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput		Fuel/Material
101	5350 BHP, CAT G3616, COMPRESSOR ENGINE 1, SN ZZY00759	39.650	MMBTU/HR	Natural Gas
101A	RECIPROCATING COMPRESSOR 1			
102	5350 BHP CAT G3616 COMPRESSOR ENGINE 2, SN ZZY00774	39.650	MMBTU/HR	Natural Gas
102A	RECIPROCATING COMPRESSOR 2			
111	SOLAR TAURUS 70-10802S TURBINE 1, SN 1032B	79,234.000	CF/HR	Natural Gas
111A	CENTRIFUGAL COMPRESSOR 1			
201	DEHYDRATOR 1	2,083.000	CF/HR	NATURAL GAS
201A	DEHYDRATOR 1 REBOILER		N/A	
301	MICROTURBINE GENSETS (10)		N/A	Natural Gas
			N/A	
401	PIPING COMPONENTS		N/A	
401P	PRATT PIPING COMPONENTS		N/A	
402	STORAGE TANKS		N/A	
403	LIQUIDS LOADING			
404	PIG LAUNCHERS/RECEIVERS		N/A	
404B	BRADEN RUN PIG LAUNCHER/RECEIVER		N/A	Natural Gas
404P	PRATT PIG LAUNCHERS/RECEIVERS		N/A	
405	BLOWDOWNS		N/A	
501	FUEL GAS HEATERS	1,571.000	CF/HR	NATURAL GAS
501P	PRATT COMBUSTION UNITS		N/A	
C101	ENGINE 1 CATALYST			
C102	ENGINE 2 CATALYST			
C201	DEHYDRATOR 1 FLARE			
S101	ENGINE 1 STACK			
S102	ENGINE 2 STACK			
S111	TURBINE 1 STACK			
S201	DEHYDRATOR 1 FLARE STACK			
S201A	DEHYDRATOR 1 REBOILER STACK			
S301	MICROTURBINE GENSET STACKS (10)			
S404	PIG LAUNCHER/RECEIVER VENTS			
S404B	BRADEN RUN PIG LAUNCHER/RCVR VENT			
S404P	PRATT PIG LAUNCHER/RECEIVER VENTS			
S405	BLOWDOWN VENTS			
S501	FUEL GAS HEATER STACKS			
S501P	PRATT COMBUSTION UNIT STACKS			
Z401	PIPING COMPONENT FUGITIVES			
Z401A	COMPRESSOR FUGITIVES			
Z401P	PRATT PIPING COMPONENT FUGITIVES			
Z402	STORAGE TANK FUGITIVES			
Z403	LIQUIDS LOADING FUGITIVES			



## PERMIT MAPS



**PERMIT MAPS**

PROC  
404P → STAC  
S404P

PROC  
405 → STAC  
S405

PROC  
501 → STAC  
S501

PROC  
501P → STAC  
S501P

**SECTION B. General State Only Requirements****#001 [25 Pa. Code § 121.1]****Definitions.**

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and in 25 Pa. Code § 121.1.

**#002 [25 Pa. Code § 127.446]****Operating Permit Duration.**

- (a) This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit.
- (b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit.

**#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)]****Permit Renewal.**

- (a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.
- (b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.
- (c) The permittee shall submit with the renewal application a fee for the processing of the application as specified in 25 Pa. Code § 127.703(b). The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.
- (d) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413.
- (e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).
- (f) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

**#004 [25 Pa. Code § 127.703]****Operating Permit Fees under Subchapter I.**

- (a) The permittee shall pay the annual operating permit maintenance fee according to the following fee schedule in either paragraph (1) or (2) in accordance with 25 Pa. Code § 127.703(d) on or before December 31 of each year for the next calendar year.
- (1) For a synthetic minor facility, a fee equal to:
- (i) Four thousand dollars (\$4,000) for calendar years 2021—2025.
  - (ii) Five thousand dollars (\$5,000) for calendar years 2026—2030.
  - (iii) Six thousand three hundred dollars (\$6,300) for the calendar years beginning with 2031.

**SECTION B. General State Only Requirements**

(2) For a facility that is not a synthetic minor, a fee equal to:

- (i) Two thousand dollars (\$2,000) for calendar years 2021—2025.
- (ii) Two thousand five hundred dollars (\$2,500) for calendar years 2026—2030.
- (iii) Three thousand one hundred dollars (\$3,100) for the calendar years beginning with 2031.

(b) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

**#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]****Transfer of Operating Permits.**

(a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.

(b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and a written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee and a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.

(c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

**#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]****Inspection and Entry.**

(a) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Department or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, any facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

**#007 [25 Pa. Code §§ 127.441 & 127.444]****Compliance Requirements.**

(a) The permittee shall comply with the conditions of this operating permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one or more of the following:



**SECTION B. General State Only Requirements**

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source which is subject to 25 Pa. Code Article III unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued for the source is operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

**#008 [25 Pa. Code § 127.441]****Need to Halt or Reduce Activity Not a Defense.**

It shall not be a defense for the permittee in an enforcement action that it was necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**#009 [25 Pa. Code §§ 127.442(a) & 127.461]****Duty to Provide Information.**

(a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.

(b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

**#010 [25 Pa. Code § 127.461]****Revising an Operating Permit for Cause.**

This operating permit may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

- (1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.
- (2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.
- (3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.
- (4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

**#011 [25 Pa. Code §§ 127.450, 127.462, 127.465 & 127.703]****Operating Permit Modifications**

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and significant operating permit modifications, under this permit, as outlined below:

**SECTION B. General State Only Requirements**

(b) Administrative Amendments. The permittee shall submit the application for administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.

(c) Minor Operating Permit Modifications. The permittee shall submit the application for minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(d) Significant Operating Permit Modifications. The permittee shall submit the application for significant operating permit modifications in accordance with 25 Pa. Code § 127.465.

(e) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

**#012 [25 Pa. Code § 127.441]****Severability Clause.**

The provisions of this permit are severable, and if any provision of this permit is determined by a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

**#013 [25 Pa. Code § 127.449]****De Minimis Emission Increases.**

(a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

(b) The Department may disapprove or condition de minimis emission increases at any time.

(c) Except as provided below in (d), the permittee is authorized to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NO<sub>x</sub> from a single source during the term of the permit and 5 tons of NO<sub>x</sub> at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM<sub>10</sub> from a single source during the term of the permit and 3.0 tons of PM<sub>10</sub> at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act, the regulations thereunder or 25 Pa. Code Article III.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:

**SECTION B. General State Only Requirements**

- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
  - (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
  - (3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code §123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.
  - (4) Space heaters which heat by direct heat transfer.
  - (5) Laboratory equipment used exclusively for chemical or physical analysis.
  - (6) Other sources and classes of sources determined to be of minor significance by the Department.
- (e) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:
- (1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (c)(4) and (5) of this permit condition.
  - (2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.
  - (3) Violate any applicable requirement of this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.
- (f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.
- (g) Except for de minimis emission increases, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.
- (h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

**#014 [25 Pa. Code § 127.3]****Operational Flexibility.**

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with Federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)

**SECTION B. General State Only Requirements**

(6) Section 127.462 (relating to minor operating permit modifications)

(7) Subchapter H (relating to general plan approvals and general operating permits)

**#015 [25 Pa. Code § 127.11]****Reactivation**

(a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

**#016 [25 Pa. Code § 127.36]****Health Risk-based Emission Standards and Operating Practice Requirements.**

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

**#017 [25 Pa. Code § 121.9]****Circumvention.**

No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

**#018 [25 Pa. Code §§ 127.402(d) & 127.442]****Reporting Requirements.**

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager  
PA Department of Environmental Protection  
(At the address given in the permit transmittal letter, or otherwise notified)

(d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

(e) Any records, reports or information submitted to the Department shall be available to the public except for such

**SECTION B. General State Only Requirements**

records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

**#019 [25 Pa. Code §§ 127.441(c) & 135.5]****Sampling, Testing and Monitoring Procedures.**

(a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.

(b) Unless alternative methodology is required by the Clean Air Act and regulations adopted thereunder, sampling, testing and monitoring required by or used by the permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139.

**#020 [25 Pa. Code §§ 127.441(c) and 135.5]****Recordkeeping.**

(a) The permittee shall maintain and make available, upon request by the Department, the following records of monitored information:

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.
- (5) The results of the analyses.
- (6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of any required monitoring data and supporting information for at least five (5) years from the date of the monitoring, sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions.

**#021 [25 Pa. Code § 127.441(a)]****Property Rights.**

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

**#022 [25 Pa. Code § 127.447]****Alternative Operating Scenarios.**

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.

**SECTION B. General State Only Requirements****#023 [25 Pa. Code §135.3]****Reporting**

(a) If the facility is a Synthetic Minor Facility, the permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator of a Synthetic Minor Facility may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

**#024 [25 Pa. Code §135.4]****Report Format**

If applicable, the emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §121.7]****Prohibition of air pollution.**

No person may permit air pollution as that term is defined in the act.

**# 002 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

(a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

(1) Construction or demolition of buildings or structures.

(2) Grading, paving and maintenance of roads and streets.

(3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

(7) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.

(8) Coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in § § 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations).

(9) Sources and classes of sources other than those identified in paragraphs (1)-(8), for which the operator has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

(i) the emissions are of minor significance with respect to causing air pollution; and

(ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

(b) An application form for requesting a determination under either subsection (a)(9) or 129.15(c) is available from the Department. In reviewing these applications, the Department may require the applicant to supply information including, but not limited to, a description of proposed control measures, characteristics of emissions, quantity of emissions, and ambient air quality data and analysis showing the impact of the source on ambient air quality. The applicant shall be required to demonstrate that the requirements of subsections (a)(9) and (c) and 123.2 (relating to fugitive particulate matter) or of the requirements of 129.15(c) have been satisfied. Upon such demonstration, the Department will issue a determination, in writing, either as an operating permit condition, for those sources subject to permit requirements under the act, or as an order containing appropriate conditions and limitations.

(c) A person responsible for any source specified in subsections (a)(1) -- (7) or (9) shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

(1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.

(2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.

**SECTION C. Site Level Requirements**

(3) Paving and maintenance of roadways.

(4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

(d) The requirements contained in subsection (a) and 123.2 do not apply to fugitive emissions arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

**# 003 [25 Pa. Code §123.13]****Processes**

(a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

(b) Not applicable

(c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) .04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

(ii) The rate determined by the formula:

$$A = 6000/E$$

where:

A = Allowable emissions in grains per dry standard cubic foot, and

E = Effluent gas volume in dry standard cubic feet per minute,

when E is equal to or greater than 150,000 but less than 300,000.

