



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
AIR QUALITY PROGRAM

STATE ONLY NATURAL MINOR OPERATING PERMIT

Issue Date: June 30, 2025

Effective Date: July 14, 2025

Expiration Date: June 30, 2030

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: 63-01001

Natural Minor

Federal Tax Id - Plant Code: 26-2863376-3

Owner Information

Name: ETC NORTHEAST PIPELINE LLC

Mailing Address: 101 TECHNOLOGY DR  
PITTSBURGH, PA 15275-1005

Plant Information

Plant: ETC NORTHEAST PIPELINE/REVOLUTION CRYO PLT

Location: 63 Washington County 63953 Smith Township

SIC Code: 1321 Mining - Natural Gas Liquids

Responsible Official

Name: STEPHEN SCHUMAN

Title: VP-OPERATIONS

Phone: (878) 332 - 2240

Email: Dutch.Schuman@energytransfer.com

Permit Contact Person

Name: DOUG FRISCO

Title: ENVIRONMENTAL MANAGER

Phone: (570) 505 - 3730

Email: doug.frisco@energytransfer.com

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

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



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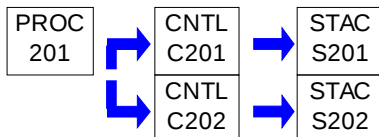
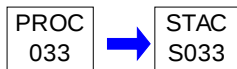
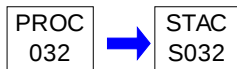
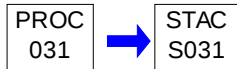
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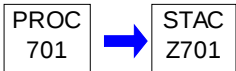
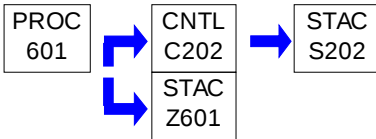
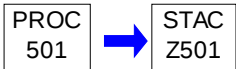
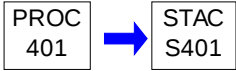
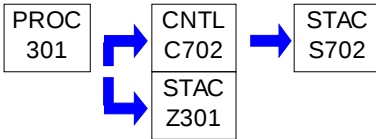
### **Section G. Emission Restriction Summary**

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**SECTION A. Site Inventory List**

| Source ID | Source Name                                 | Capacity/Throughput | Fuel/Material |
|-----------|---------------------------------------------|---------------------|---------------|
| 031       | 40.92 MMBTU/HR HMO HEATER 1                 | 40.600 MCF/HR       | Natural Gas   |
| 032       | 40.92 MMBTU/HR HMO HEATER 2                 | 40.600 MCF/HR       | Natural Gas   |
| 033       | 40.92 MMBTU/HR HMO HEATER 3                 | 40.600 MCF/HR       | Natural Gas   |
| 201       | 200 GPM AMINE UNIT 1                        | N/A                 |               |
| 204       | ELECTRIC COMPRESSOR ROD PACKING             | 227.000 CF/HR       | Natural Gas   |
| 301       | TANKS/VESSELS                               | N/A                 |               |
| 401       | HEATERS                                     | N/A                 | Natural Gas   |
| 501       | PNEUMATIC DEVICES                           | 8.510 CF/HR         | AIR-ACTUATED  |
| 601       | VENTING/BLOWDOWNS                           | 11.270 MCF/HR       | Natural Gas   |
| 701       | FUGITIVES                                   | N/A                 | Natural Gas   |
| 702       | TRUCK LOADING                               | N/A                 |               |
| 801       | PIGGING OPERATIONS                          | N/A                 | Natural Gas   |
| C201      | 5.54 MMBTU/HR AMINE UNIT THERMAL OXIDIZER 1 | N/A                 | Natural Gas   |
| C202      | 906 MMBTU/HR REV CRYO 1 PLANT FLARE         | N/A                 | Natural Gas   |
| C702      | 1.0 MMBTU/HR TRUCK LOADING COMBUSTOR        | N/A                 | Natural Gas   |
| S031      | HMO HEATER 1 STACK                          |                     |               |
| S032      | HMO HEATER 2 STACK                          |                     |               |
| S033      | HMO HEATER 3 STACK                          |                     |               |
| S201      | ELECTRIC COMPRESSOR FUGITIVES               |                     |               |
| S202      | MSS FLARE EMISSIONS                         |                     |               |
| S401      | HEATER STACK EMISSIONS                      |                     |               |
| S702      | TRUCKLOADING FLARE STACK EMISSIONS          |                     |               |
| Z301      | TANKS/VESSELS STACK                         |                     |               |
| Z501      | PNEUMATIC DEVICES FUGITIVES                 |                     |               |
| Z601      | VENTING/BLOWDOWN FUGITIVES                  |                     |               |
| Z701      | FUGITIVES STACK                             |                     |               |