(iii) .02 grain per dry standard cubic foot, when the effluent gas volume is greater than 300,000 dry standard cubic feet per minute.

(2) Allowable emissions. Allowable emissions under this subsection are graphically indicated in Appendix C.

(d) No person may permit the emission into the outdoor atmosphere of particulate matter from kraft and soda pulp mill smelt dissolving tanks in excess of .2 lb/ton black liquor solids -- dry basis.

**# 004 [25 Pa. Code §123.2]****Fugitive particulate matter**

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

**# 005 [25 Pa. Code §123.21]****General**

(a) This section applies to sources except those subject to other provisions of this article, with respect to the control of sulfur compound emissions.

(b) No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry



**SECTION C. Site Level Requirements**

basis.

Compliance with this limitation may be determined through fuel analysis records.

**# 006 [25 Pa. Code §123.31]****Limitations**

(a) Not applicable

(b) A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

(c) Not applicable

**# 007 [25 Pa. Code §123.42]****Exceptions**

The limitations of 123.41 (relating to limitations) shall not apply to a visible emission in any of the following instances:

(1) when the presence of uncombined water is the only reason for failure of the emission to meet the limitations.

(2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.

(3) When the emission results from sources specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).

(4) When arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall not allow the emission into the outdoor atmosphere of visible air contaminants from any source at the facility in such a manner that opacity thereof is equal to or greater than 10% at any time.

**# 009 [25 Pa. Code §129.14]****Open burning operations**

(a) Air basins. No person may permit the open burning of material in an air basin.

(b) Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:

(1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.

(2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.

(3) The emissions interfere with the reasonable enjoyment of life or property.

(4) The emissions cause damage to vegetation or property.

(5) The emissions are or may be deleterious to human or animal health.

**SECTION C. Site Level Requirements**

(c) Exceptions: The requirements of subsections (a) and (b) do not apply where the open burning operations result from:

(1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.

(2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.

(3) A fire set for the prevention and control of disease or pests, when approved by the Department.

(4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.

(5) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of such structure.

(6) A fire set solely for recreational or ceremonial purposes.

(7) A fire set solely for cooking food.

(d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:

(1) As used in this subsection the following terms shall have the following meanings:

Air curtain destructor -- A mechanical device which forcefully projects a curtain of air across a pit in which open burning is being conducted so that combustion efficiency is increased and smoke and other particulate matter are contained.

Clearing and grubbing wastes -- Trees, shrubs, and other native vegetation which are cleared from land during or prior to the process of construction. The term does not include demolition wastes and dirt laden roots.

(2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:

(i) Air curtain destructors shall be used when burning clearing and grubbing wastes.

(ii) Each proposed use of air curtain destructors shall be reviewed and approved by the Department in writing with respect to equipment arrangement, design and existing environmental conditions prior to commencement of burning. Proposals approved under this subparagraph need not obtain plan approval or operating permits under Chapter 127 (relating to construction modification, reactivation and operation of sources).

(iii) Approval for use of an air curtain destructor at one site may be granted for a specified period not to exceed 3 months, but may be extended for additional limited periods upon further approval by the Department.

(iv) The Department reserves the right to rescind approval granted if a determination by the Department indicates that an air pollution problem exists.

(3) Subsection (b) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:

(i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b) of this section.

(ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.

**SECTION C. Site Level Requirements**

(4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.

**II. TESTING REQUIREMENTS.****# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

If, at any time, the Department has cause to believe that air contaminant emissions from the sources listed in this operating permit may be in excess of the limitations specified in, or established pursuant to this plan approval, the permittee may be required to conduct emissions testing in accordance with the test methods and procedures deemed necessary by the Department to determine actual emissions rate(s). Such testing shall be conducted in accordance with the 25 Pa. Code Chapter 139, the most current version of the Department's Source Testing Manual, the applicable provisions 40 CFR Parts 60 and 63, and in accordance with any restrictions or limitations established by the Department at such time that notification of testing is provided.

**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Performance testing shall be conducted as follows:

- (a) The owner/operator shall submit one (1) electronic copy of a pre-test protocol to the Department for review at least 60 days prior to the performance of any EPA reference method stack test. The Owner/operator shall submit one (1) electronic copy of a one-time protocol to the Department for review for the use of a portable analyzer and may repeat portable analyzer testing without additional protocol approvals provided that the same method and equipment are used. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.
- (b) The owner/operator shall notify the Regional Air Quality Manager at least 15 days prior to any performance test so that an observer may be present at the time of the test. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- (c) One (1) electronic copy a complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program.
- (d) Pursuant to 25 Pa. Code §139.53(b) a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
  - (1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.
  - (2) Permit number(s) and condition(s) which are the basis for the evaluation.
  - (3) Summary of results with respect to each applicable permit condition.
  - (4) Statement of compliance or non-compliance with each applicable permit condition.
- (e) Pursuant to 25 Pa. Code §139.3 all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- (g) Electronic submittals shall be sent to RA-epstacktesting@pa.gov. Alternatively, electronic copies may be provided on a CD to the Pennsylvania Department of Environmental Protection, Air Quality Program, 400 Waterfront Drive, Pittsburgh, PA 15222 with deadlines verified through document postmarks.
- (h) The owner/operator shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are

**SECTION C. Site Level Requirements**

followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between state and the federal, the most stringent provision, term, condition, method or rule shall be used by default.

**III. MONITORING REQUIREMENTS.****# 012 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (1) A device approved by the Department and maintained to provide accurate opacity measurements.
- (2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

**# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

A facility-wide inspection shall be conducted at a minimum of once per day that the facility is visited by the Owner/Operator. The facility-wide inspection shall be conducted for the presence of the following:

1. Visible stack emissions;
2. Fugitive emissions; and
3. Potentially objectionable odors at the property line.

These observations are to ensure continued compliance with source-specific visible emission limitations, fugitive emissions prohibited under 25 Pa. Code § 123.1 or 25 Pa. Code § 123.2, and malodors prohibited under 25 Pa. Code §123.31. Observations for visible stack emissions shall be conducted during daylight hours and all observations shall be conducted while sources are in operation. If any visible stack emissions, fugitive emissions, or potentially objectionable odors are apparent, the Owner/Operator shall take corrective action. These observations determine whether, or not, these conditions exist. They do not quantify the level of existing conditions. Therefore, the observations for presence, or lack of, visible emissions do not require that they be performed by a person certified as a qualified observer for EPA Method 9 for Visual Determination of the Opacity of Emissions from Stationary Sources.

Equipment at the plant shall not operate in violation of 25 Pa. Code § 123.1 and 25 Pa. Code § 123.2.

**IV. RECORDKEEPING REQUIREMENTS.****# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain the following comprehensive and accurate records:

- (a) The number of hours per month that each turbine, engine, dehydrator, and microturbine operated.
- (b) The amount of fuel used per month by each turbine, engine, dehydrator, and microturbine.
- (c) Records including a description of testing methods, results, all engine operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for each engine.
- (d) Copies of any test report(s) that demonstrate that each engine was operating within 10 percent of 100 percent peak (or the highest achievable) load during performance testing.
- (e) Copies of any test report(s) that demonstrate that each turbine was operating within 25 percent of 100 percent peak (or the highest achievable) load during performance testing.
- (f) Copies of the manufacturer's recommended maintenance schedule for each engine, engine catalyst, and turbine.
- (g) Records of any maintenance conducted on each turbine, engine, catalyst, triethylene glycol dehydrator, and enclosed flare.
- (h) Actual average annual VOC and benzene emissions from each glycol dehydration unit process vent (defined as the glycol dehydration unit reboiler stack, the glycol regenerator still vent and the flash tank vent) using natural gas flow rate to the glycol dehydration unit, GRI-GLYCalc Version 3.0 or higher or equivalent process simulation software (Promax, Hysys, etc.), and the procedures presented in the associated Technical Reference Manual.
- (i) Monthly records of actual natural gas throughput and the average glycol circulation rate for the triethylene glycol

**SECTION C. Site Level Requirements**

dehydrator.

(j) Records of each equipment or pipeline (including pig receiver or launcher) blowdown at the facility including the purpose, date, time, and duration of the event; volume of gas vented; and calculated emissions of VOC, HAP, CH<sub>4</sub>, and CO<sub>2</sub>e.

(k) Records of annual produced water throughput for the produced water storage tank at the facility.

(l) Records of a fractional gas analysis performed at least once per year on the inlet natural gas to the facility.

(m) Records of facility-wide inspections including the date, time, name, and title of the observer, along with any corrective action taken as a result.

(n) Records of any leak detected and associated repair activity through the leak detection and repair or maintenance program.

(o) Records of total HAPs emissions maintained on a rolling 12-month basis.

**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

All logs and required records shall be maintained either on site, electronically, or at an alternative location acceptable to the Department, for a minimum of five (5) years and shall be made available to the Department upon request.

**# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall maintain a record of all visible stack emission, fugitive emission, and potentially objectionable odor surveys performed. The records shall include the date, time, name and title of the observer, whether stack emissions, fugitive emissions, or potentially objectionable odors were observed, and any corrective action. Records shall be kept on site for a minimum of 5 years and made available to the Department upon request.

**# 017 [25 Pa. Code §135.5]****Recordkeeping**

Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with §§ 135.3 and 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

**V. REPORTING REQUIREMENTS.****# 018 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Annual emissions reporting shall be conducted as follows:

(a) Submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

(b) Emissions data including, but not limited to the following, shall be reported: carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), particulate matter (PM), particulate matter less than 10 micrometers in diameter (PM<sub>10</sub>), particulate matter less than 2.5 micrometers in diameter (PM<sub>2.5</sub>), sulfur dioxide (SO<sub>2</sub>), volatile organic compounds (VOC), speciated hazardous air pollutants emitted in annual quantities in excess of 0.1 tons, and greenhouse gases expressed as CO<sub>2</sub>e. A description of the method(s) used to calculate the emissions and the time period over which the calculation is based shall be included. The statement shall also contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

(c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

**# 019 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A

**SECTION C. Site Level Requirements**

malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

1. name, permit or authorization number, and location of the facility,
2. nature and cause of the malfunction, emergency or incident,
3. date and time when the malfunction, emergency or incident was first observed,
4. expected duration of excess emissions,
5. estimated rate of emissions,
6. corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

**# 020 [25 Pa. Code §135.3]****Reporting**

(a) A person who owns or operates a source to which this chapter applies, and who has previously been advised by the Department to submit a source report, shall submit by March 1 of each year a source report for the preceding calendar year. The report shall include information for all previously reported sources, new sources which were first operated during the preceding calendar year and sources modified during the same period which were not previously reported.

(b) A person who receives initial notification by the Department that a source report is necessary shall submit an initial source report within 60 days after receiving the notification or by March 1 of the year following the year for which the report is required, whichever is later.

(c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause.

**SECTION C. Site Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 021 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall construct, operate, and maintain all air contamination sources and air cleaning devices authorized under this operating permit in accordance with the manufacturer's specifications and recommended maintenance schedules. Additionally, the permittee may not cause or permit the operation of an air contamination source in a manner inconsistent with good operating practices.

**VII. ADDITIONAL REQUIREMENTS.****# 022 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner/Operator shall provide written notice to the Department upon deactivation of any active air contamination source(s) at the Pratt Compressor Station. The notice shall:

- a. Identify the deactivated air contamination sources by make, model, and current Department permit number for operation;
- b. Include the date of deactivation; and
- c. Describe the method of deactivation.

**# 023 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

In accordance with 40 CFR §60.4 and §63.13, copies of all requests, reports, applications, submittals and other communications provided pursuant to 40 CFR Part 60 Subparts JJJJ, KKKK, and OOOOa shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted.

PA DEP  
Air Quality Program  
400 Waterfront Drive  
Pittsburgh, PA 15222-4745

United States Environmental Protection Agency  
Region III, Air and Radiation Division  
Permits Branch (3AD10)  
Four Penn Center  
1600 John F. Kennedy Boulevard  
Philadelphia, Pennsylvania 19103-2852

**# 024 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall comply with all applicable requirements of New Source Performance Standards under 40 CFR Part 60 Subparts JJJJ and OOOOa, and National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 Subpart ZZZZ.
- (b) The permittee shall comply with all applicable requirements specified in 40 CFR Part 98 related to the Mandatory Greenhouse Gas Reporting Rule.

**VIII. COMPLIANCE CERTIFICATION.**

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to State Only General Requirements).

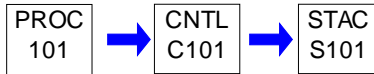
**IX. COMPLIANCE SCHEDULE.**

No compliance milestones exist.

**SECTION D. Source Level Requirements**

Source ID: 101                      Source Name: 5350 BHP, CAT G3616, COMPRESSOR ENGINE 1, SN ZZY00759  
 Source Capacity/Throughput:      39.650 MMBTU/HR      Natural Gas

Conditions for this source occur in the following groups: COMPRESSOR ENGINES  
 SUBPART JJJJ

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).



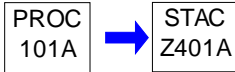
**SECTION D. Source Level Requirements**

Source ID: 101A

Source Name: RECIPROCATING COMPRESSOR 1

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SUBPART OOOOA

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

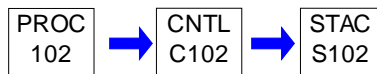
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

Source ID: 102

Source Name: 5350 BHP CAT G3616 COMPRESSOR ENGINE 2, SN ZZY00774

Source Capacity/Throughput: 39.650 MMBTU/HR Natural Gas

Conditions for this source occur in the following groups: COMPRESSOR ENGINES  
SUBPART JJJJ**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

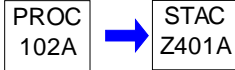
**SECTION D. Source Level Requirements**

Source ID: 102A

Source Name: RECIPROCATING COMPRESSOR 2

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SUBPART OOOOA

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

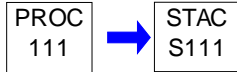
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

Source ID: 111

Source Name: SOLAR TAURUS 70-10802S TURBINE 1, SN 1032B

Source Capacity/Throughput: 79,234.000 CF/HR Natural Gas

Conditions for this source occur in the following groups: SUBPART KKKK  
TURBINE**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

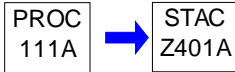
**SECTION D. Source Level Requirements**

Source ID: 111A

Source Name: CENTRIFUGAL COMPRESSOR 1

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SUBPART OOOOA

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

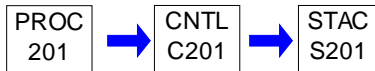
**SECTION D. Source Level Requirements**

Source ID: 201

Source Name: DEHYDRATOR 1

Source Capacity/Throughput: 2,083.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: DEHYDRATOR

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

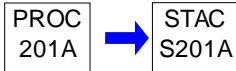
**SECTION D. Source Level Requirements**

Source ID: 201A

Source Name: DEHYDRATOR 1 REBOILER

Source Capacity/Throughput:

N/A

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**SECTION D. Source Level Requirements**

Source ID: 301

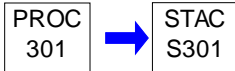
Source Name: MICROTURBINE GENSETS (10)

Source Capacity/Throughput:

N/A

Natural Gas

N/A

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).



**SECTION D. Source Level Requirements**

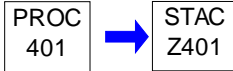
Source ID: 401

Source Name: PIPING COMPONENTS

Source Capacity/Throughput:

N/A

Conditions for this source occur in the following groups: SUBPART OOOOA

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

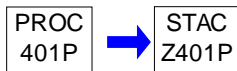
**SECTION D. Source Level Requirements**

Source ID: 401P

Source Name: PRATT PIPING COMPONENTS

Source Capacity/Throughput:

N/A

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**SECTION D. Source Level Requirements**

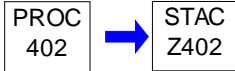
Source ID: 402

Source Name: STORAGE TANKS

Source Capacity/Throughput:

N/A

Conditions for this source occur in the following groups: SUBPART OOOOA

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

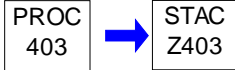
**SECTION D. Source Level Requirements**

Source ID: 403

Source Name: LIQUIDS LOADING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SUBPART OOOOA

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements**

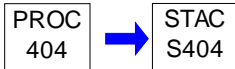
Source ID: 404

Source Name: PIG LAUNCHERS/RECEIVERS

Source Capacity/Throughput:

N/A

Conditions for this source occur in the following groups: SUBPART OOOOA

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

**VII. ADDITIONAL REQUIREMENTS.****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pigging equipment at Redhook Compressor Station includes:

GSF360 Launcher/Receiver, 12" nominal diameter, high pressure, to Jupiter IC  
 H316 Launcher/Receiver, 30" nominal diameter, high pressure, to Jefferson  
 H147/H148 Launcher/Receiver, 20" nominal diameter, high pressure, to Hartson CS  
 H137/H106 Launcher/Receiver, 16" nominal diameter, low pressure, to Blaine Gates  
 H158 Launcher/Receiver, 12" nominal diameter, high pressure, to Crayne Farm  
 M80 Launcher/Receiver, 6" nominal diameter, high pressure, to Crayne Farm

**SECTION D. Source Level Requirements**

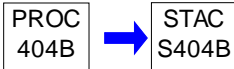
Source ID: 404B

Source Name: BRADEN RUN PIG LAUNCHER/RECEIVER

Source Capacity/Throughput:

N/A

Natural Gas

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pigging equipment at Braden Run Interconnect includes:

H305 Launcher/Receiver, 30" nominal diameter, high pressure, to Jupiter 3 IC

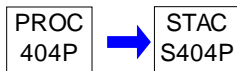
**SECTION D. Source Level Requirements**

Source ID: 404P

Source Name: PRATT PIG LAUNCHERS/RECEIVERS

Source Capacity/Throughput:

N/A

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pigging equipment at Pratt Compressor Station includes:

H117 Launcher/Receiver, 16" nominal diameter, high pressure, to Rhinehart IC  
 H147 Launcher/Receiver, 16" nominal diameter, high pressure, to Bayard GS  
 H148 Launcher/Receiver, 20" nominal diameter, high pressure, to Braden Run IC  
 D497 Launcher/Receiver, 12" nominal diameter, high pressure, to Hatfield

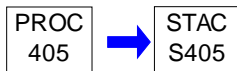
**SECTION D. Source Level Requirements**

Source ID: 405

Source Name: BLOWDOWNS

Source Capacity/Throughput:

N/A

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

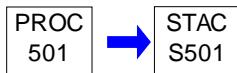


**SECTION D. Source Level Requirements**

Source ID: 501

Source Name: FUEL GAS HEATERS

Source Capacity/Throughput: 1,571.000 CF/HR NATURAL GAS

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

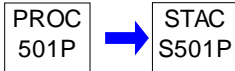
**SECTION D. Source Level Requirements**

Source ID: 501P

Source Name: PRATT COMBUSTION UNITS

Source Capacity/Throughput:

N/A

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**SECTION E. Source Group Restrictions.**

Group Name: COMPRESSOR ENGINES

Group Description: Engines 1-2

Sources included in this group

ID	Name
101	5350 BHP, CAT G3616, COMPRESSOR ENGINE 1, SN ZZY00759
102	5350 BHP CAT G3616 COMPRESSOR ENGINE 2, SN ZZY00774
C101	ENGINE 1 CATALYST
C102	ENGINE 2 CATALYST

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Emissions from each Caterpillar G3616 compressor engine (Source IDs 101-102) shall not exceed the following:

At rated bhp and speed:

- (a) NO<sub>x</sub> – 0.30 g/bhp-hr
- (b) CO – 0.17 g/bhp-hr
- (c) VOC – 0.17 g/bhp-hr\*
- (d) Formaldehyde – 0.03 g/bhp-hr\*\*

\* Based on U.S. EPA Reference Methods 18/25A or 25A/320 (or Department approved equivalent, does not include formaldehyde)

\*\* Based on U.S. EPA Reference Methods 320 or 328 (or Department approved equivalent)

**II. TESTING REQUIREMENTS.****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The owner/operator shall perform NO<sub>x</sub> emission tests on each Caterpillar G3616 compressor engine at the Facility according to the requirements of 40 CFR §§60.4243 and 60.4244, 63.6610, and 63.6620. Initial emission testing is required within one hundred eighty (180) days of startup of each compressor engine. EPA Method stack testing shall be conducted for the initial stack test and at a minimum of once every five years from the previous EPA Method test.
- (b) The owner/operator shall perform CO emission tests on each G3616 compressor engine at the Facility according to the requirements of 40 CFR §§60.4243 and 60.4244, 63.6610, and 63.6620. Initial emission testing is required within one hundred eighty (180) days of startup of each compressor engine. Portable analyzer testing according to ASTM Methods D6522-00 and D6348-03, or other methods included in Table 4 to Subpart ZZZZ of Part 63 are acceptable for subsequent testing semiannually or annually as applicable in accordance with 40 CFR §63.6615. EPA Method stack testing shall be conducted for the initial stack test and at a minimum of once every five years from the previous EPA Method test.
- (c) The owner/operator shall perform VOC emission tests on each Caterpillar G3616 compressor engine at the Facility according to the requirements of 40 CFR §§60.4243 and 60.4244. Initial emission testing is required within one hundred eighty (180) days of startup of each compressor engine. Subsequent testing shall be performed every 8,760 hours or 3 years, whichever comes first. EPA Method stack testing shall be conducted for the initial stack test and once every five years from the previous EPA Method test. Portable analyzer testing according to ASTM Methods D6522-00 and D6348-03, or other methods included in Table 2 to Subpart JJJJ of Part 60 are acceptable for intervening testing every 8,760 hours or 3 years.
- (d) The owner/operator shall perform formaldehyde emission tests on each Caterpillar G3616 compressor engine according to the requirements of 25 Pa. Code Chapter 139. Initial emission testing is required within 180 days of startup of each compressor engine. EPA Method stack testing shall be conducted for the initial stack test and once every five years from the previous EPA Method test.

**SECTION E. Source Group Restrictions.****III. MONITORING REQUIREMENTS.****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The owner/operator shall perform periodic monitoring for NO<sub>x</sub> and CO emissions on each Caterpillar G3616 compressor engine at the Facility. Periodic monitoring shall be performed every 2,500 hours of operation and no sooner than 45 days from the previous test. A Department-approved test that has been performed within 45 days prior to the scheduled periodic monitoring may be used in lieu of the periodic monitoring for that time period. A portable gas analyzer may be used to satisfy the requirements of this condition utilizing three 20-minute test runs. The Department may alter the frequency of portable analyzer tests based on the test results. If NO<sub>x</sub> and CO emission results from the most recently conducted EPA Method stack tests are less than or equal to 75% of the NO<sub>x</sub> and CO emission limit, frequency of the periodic monitoring may be reduced to once annually. The portable gas analyzer shall be used and maintained according to the manufacturer's specifications and the procedures specified in ASTM D 6522 or equivalent as approved by the Department. The Department may also waive all or parts of this requirement if the Owner/Operator demonstrates compliance, in lieu of testing, through alternate means satisfactory to the Department.

(b) The owner/operator shall submit results of periodic monitoring to the Department's Southwest Regional Office within thirty (30) calendar days after completion. The Department reserves the right to require source tests in accordance with EPA reference methods should the data from the portable analyzer warrant such tests.

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**SECTION E. Source Group Restrictions.**

Group Name: DEHYDRATOR

Group Description: Dehydrator

**Sources included in this group**

ID	Name
201	DEHYDRATOR 1
C201	DEHYDRATOR 1 FLARE

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) VOC emissions from the triethylene glycol dehydrator still vent and flash tank shall be captured and controlled by at least 98% by enclosed flare.

(b) The enclosed flare shall be operated at all times when the TEG dehydrator is operated.

(c) The owner or operator shall document daily visual observations of the continuous presence of a flame the enclosed flare. Alternatively, the owner or operator may equip the flare with a heat sensing monitoring device with a continuous recorder that indicates the continuous ignition of the pilot flame. The flare shall be designed and operated in accordance with the applicable requirements in 40 CFR §60.18.

**VII. ADDITIONAL REQUIREMENTS.****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

At all times the owner or operator must operate and maintain natural gas dehydration equipment, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

**SECTION E. Source Group Restrictions.**

Group Name: SUBPART JJJJ

Group Description: 40 CFR Subpart JJJJ Affected Facilities

Sources included in this group

ID	Name
101	5350 BHP, CAT G3616, COMPRESSOR ENGINE 1, SN ZZY00759
102	5350 BHP CAT G3616 COMPRESSOR ENGINE 2, SN ZZY00774
C101	ENGINE 1 CATALYST
C102	ENGINE 2 CATALYST

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?**

Pursuant to 40 CFR §60.4233(e), owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 of Subpart JJJJ for each stationary SI ICE.

**II. TESTING REQUIREMENTS.****# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?**

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f), as follows:

- (a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.
- (b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.
- (c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
- (d) To determine compliance with the NO<sub>x</sub> mass per unit output emission limitation, convert the concentration of NO<sub>x</sub> in the engine exhaust using Equation 1 of this section:

$$ER = (Cd * 1.912 * 10^{-3} * Q * T) / (HP-hr) \quad (\text{Eq. 1})$$

Where:

ER = Emission rate of NO<sub>x</sub> in g/HP-hrCd = Measured NO<sub>x</sub> concentration in parts per million by volume (ppmv).1.912×10<sup>-3</sup> = Conversion constant for ppm NO<sub>x</sub> to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

- (e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

**SECTION E. Source Group Restrictions.**

$$ER = (Cd * 1.164 * 10^{-3} * Q * T) / (HP-hr) \quad (\text{Eq. 2})$$

Where:

ER = Emission rate of CO in g/HP-hr.

Cd = Measured CO concentration in ppmv.

$1.164 \times 10^{-3}$  = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

$$ER = (Cd * 1.833 * 10^{-3} * Q * T) / (HP-hr) \quad (\text{Eq. 3})$$

Where:

ER = Emission rate of VOC in g/HP-hr.

Cd = VOC concentration measured as propane in ppmv.

$1.833 \times 10^{-3}$  = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

(g) If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = C_{Mi} / C_{Ai} \quad (\text{Eq. 4})$$

Where:

RF<sub>i</sub> = Response factor of compound i when measured with EPA Method 25A.

C<sub>Mi</sub> = Measured concentration of compound i in ppmv as carbon.

C<sub>Ai</sub> = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i * C_{imeas} \quad (\text{Eq. 5})$$

Where:

C<sub>icorr</sub> = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C<sub>imeas</sub> = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{peq} = 0.6098 * C_{icorr} \quad (\text{Eq. 6})$$

Where:

C<sub>peq</sub> = Concentration of compound i in mg of propane equivalent per DSCM.

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**SECTION E. Source Group Restrictions.****IV. RECORDKEEPING REQUIREMENTS.****# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?**

Pursuant to 40 CFR §60.4245, owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements:

(a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) as follows.

- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (2) Maintenance conducted on the engine.
- (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
- (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

(b) [Not applicable]

(c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.

- (1) Name and address of the owner or operator;
- (2) The address of the affected source;
- (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (4) Emission control equipment; and
- (5) Fuel used.

(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. Performance test reports using EPA Method 18, EPA Method 320, or ASTM D6348-03 (incorporated by reference—see 40 CFR 60.17) to measure VOC require reporting of all QA/QC data. For Method 18, report results from sections 8.4 and 11.1.1.4; for Method 320, report results from sections 8.6.2, 9.0, and 13.0; and for ASTM D6348-03 report results of all QA/QC procedures in Annexes 1-7.

(e) [Not applicable]

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.****# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?**

Pursuant to 40 CFR §60.4243(b), for each stationary SI internal combustion engine that must comply with the emission standards specified in §60.4233(e), you must demonstrate compliance according to §60.4243(b)(2), by:

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(e) and according to the requirements specified in §60.4244, as applicable, and according to the following:

(i) [Not applicable]

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a



**SECTION E. Source Group Restrictions.**

maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

**VII. ADDITIONAL REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Each Caterpillar G3616 natural gas-fired compressor engine (Source IDs 101-102) and associated control device (Source IDs C101-C102) is subject to and must meet the applicable requirements specified in 40 CFR Part 60 Subpart JJJJ--Standards of Performance for Stationary Spark Ignition Internal Combustion Engines in §§60.4230-60.4248. Definitions for terms utilized in Subpart JJJJ are specified in 40 CFR §60.4248.

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****Am I subject to this subpart?**

Pursuant to 40 CFR §60.4230(a), the provisions of this Subpart JJJJ are applicable to owners and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(4) and (a)(6), where for the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator:

(4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:

(i) On or after July 1, 2007, for engines with a maximum engine power greater than or equal to 500 HP (except lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP);

(ii) - (iv) [Not applicable]

(5) [Not applicable]

(6) The provisions of §60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.

**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]****Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines****How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?**

Pursuant to 40 CFR §60.4234, owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

**SECTION E. Source Group Restrictions.**

Group Name: SUBPART KKKK

Group Description: 40 CFR Subpart KKKK Affected Facilities

Sources included in this group

ID	Name
111	SOLAR TAURUS 70-10802S TURBINE 1, SN 1032B

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4320]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What emission limits must I meet for nitrogen oxides (NOX)?**

a) You must meet the emission limits for NOX specified in Table 1 to this subpart.

Table 1 excerpt:

Combustion turbine type: New turbine firing natural gas

Combustion turbine heat input at peak load (HHV): &gt; 50 MMBtu/h and &lt; or = to 850 MMBtu/h

NOx emission standard: 25 ppm at 15 percent O<sub>2</sub> or 150 ng/J of useful output (1.2 lb/MWh)

b) N/A

[Compliance with the BAT NO<sub>x</sub> limit of 15 ppmvd @ 15% O<sub>2</sub> ensures compliance with this requirement.]**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4330]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What emission limits must I meet for sulfur dioxide (SO<sub>2</sub>)?**

(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1), (a)(2), or (a)(3) of this section. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.

1) [Not applicable.]

2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement; or

3) [Not applicable.]

(b) [Not applicable.]

[Compliance with the FERC Tariff gas quality specifications ensures compliance with this requirement.]

**II. TESTING REQUIREMENTS.****# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4340]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I demonstrate continuous compliance for NOX if I do not use water or steam injection?**

(a) If you are not using water or steam injection to control NOX emissions, you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the NOX emission result from the performance test is less than or equal to 75 percent of the NOX emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOX emission limit for the turbine, you must resume annual performance tests.

(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:

(1) [Not applicable.]

**SECTION E. Source Group Restrictions.**

(2) Continuous parameter monitoring as follows:

- i. [Not applicable.]
- ii. For any lean premix stationary combustion turbine, you must continuously monitor the appropriate parameters to determine whether the unit is operating in low-NOX mode.
- iii. [Not applicable.]
- iv. [Not applicable.]

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4400]**

**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines**

**How do I conduct the initial and subsequent performance tests, regarding NOX ?**

(a) You must conduct an initial performance test, as required in §60.8. Subsequent NOX performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:

i. Measure the NOX concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the NOX emission rate:

$$E = 1.194 \times 10^{-7} \times (\text{NOX})_c \times Q_{\text{std}} / P \quad (\text{Eq. 5})$$

Where:

E = NOX emission rate, in lb/MWh

$1.194 \times 10^{-7}$  = conversion constant, in lb/dscf-ppm

(NOX)<sub>c</sub> = average NOX concentration for the run, in ppm

Q<sub>std</sub> = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

ii. Measure the NOX and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NOX emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NOX emission rate in lb/MWh.

2) Sampling traverse points for NOX and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:

i. You may perform a stratification test for NOX and diluent pursuant to

A. [Reserved], or

B. The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.

ii. Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:

**SECTION E. Source Group Restrictions.**

A. If each of the individual traverse point NOX concentrations is within  $\pm 10$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 5$  ppm or  $\pm 0.5$  percent CO<sub>2</sub> (or O<sub>2</sub>) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NOX concentration during the stratification test; or

B. For turbines with a NOX standard greater than 15 ppm @ 15% O<sub>2</sub>, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NOX concentrations is within  $\pm 5$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 3$  ppm or  $\pm 0.3$  percent CO<sub>2</sub> (or O<sub>2</sub>) from the mean for all traverse points; or

C. For turbines with a NOX standard less than or equal to 15 ppm @ 15% O<sub>2</sub>, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NOX concentrations is within  $\pm 2.5$  percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than  $\pm 1$  ppm or  $\pm 0.15$  percent CO<sub>2</sub> (or O<sub>2</sub>) from the mean for all traverse points.

(b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

(1) If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel.

(2) [Not applicable.]

(3) [Not applicable.]

(4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NOX emission rate at each tested level meets the applicable emission limit in §60.4320.

(5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit.

(6) The ambient temperature must be greater than 0 °F during the performance test.

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4405]**

**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines**

**How do I perform the initial performance test if I have chosen to install a NOX-diluent CEMS?**

If you elect to install and certify a NOX-diluent CEMS under §60.4345, then the initial performance test required under §60.8 may be performed in the following alternative manner:

(a) Perform a minimum of nine RATA reference method runs, with a minimum time per run of 21 minutes, at a single load level, within plus or minus 25 percent of 100 percent of peak load. The ambient temperature must be greater than 0 °F during the RATA runs.

(b) For each RATA run, concurrently measure the heat input to the unit using a fuel flow meter (or flow meters) and measure the electrical and thermal output from the unit.

(c) Use the test data both to demonstrate compliance with the applicable NOX emission limit under §60.4320 and to provide the required reference method data for the RATA of the CEMS described under §60.4335.

(d) Compliance with the applicable emission limit in §60.4320 is achieved if the arithmetic average of all of the NOX emission rates for the RATA runs, expressed in units of ppm or lb/MWh, does not exceed the emission limit.

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4415]**

**Subpart KKKK - Standards of Performance for Stationary Combustion Turbines**

**How do I conduct the initial and subsequent performance tests for sulfur?**

(a) You must conduct an initial performance test, as required in §60.8. Subsequent SO<sub>2</sub> performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.

**SECTION E. Source Group Restrictions.**

(1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see §60.17) for natural gas or ASTM D4177 (incorporated by reference, see §60.17) for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see §60.17). The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:

i. [Not applicable.]

ii. For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17).

(2) Measure the SO<sub>2</sub> concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of this part. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, "Flue and Exhaust Gas Analyses," manual methods for sulfur dioxide (incorporated by reference, see §60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then use the following equation to calculate the SO<sub>2</sub> emission rate:

$$E = 1.664 \times 10^{-7} \times (\text{SO}_2)_c \times \text{Qstd} / P \quad (\text{Eq. 6})$$

Where:

E = SO<sub>2</sub> emission rate, in lb/MWh

$1.664 \times 10^{-7}$  = conversion constant, in lb/dscf-ppm

(SO<sub>2</sub>)<sub>c</sub> = average SO<sub>2</sub> concentration for the run, in ppm

Qstd = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

(3) Measure the SO<sub>2</sub> and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in appendix A of this part. In addition, you may use the manual methods for sulfur dioxide ASME PTC 19-10-1981-Part 10 (incorporated by reference, see §60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the SO<sub>2</sub> emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the SO<sub>2</sub> emission rate in lb/MWh.

(b) [Reserved]

[Compliance with the FERC Tariff natural gas quality specifications ensures compliance with this requirement.]

**III. MONITORING REQUIREMENTS.****# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4360]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How do I determine the total sulfur content of the turbine's combustion fuel?**

You must monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used.

**SECTION E. Source Group Restrictions.**

[Pursuant to 40 CFR 60.4365(a), the FERC Tarriff gas quality specifications ensure compliance with this requirement.]

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4365]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How can I be exempted from monitoring the total sulfur content of the fuel?**

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for units located in continental areas and 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

- (a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for noncontinental areas; or
- (b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu) heat input for continental areas or 180 ng SO<sub>2</sub>/J (0.42 lb SO<sub>2</sub>/MMBtu) heat input for noncontinental areas. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

[Compliance with the FERC Tarriff gas quality specifications ensures compliance with this requirement.]

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4380]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****How are excess emissions and monitor downtime defined for NOX ?**

For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

- (a) [Not applicable.]
- (b) [Not applicable.]
- (c) For turbines required to monitor combustion parameters or parameters that document proper operation of the NOX emission controls:
  - (1) An excess emission is a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.
  - (2) A period of monitor downtime is a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.****# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4375]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What reports must I submit?**

- (a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel

**SECTION E. Source Group Restrictions.**

sulfur content under this subpart, you must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

(b) For each affected unit that performs annual performance tests in accordance with §60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4395]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****When must I submit my reports?**

All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

**VI. WORK PRACTICE REQUIREMENTS.****# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4333]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What are my general requirements for complying with this subpart?**

(a) You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction

(b) [Not applicable.]

**VII. ADDITIONAL REQUIREMENTS.****# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4305]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****Does this subpart apply to my stationary combustion turbine?**

The Solar Taurus 70 turbine (Source ID 111) under this operating permit is subject to applicable requirements of 40 CFR Part 60 Subpart KKKK – Standards of Performance for Stationary Combustion Turbines.

**# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4420]****Subpart KKKK - Standards of Performance for Stationary Combustion Turbines****What definitions apply to this subpart?**

All terms used in 40 CFR Part 60 Subpart KKKK shall have the meaning given in 40 CFR §60.4420 or else in the Clean Air Act and 40 CFR Part 60 Subpart A.

**SECTION E. Source Group Restrictions.**

Group Name: SUBPART OOOOA

Group Description: 40 CFR Part 60 Subpart OOOOa Affected Facilities

**Sources included in this group**

ID	Name
101A	RECIPROCATING COMPRESSOR 1
102A	RECIPROCATING COMPRESSOR 2
111A	CENTRIFUGAL COMPRESSOR 1
401	PIPING COMPONENTS
402	STORAGE TANKS
403	LIQUIDS LOADING
404	PIG LAUNCHERS/RECEIVERS

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

In order to not be classified as storage vessel affected facilities under 40 CFR Part 60 Subpart OOOOa, potential VOC emissions from each produced water storage vessel may not exceed 6 tpy in any consecutive 12-month period. The potential for VOC emissions must be calculated using a generally accepted model or calculation methodology based on the maximum average daily produced water throughput for a 30-day period of production after liquids first enter the storage vessel and verified annually.

**II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.**

No additional reporting requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

Pursuant to §60.5415a(c), for each reciprocating compressor affected facility complying with §60.5385a(a)(1) or (2), you must demonstrate continuous compliance according to paragraphs (c)(1) through (3) of this section. For each reciprocating compressor affected facility complying with §60.5385a(a)(3), you must demonstrate continuous compliance according to paragraph (c)(4) of this section.

(1) You must continuously monitor the number of hours of operation for each reciprocating compressor affected facility or track the number of months since initial startup or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.

(2) You must submit the annual reports as required in §60.5420a(b)(1) and (4) and maintain records as required in



**SECTION E. Source Group Restrictions.**

§60.5420a(c)(3).

(3) You must replace the reciprocating compressor rod packing on or before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.

(4) You must operate the rod packing emissions collection system under negative pressure and continuously comply with the cover and closed vent requirements in §60.5416a(a) and (b).

**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pursuant to 40 CFR §60.5410a(j), to achieve initial compliance with the fugitive emission standards for each collection of fugitive emissions components at a compressor station, you must comply with §60.5410a(j)(1) through (5), as follows:

(1) You must develop a fugitive emissions monitoring plan as required in §60.5397a(b)(c), and (d).

(2) You must conduct an initial monitoring survey as required in §60.5397a(f).

(3) You must maintain the records specified in §60.5420a(c)(15).

(4) You must repair each identified source of fugitive emissions for each affected facility as required in §60.5397a(h).

(5) You must submit the initial annual report for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station as required in §60.5420a(b)(1) and (7).

**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pursuant to 40 CFR §60.5414a(h), for each collection of fugitive emissions components at a compressor station, you must demonstrate continuous compliance with the fugitive emission standards specified in §60.5397a according to §60.5414a(h)(1) through (4), as follows:

(1) You must conduct periodic monitoring surveys as required in §60.5397a(g).

(2) You must repair or replace each identified source of fugitive emissions as required in §60.5397a(h).

(3) You must maintain records as specified in §60.5420a(c)(15).

(4) You must submit annual reports for collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station as required in §60.5420a(b)(1) and (7).

**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pursuant to §60.5385a, you must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with the standards in §60.5385a(a) through (d) for each reciprocating compressor affected facility.

(a) You must replace the reciprocating compressor rod packing according to either paragraph (a)(1) or (2) of this section, or you must comply with paragraph (a)(3) of this section.

(1) On or before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of your reciprocating compressor affected facility, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.

(2) Prior to 36 months from the date of the most recent rod packing replacement, or 36 months from the date of startup for a new reciprocating compressor for which the rod packing has not yet been replaced.

**SECTION E. Source Group Restrictions.**

(3) Collect the methane and VOC emissions from the rod packing using a rod packing emissions collection system that operates under negative pressure and route the rod packing emissions to a process through a closed vent system that meets the requirements of §60.5411a(a) and (d).

(b) You must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5410a(c).

(c) You must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5415a(c).

(d) You must perform the reporting as required by §60.5420a(b)(1) and (4) and the recordkeeping as required by §60.5420a(c)(3), (6) through (9), and (17), as applicable.

**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pursuant to 40 CFR §60.5397a, for each affected facility under §60.5365a(i) and (j), you must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with the requirements of §60.5397a(a) through (j), as applicable as follows:

(a) You must monitor all fugitive emission components, as defined in §60.5430a, in accordance with paragraphs (b) through (g) of this section. You must repair all sources of fugitive emissions in accordance with paragraph (h) of this section. You must keep records in accordance with paragraph (i) of this section and report in accordance with paragraph (j) of this section. For purposes of this section, fugitive emissions are defined as: Any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppm or greater using Method 21.

(b) You must develop an emissions monitoring plan that covers the collection of fugitive emissions components at well sites and compressor stations within each company-defined area in accordance with paragraphs (c) and (d) of this section.

(c) Fugitive emissions monitoring plans must include the elements specified in paragraphs (c)(1) through (8) of this section, at a minimum.

(1) Frequency for conducting surveys. Surveys must be conducted at least as frequently as required by paragraphs (f) and (g) of this section.

(2) Technique for determining fugitive emissions (i.e., Method 21 at 40 CFR part 60, appendix A-7, or optical gas imaging).

(3) Manufacturer and model number of fugitive emissions detection equipment to be used.

(4) Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected, including timeframes for fugitive emission components that are unsafe to repair. Your repair schedule must meet the requirements of paragraph (h) of this section at a minimum.

(5) Procedures and timeframes for verifying fugitive emission component repairs.

(6) Records that will be kept and the length of time records will be kept.

(7) If you are using optical gas imaging, your plan must also include the elements specified in paragraphs (c)(7)(i) through (vii) of this section.

(i) Verification that your optical gas imaging equipment meets the specifications of paragraphs (c)(7)(i)(A) and (B) of this section. This verification is an initial verification and may either be performed by the facility, by the manufacturer, or by a third party. For the purposes of complying with the fugitives emissions monitoring program with optical gas imaging, a fugitive emission is defined as any visible emissions observed using optical gas imaging.

(A) Your optical gas imaging equipment must be capable of imaging gases in the spectral range for the compound of

**SECTION E. Source Group Restrictions.**

highest concentration in the potential fugitive emissions.

(B) Your optical gas imaging equipment must be capable of imaging a gas that is half methane, half propane at a concentration of 10,000 ppm at a flow rate of =60g/hr from a quarter inch diameter orifice.

(ii) Procedure for a daily verification check.

(iii) Procedure for determining the operator's maximum viewing distance from the equipment and how the operator will ensure that this distance is maintained.

(iv) Procedure for determining maximum wind speed during which monitoring can be performed and how the operator will ensure monitoring occurs only at wind speeds below this threshold.

(v) Procedures for conducting surveys, including the items specified in paragraphs (c)(7)(v)(A) through (C) of this section.

(A) How the operator will ensure an adequate thermal background is present in order to view potential fugitive emissions.

(B) How the operator will deal with adverse monitoring conditions, such as wind.

(C) How the operator will deal with interferences (e.g., steam).

(vi) Training and experience needed prior to performing surveys.

(vii) Procedures for calibration and maintenance. At a minimum, procedures must comply with those recommended by the manufacturer.

(8) If you are using Method 21 of appendix A-7 of this part, your plan must also include the elements specified in paragraphs (c)(8)(i) and (ii) of this section. For the purposes of complying with the fugitive emissions monitoring program using Method 21 a fugitive emission is defined as an instrument reading of 500 ppm or greater.

(i) Verification that your monitoring equipment meets the requirements specified in Section 6.0 of Method 21 at 40 CFR part 60, appendix A-7. For purposes of instrument capability, the fugitive emissions definition shall be 500 ppm or greater methane using a FID-based instrument. If you wish to use an analyzer other than a FID-based instrument, you must develop a site-specific fugitive emission definition that would be equivalent to 500 ppm methane using a FID-based instrument (e.g., 10.6 eV PID with a specified isobutylene concentration as the fugitive emission definition would provide equivalent response to your compound of interest).

(ii) Procedures for conducting surveys. At a minimum, the procedures shall ensure that the surveys comply with the relevant sections of Method 21 at 40 CFR part 60, appendix A-7, including Section 8.3.1.

(d) Each fugitive emissions monitoring plan must include the elements specified in paragraphs (d)(1) through (4) of this section, at a minimum, as applicable.

(1) Sitemap.

(2) A defined observation path that ensures that all fugitive emissions components are within sight of the path. The observation path must account for interferences.

(3) If you are using Method 21, your plan must also include a list of fugitive emissions components to be monitored and method for determining location of fugitive emissions components to be monitored in the field (e.g. tagging, identification on a process and instrumentation diagram, etc.).

(4) Your plan must also include the written plan developed for all of the fugitive emission components designated as difficult-to-monitor in accordance with paragraph (g)(3)(i) of this section, and the written plan for fugitive emission components designated as unsafe-to-monitor in accordance with paragraph (g)(3)(ii) of this section.

**SECTION E. Source Group Restrictions.**

(e) Each monitoring survey shall observe each fugitive emissions component, as defined in §60.5430a, for fugitive emissions.

(f) (1) You must conduct an initial monitoring survey within 60 days of the startup of production, as defined in §60.5430a, for each collection of fugitive emissions components at a new well site or by June 3, 2017, whichever is later. For a modified collection of fugitive emissions components at a well site, the initial monitoring survey must be conducted within 60 days of the first day of production for each collection of fugitive emission components after the modification or by June 3, 2017, whichever is later.

(2) You must conduct an initial monitoring survey within 60 days of the startup of a new compressor station for each new collection of fugitive emissions components at the new compressor station or by June 3, 2017, whichever is later. For a modified collection of fugitive components at a compressor station, the initial monitoring survey must be conducted within 60 days of the modification or by June 3, 2017, whichever is later.

(g) A monitoring survey of each collection of fugitive emissions components at a well site or at a compressor station must be performed at the frequencies specified in paragraphs (g)(1) and (2) of this section, with the exceptions noted in paragraphs (g)(3) and (4) of this section.

(1) A monitoring survey of each collection of fugitive emissions components at a well site within a company-defined area must be conducted at least semiannually after the initial survey. Consecutive semiannual monitoring surveys must be conducted at least 4 months apart.

(2) A monitoring survey of the collection of fugitive emissions components at a compressor station within a company-defined area must be conducted at least quarterly after the initial survey. Consecutive quarterly monitoring surveys must be conducted at least 60 days apart.

(3) Fugitive emissions components that cannot be monitored without elevating the monitoring personnel more than 2 meters above the surface may be designated as difficult-to-monitor. Fugitive emissions components that are designated difficult-to-monitor must meet the specifications of paragraphs (g)(3)(i) through (iv) of this section.

(i) A written plan must be developed for all of the fugitive emissions components designated difficult-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs (b), (c), and (d) of this section.

(ii) The plan must include the identification and location of each fugitive emissions component designated as difficult-to-monitor.

(iii) The plan must include an explanation of why each fugitive emissions component designated as difficult-to-monitor is difficult-to-monitor.

(iv) The plan must include a schedule for monitoring the difficult-to-monitor fugitive emissions components at least once per calendar year.

(4) Fugitive emissions components that cannot be monitored because monitoring personnel would be exposed to immediate danger while conducting a monitoring survey may be designated as unsafe-to-monitor. Fugitive emissions components that are designated unsafe-to-monitor must meet the specifications of paragraphs (g)(4)(i) through (iv) of this section.

(i) A written plan must be developed for all of the fugitive emissions components designated unsafe-to-monitor. This written plan must be incorporated into the fugitive emissions monitoring plan required by paragraphs (b), (c), and (d) of this section.

(ii) The plan must include the identification and location of each fugitive emissions component designated as unsafe-to-monitor.

(iii) The plan must include an explanation of why each fugitive emissions component designated as unsafe-to-monitor is unsafe-to-monitor.

**SECTION E. Source Group Restrictions.**

(iv) The plan must include a schedule for monitoring the fugitive emissions components designated as unsafe-to-monitor.

(5) The requirements of paragraph (g)(2) of this section are waived for any collection of fugitive emissions components at a compressor station located within an area that has an average calendar month temperature below 0°Fahrenheit for two of three consecutive calendar months of a quarterly monitoring period. The calendar month temperature average for each month within the quarterly monitoring period must be determined using historical monthly average temperatures over the previous three years as reported by a National Oceanic and Atmospheric Administration source or other source approved by the Administrator. The requirements of paragraph (g)(2) of this section shall not be waived for two consecutive quarterly monitoring periods.

(h) Each identified source of fugitive emissions shall be repaired or replaced in accordance with paragraphs (h)(1) and (2) of this section. For fugitive emissions components also subject to the repair provisions of §§60.5416a(b)(9) through (12) and (c)(4) through (7), those provisions apply instead to those closed vent system and covers, and the repair provisions of paragraphs (h)(1) and (2) of this section do not apply to those closed vent systems and covers.

(1) Each identified source of fugitive emissions shall be repaired or replaced as soon as practicable, but no later than 30 calendar days after detection of the fugitive emissions.

(2) If the repair or replacement is technically infeasible, would require a vent blowdown, a compressor station shutdown, a well shutdown or well shut-in, or would be unsafe to repair during operation of the unit, the repair or replacement must be completed during the next compressor station shutdown, well shutdown, well shut-in, after an unscheduled, planned or emergency vent blowdown or within 2 years, whichever is earlier.

(3) Each repaired or replaced fugitive emissions component must be resurveyed as soon as practicable, but no later than 30 days after being repaired, to ensure that there are no fugitive emissions.

(i) For repairs that cannot be made during the monitoring survey when the fugitive emissions are initially found, the operator may resurvey the repaired fugitive emissions components using either Method 21 or optical gas imaging within 30 days of finding such fugitive emissions.

(ii) For each repair that cannot be made during the monitoring survey when the fugitive emissions are initially found, a digital photograph must be taken of that component or the component must be tagged for identification purposes. The digital photograph must include the date that the photograph was taken, must clearly identify the component by location within the site (e.g., the latitude and longitude of the component or by other descriptive landmarks visible in the picture).

(iii) Operators that use Method 21 to resurvey the repaired fugitive emissions components are subject to the resurvey provisions specified in paragraphs (h)(3)(iii)(A) and (B) of this section.

(A) A fugitive emissions component is repaired when the Method 21 instrument indicates a concentration of less than 500 ppm above background or when no soap bubbles are observed when the alternative screening procedures specified in section 8.3.3 of Method 21 are used.

(B) Operators must use the Method 21 monitoring requirements specified in paragraph (c)(8)(ii) of this section or the alternative screening procedures specified in section 8.3.3 of Method 21.

(iv) Operators that use optical gas imaging to resurvey the repaired fugitive emissions components, are subject to the resurvey provisions specified in paragraphs (h)(3)(iv)(A) and (B) of this section.

(A) A fugitive emissions component is repaired when the optical gas imaging instrument shows no indication of visible emissions.

(B) Operators must use the optical gas imaging monitoring requirements specified in paragraph (c)(7) of this section.

(i) Records for each monitoring survey shall be maintained as specified §60.5420a(c)(15).

**SECTION E. Source Group Restrictions.**

(j) Annual reports shall be submitted for each collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station that include the information specified in §60.5420a(b)(7). Multiple collection of fugitive emissions components at a well site or at a compressor station may be included in a single annual report.

**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pursuant to §60.5410a(c), to achieve initial compliance with the standards for each reciprocating compressor affected facility you must comply with §60.5410a(c), items (1) through (4), as follows:

- (1) If complying with §60.5385a(a)(1) or (2), during the initial compliance period, you must continuously monitor the number of hours of operation or track the number of months since the last rod packing replacement.
- (2) If complying with §60.5385a(a)(3), you must operate the rod packing emissions collection system under negative pressure and route emissions to a process through a closed vent system that meets the requirements of §60.5411a(a) and (d).
- (3) You must submit the initial annual report for your reciprocating compressor as required in §60.5420a(b)(1) and (4).
- (4) You must maintain the records as specified in §60.5420a(c)(3) for each reciprocating compressor affected facility.

**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pursuant to 40 CFR §60.5415a(h), for each collection of fugitive emissions components at a compressor station, you must demonstrate continuous compliance with the fugitive emission standards specified in §60.5397a according to paragraphs (1) through (4), as follows:

- (1) You must conduct periodic monitoring surveys as required in §60.5397a(g).
- (2) You must repair or replace each identified source of fugitive emissions as required in §60.5397a(h).
- (3) You must maintain records as specified in §60.5420a(c)(15).
- (4) You must submit annual reports for collection of fugitive emissions components at a well site and each collection of fugitive emissions components at a compressor station as required in §60.5420a(b)(1) and (7).

**VII. ADDITIONAL REQUIREMENTS.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Pursuant to 40 CFR §60.5420a, you are subject to the following notification, reporting, and recordkeeping requirements.

- (a) [Not applicable.]
- (b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (8) and (12) of this section and performance test reports as specified in paragraph (b)(9) or (10) of this section, if applicable. You must submit annual reports following the procedure specified in paragraph (b)(11) of this section. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to §60.5410a. Subsequent annual reports are due no later than same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (8) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period.
  - (1) The general information specified in paragraphs (b)(1)(i) through (iv) of this section for all reports.

**SECTION E. Source Group Restrictions.**

(i) The company name, facility site name associated with the affected facility, US Well ID or US Well ID associated with the affected facility, if applicable, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.

(ii) An identification of each affected facility being included in the annual report.

(iii) Beginning and ending dates of the reporting period.

(iv) A certification by a certifying official of truth, accuracy, and completeness. 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.

(2) [Not applicable.]

(3) [Not applicable.]

(4) For each reciprocating compressor affected facility, the information specified in paragraphs (b)(4)(i) and (ii) of this section.

(i) The cumulative number of hours of operation or the number of months since initial startup or since the previous reciprocating compressor rod packing replacement, whichever is later. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.

(ii) Records of deviations specified in paragraph (c)(3)(iii) of this section that occurred during the reporting period.

(5) [Not applicable.]

(6) [Not applicable.]

(7) For the collection of fugitive emissions components at each compressor station within the company-defined area, the records of each monitoring survey including the information specified in paragraphs (b)(7)(i) through (xii) of this section. For the collection of fugitive emissions components at a compressor station, if a monitoring survey is waived under §60.5397a(g)(5), you must include in your annual report the fact that a monitoring survey was waived and the calendar months that make up the quarterly monitoring period for which the monitoring survey was waived.

(i) Date of the survey.

(ii) Beginning and end time of the survey.

(iii) Name of operator(s) performing survey. If the survey is performed by optical gas imaging, you must note the training and experience of the operator.

(iv) Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.

(v) Monitoring instrument used.

(vi) Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.

(vii) Number and type of components for which fugitive emissions were detected.

(viii) Number and type of fugitive emissions components that were not repaired as required in §60.5397a(h).

(ix) Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored.

(x) The date of successful repair of the fugitive emissions component.

**SECTION E. Source Group Restrictions.**

(xi) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair.

(xii) Type of instrument used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

(8) [Not applicable.]

(9) Within 60 days after the date of completing each performance test (see §60.8) required by this subpart, except testing conducted by the manufacturer as specified in §60.5413a(d), you must submit the results of the performance test following the procedure specified in either paragraph (b)(9)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site ([https://www3.epa.gov/ttn/chief/ert/ert\\_info.html](https://www3.epa.gov/ttn/chief/ert/ert_info.html)) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph.

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §60.4.

(10) [Not applicable.]

(11) You must submit reports to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX (<https://cdx.epa.gov/>.) You must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI Web site (<https://www3.epa.gov/ttn/chief/cedri/>). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in §60.4. Once the form has been available in CEDRI for at least 90 calendar days, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted.

(12) You must submit the certification signed by the qualified professional engineer according to §60.5411a(d) for each closed vent system routing to a control device or process.

(c) Recordkeeping requirements. You must maintain the records identified as specified in §60.7(f) and in paragraphs (c)(1) through (16) of this section. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.

(1) [Not applicable.]

(2) [Not applicable.]

(3) For each reciprocating compressor affected facility, you must maintain the records in paragraphs (c)(3)(i) through (iii) of this section.

(i) Records of the cumulative number of hours of operation or number of months since initial startup or the previous



**SECTION E. Source Group Restrictions.**

replacement of the reciprocating compressor rod packing, whichever is later. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.

(ii) Records of the date and time of each reciprocating compressor rod packing replacement, or date of installation of a rod packing emissions collection system and closed vent system as specified in §60.5385a(a)(3).

(iii) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in §60.5385a.

(4) - (14) [Not applicable.]

(15) For each collection of fugitive emissions components at a compressor station, the records identified in paragraphs (c)(15)(i) through (iii) of this section.

(i) The fugitive emissions monitoring plan as required in §60.5397a(b), (c), and (d).

(ii) The records of each monitoring survey as specified in paragraphs (c)(15)(ii)(A) through (I) of this section.

(A) Date of the survey.

(B) Beginning and end time of the survey.

(C) Name of operator(s) performing survey. You must note the training and experience of the operator.

(D) Monitoring instrument used.

(E) When optical gas imaging is used to perform the survey, one or more digital photographs or videos, captured from the optical gas imaging instrument used for conduct of monitoring, of each required monitoring survey being performed. The digital photograph must include the date the photograph was taken and the latitude and longitude of the collection of fugitive emissions components at a well site or collection of fugitive emissions components at a compressor station imbedded within or stored with the digital file. As an alternative to imbedded latitude and longitude within the digital file, the digital photograph or video may consist of an image of the monitoring survey being performed with a separately operating GPS device within the same digital picture or video, provided the latitude and longitude output of the GPS unit can be clearly read in the digital image.

(F) Fugitive emissions component identification when Method 21 is used to perform the monitoring survey.

(G) Ambient temperature, sky conditions, and maximum wind speed at the time of the survey.

(H) Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.

(I) Documentation of each fugitive emission, including the information specified in paragraphs (c)(15)(ii)(I)(1) through (12) of this section.

(1) Location.

(2) Any deviations from the monitoring plan or a statement that there were no deviations from the monitoring plan.

(3) Number and type of components for which fugitive emissions were detected.

(4) Number and type of difficult-to-monitor and unsafe-to-monitor fugitive emission components monitored.

(5) Instrument reading of each fugitive emissions component that requires repair when Method 21 is used for monitoring.

(6) Number and type of fugitive emissions components that were not repaired as required in §60.5397a(h).

**SECTION E. Source Group Restrictions.**

(7) Number and type of components that were tagged as a result of not being repaired during the monitoring survey when the fugitive emissions were initially found as required in §60.5397a(h)(3)(ii).

(8) If a fugitive emissions component is not tagged, a digital photograph or video of each fugitive emissions component that could not be repaired during the monitoring survey when the fugitive emissions were initially found as required in §60.5397a(h)(3)(ii). The digital photograph or video must clearly identify the location of the component that must be repaired. Any digital photograph or video required under this paragraph can also be used to meet the requirements under paragraph (c)(15)(ii)(E) of this section, as long as the photograph or video is taken with the optical gas imaging instrument, includes the date and the latitude and longitude are either imbedded or visible in the picture.

(9) Repair methods applied in each attempt to repair the fugitive emissions components.

(10) Number and type of fugitive emission components placed on delay of repair and explanation for each delay of repair.

(11) The date of successful repair of the fugitive emissions component.

(12) Instrumentation used to resurvey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

(iii) For the collection of fugitive emissions components at a compressor station, if a monitoring survey is waived under §60.5397a(g)(5), you must maintain records of the average calendar month temperature, including the source of the information, for each calendar month of the quarterly monitoring period for which the monitoring survey was waived.

(16) [Not applicable.]

(17) [Not applicable.]

**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

As used in Subpart OOOOa, pursuant to §60.5430a, all terms not defined herein shall have the meaning given them in the Act, in subpart A or subpart VVa of part 60; and the following terms shall have the specific meanings given them:

API Gravity means the weight per unit volume of hydrocarbon liquids as measured by a system recommended by the American Petroleum Institute (API) and is expressed in degrees.

Capital expenditure means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation:  $P = R \times A$ , where:

(1) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation:

$$A = Y \times (B \div 100);$$

(2) The percent Y is determined from the following equation:  $Y = 1.0 - 0.575 \log x$ , where x is 2011 minus the year of construction; and

(3) The applicable basic annual asset guideline repair allowance, B, is 4.5.

Centrifugal compressor means any machine for raising the pressure of a natural gas by drawing in low pressure natural gas and discharging significantly higher pressure natural gas by means of mechanical rotating vanes or impellers. Screw, sliding vane, and liquid ring compressors are not centrifugal compressors for the purposes of this subpart.

Certifying official means one of the following:

(1) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a

**SECTION E. Source Group Restrictions.**

duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:

(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or

(ii) The Administrator is notified of such delegation of authority prior to the exercise of that authority. The Administrator reserves the right to evaluate such delegation;

(2) For a partnership (including but not limited to general partnerships, limited partnerships, and limited liability partnerships) or sole proprietorship: A general partner or the proprietor, respectively. If a general partner is a corporation, the provisions of paragraph (1) of this definition apply;

(3) [Not applicable]; or

(4) For affected facilities:

(i) The designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; or

(ii) The designated representative for any other purposes under part 60.

Collection system means any infrastructure that conveys gas or liquids from the well site to another location for treatment, storage, processing, recycling, disposal or other handling.

Compressor station means any permanent combination of one or more compressors that move natural gas at increased pressure through gathering or transmission pipelines, or into or out of storage. This includes, but is not limited to, gathering and boosting stations and transmission compressor stations. The combination of one or more compressors located at a well site, or located at an onshore natural gas processing plant, is not a compressor station for purposes of §60.5397a.

Condensate means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature, pressure, or both, and remains liquid at standard conditions.

Crude oil and natural gas source category means:

(1) [Not applicable]; and

(2) Natural gas production, processing, transmission, and storage, which include the well and extend to, but do not include, the local distribution company custody transfer station.

Custody transfer means the transfer of crude oil or natural gas after processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation.

Dehydrator means a device in which an absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber).

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

**SECTION E. Source Group Restrictions.**

Equipment, as used in the standards and requirements in this subpart relative to the equipment leaks of GHG (in the form of methane) and VOC from onshore natural gas processing plants, means each pump, pressure relief device, open-ended valve or line, valve, and flange or other connector that is in VOC service or in wet gas service, and any device or system required by those same standards and requirements in this subpart.

Field gas means feedstock gas entering the natural gas processing plant.

Field gas gathering means the system used transport field gas from a field to the main pipeline in the area.

Flow line means a pipeline used to transport oil and/or gas to a processing facility or a mainline pipeline.

Fugitive emissions component means any component that has the potential to emit fugitive emissions of methane or VOC at a well site or compressor station, including but not limited to valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems not subject to §60.5411a, thief hatches or other openings on a controlled storage vessel not subject to §60.5395a, compressors, instruments, and meters. Devices that vent as part of normal operations, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions components, insofar as the natural gas discharged from the device's vent is not considered a fugitive emission. Emissions originating from other than the vent, such as the thief hatch on a controlled storage vessel, would be considered fugitive emissions.

Gas processing plant process unit means equipment assembled for the extraction of natural gas liquids from field gas, the fractionation of the liquids into natural gas products, or other operations associated with the processing of natural gas products. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the products.

Gas to oil ratio (GOR) means the ratio of the volume of gas at standard temperature and pressure that is produced from a volume of oil when depressurized to standard temperature and pressure.

Greenfield site means a site, other than a natural gas processing plant, which is entirely new construction. Natural gas processing plants are not considered to be greenfield sites, even if they are entirely new construction.

In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in §60.485a(e) or §60.5401a(f)(2).

Intermediate hydrocarbon liquid means any naturally occurring, unrefined petroleum liquid.

Intermittent/snap-action pneumatic controller means a pneumatic controller that is designed to vent non-continuously.

Local distribution company (LDC) custody transfer station means a metering station where the LDC receives a natural gas supply from an upstream supplier, which may be an interstate transmission pipeline or a local natural gas producer, for delivery to customers through the LDC's intrastate transmission or distribution lines.

Maximum average daily throughput means the earliest calculation of daily average throughput during the 30-day PTE evaluation period employing generally accepted methods.

Natural gas-driven diaphragm pump means a positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid. A pump in which a fluid is displaced by a piston driven by a diaphragm is not considered a diaphragm pump for purposes of this subpart. A lean glycol circulation pump that relies on energy exchange with the rich glycol from the contactor is not considered a diaphragm pump.

Natural gas liquids means the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas.

Natural gas processing plant (gas plant) means any processing site engaged in the extraction of natural gas liquids from field gas, fractionation of mixed natural gas liquids to natural gas products, or both. A Joule-Thompson valve, a dew point depression valve, or an isolated or standalone Joule-Thompson skid is not a natural gas processing plant.

**SECTION E. Source Group Restrictions.**

Natural gas transmission means the pipelines used for the long distance transport of natural gas (excluding processing). Specific equipment used in natural gas transmission includes the land, mains, valves, meters, boosters, regulators, storage vessels, dehydrators, compressors, and their driving units and appurtenances, and equipment used for transporting gas from a production plant, delivery point of purchased gas, gathering system, storage area, or other wholesale source of gas to one or more distribution area(s).

Nonfractionating plant means any gas plant that does not fractionate mixed natural gas liquids into natural gas products.

Non-natural gas-driven pneumatic controller means an instrument that is actuated using other sources of power than pressurized natural gas; examples include solar, electric, and instrument air.

Onshore means all facilities except those that are located in the territorial seas or on the outer continental shelf.

Pneumatic controller means an automated instrument used for maintaining a process condition such as liquid level, pressure, delta-pressure and temperature.

Pressure vessel means a storage vessel that is used to store liquids or gases and is designed not to vent to the atmosphere as a result of compression of the vapor headspace in the pressure vessel during filling of the pressure vessel to its design capacity.

Produced water means water that is extracted from the earth from an oil or natural gas production well, or that is separated from crude oil, condensate, or natural gas after extraction.

Qualified Professional Engineer means an individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the specific technical certifications required under this subpart. Professional engineers making these certifications must be currently licensed in at least one state in which the certifying official is located.

Reciprocating compressor means a piece of equipment that increases the pressure of a process gas by positive displacement, employing linear movement of the driveshaft.

Reciprocating compressor rod packing means a series of flexible rings in machined metal cups that fit around the reciprocating compressor piston rod to create a seal limiting the amount of compressed natural gas that escapes to the atmosphere, or other mechanism that provides the same function.

Removed from service means that a storage vessel affected facility has been physically isolated and disconnected from the process for a purpose other than maintenance in accordance with §60.5395a(c)(1).

Returned to service means that a storage vessel affected facility that was removed from service has been:

- (1) Reconnected to the original source of liquids or has been used to replace any storage vessel affected facility; or
- (2) Installed in any location covered by this subpart and introduced with crude oil, condensate, intermediate hydrocarbon liquids or produced water.

Routed to a process or route to a process means the emissions are conveyed via a closed vent system to any enclosed portion of a process that is operational where the emissions are predominantly recycled and/or consumed in the same manner as a material that fulfills the same function in the process and/or transformed by chemical reaction into materials that are not regulated materials and/or incorporated into a product; and/or recovered.

Salable quality gas means natural gas that meets the flow line or collection system operator specifications, regardless of whether such gas is sold.

Storage vessel means a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, and that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support. A well completion vessel that receives recovered liquids from a well after startup of production following flowback for a period which exceeds 60 days is considered a storage vessel under

**SECTION E. Source Group Restrictions.**

this subpart. A tank or other vessel shall not be considered a storage vessel if it has been removed from service in accordance with the requirements of §60.5395a(c)(1) until such time as such tank or other vessel has been returned to service. For the purposes of this subpart, the following are not considered storage vessels:

(1) Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If you do not keep or are not able to produce records, as required by §60.5420a(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel from the date the original vessel was first located at the site. This exclusion does not apply to a well completion vessel as described above.

(2) Process vessels such as surge control vessels, bottoms receivers or knockout vessels.

(3) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Underground storage vessel means a storage vessel stored below ground.

**# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Each affected facility identified in §60.5365a and operated under this operating permit is subject to and must comply with each applicable requirement specified in 40 CFR Part 60 Subpart OOOOa—Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015.

**SECTION E. Source Group Restrictions.**

Group Name: TURBINE

Group Description: Turbine

Sources included in this group

ID	Name
111	SOLAR TAURUS 70-10802S TURBINE 1, SN 1032B

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Emission rates from the Solar Taurus 70 turbine (Source ID 111) shall be limited as follows:

Air Contaminant	Operating Condition	Emission Rate
NOx	Normal	15 ppmvd @ 15% O2
	Normal	5.03 lb/hr
	All	22.02 tpy
Compliance Method: U.S. EPA Reference Method 7E		
CO	Normal	10 ppmvd @ 15% O2
	Normal	2.04 lb/hr
	All	9.93 tpy
Compliance Method: U.S. EPA Reference Method 10.		
VOC	Normal	5 ppmvd @ 15% O2
	Normal	0.58 lb/hr
	All	2.58 tpy
Compliance Method: U.S. EPA Reference Methods 18/25A or 25A/320 (or Agency approved equivalent, does not include formaldehyde)		
Total PM (filterable + condensable)	Normal	1.62 lb/hr
	All	7.08 tpy
Compliance Method: U.S. EPA Reference Methods 201/201A or equivalent and Method 202.		

For purposes of this condition, the "normal" operating scenario is when the turbine is operating in SoLoNOx mode (excludes startup, shutdown, and low temperature operation). "Startup" is defined as beginning when air contaminants begin to be emitted to the atmosphere and ending when SoLoNOx mode begins, and shall have duration no greater than 10 minutes. "Shutdown" is defined as beginning when the turbine exits SoLoNOx mode and ending when contaminants are no longer being emitted to the atmosphere, and shall have duration no greater than 10 minutes. "Low temperature operation" is when the unit is operated at less than 0°F (inlet combustion air temperature).

**II. TESTING REQUIREMENTS.****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner/Operator shall perform NOx, CO, VOC, Total Particulate Matter (filterable + condensable), and formaldehyde emission testing upon the Solar Taurus 70 turbine (Source ID 111) at the facility according to the requirements of 25 Pa. Code Chapter 139. Initial performance testing is required within 180 days of startup of each turbine. Subsequent NOx, CO and VOC performance testing shall be conducted no less often than once every two years thereafter. Each performance test shall be conducted using EPA Method stack testing.

**SECTION E. Source Group Restrictions.****III. MONITORING REQUIREMENTS.****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner/Operator shall perform periodic monitoring for NO<sub>x</sub> and CO emissions from the Solar Taurus 70 turbine (Source ID 111) at the Facility. Periodic monitoring shall be performed every 2,500 hours of operation and no sooner than 45 days from the previous test. A Department-approved test that has been performed within 45 days prior to the scheduled periodic monitoring may be used in lieu of the periodic monitoring for that time period. A portable gas analyzer may be used to satisfy the requirements of this condition utilizing three 20-minute test runs. The Department may alter the frequency of portable analyzer tests based on the test results. If NO<sub>x</sub> and CO emission results from the most recently conducted EPA Method stack tests are less than or equal to 75% of the NO<sub>x</sub> and CO emission limit, frequency of the periodic monitoring may be reduced to once annually. The portable gas analyzer shall be used and maintained according to the manufacturer's specifications and the procedures specified in ASTM D 6522 or equivalent as approved by the Department. The Department may also waive all or parts of this requirement if the Owner/Operator demonstrates compliance, in lieu of testing, through alternate means satisfactory to the Department. Periodic NO<sub>x</sub> and CO monitoring results shall be submitted to the Department within 30 days of completion.

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**V. REPORTING REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner/operator shall provide EPA with the notifications required by 40 CFR § 60.7. Required notifications may include but are not necessarily limited to: date of commencement of construction (within 30 days after starting construction), actual start-up date (within 15 days after equipment start-up), and physical or operational changes which may increase the emission rate of any air pollutant to which a standard applies (60 days or as soon as practicable before equipment start-up).

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).





## SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.

**SECTION G. Emission Restriction Summary.**

No emission restrictions listed in this section of the permit.



**SECTION H. Miscellaneous.**



\*\*\*\*\* End of Report \*\*\*\*\*

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