**PERMIT MAPS**

**PERMIT MAPS**

**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 § 127.11a]****Reactivation of Sources**

(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

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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) - (8) Not applicable.

(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) [See Work Practice Standards.]

(d) Not applicable.

**# 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

**SECTION C. Site Level Requirements**

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

(ii) Not applicable.

(2) Not applicable.

(d) Not applicable.

**# 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 basis.

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

(a) Limitations are as follows:

(1) - (2) 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 §123.41]****Limitations**

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

(1) Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.

(2) Equal to or greater than 60% at any time.

**SECTION C. Site Level Requirements****# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Facility-wide emissions of the pollutants listed below shall not exceed the following limits on a 12-month rolling basis (calculated each month) for all air contamination sources and air cleaning devices:

30.60 TPY NO<sub>x</sub>  
35.30 TPY CO  
29.10 TPY VOC  
0.40 TPY SO<sub>x</sub>  
8.10 TPY PM-10  
8.10 TPY PM-2.5  
2.60 TPY HAP (Total)  
0.10 TPY HCHO  
2.33 TPY Hexane

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

(a) Air basins. Not applicable.

(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.

(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:



## SECTION C. Site Level Requirements

(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.

(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.**

The Owner/Operator shall submit a pre-test protocol to the Department for review at least 90 days prior to the performance of any EPA reference method stack test. The test report may be submitted via PSIMS\*Online at <https://www.depgreenport.state.pa.us/ecomm/Login.jsp>. All proposed performance test methods shall be identified in the pre-test protocol.

The Department Source Testing Manual is available at this web address:  
<http://www.depgreenport.state.pa.us/elibrary/GetFolder?FolderID=4563>

(a) At least 90 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department for review and approval. The test protocol shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

(b) When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter, submitted at least 90 calendar days prior to commencing an emissions testing program, referencing the

**SECTION C. Site Level Requirements**

previously approved procedural protocol is sufficient if the letter is approved by the Department. The letter shall be submitted as required in paragraph (a). If modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of the stack test manual has been revised since the approval, a new protocol shall be submitted for approval.

(c) At least 15 calendar days prior to commencing an emission testing program, notification as to the date and time of testing shall be given to the Department in accordance with paragraph (h) of this condition.

(d) If the proposed testing did not occur per the required notification in paragraph (b) above, an electronic mail notification shall be sent within 15 calendar days after the expected completion date of the onsite testing to the Department, in accordance with paragraph (h) of this condition, indicating why the proposed completion date of the on-site testing was not adhered to.

(e) A complete test report shall be submitted to the Department no later than 60 calendar days after completion of the onsite testing portion of an emission test program.

(1) The 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.

(2) The summary results will include, at a minimum, the following information:

(A) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.

(B) Permit number(s) and condition(s) which are the basis for the evaluation.

(C) Summary of results with respect to each applicable permit condition.

(D) Statement of compliance or non-compliance with each applicable permit condition.

(f) 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.

(g) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.

(h) Pursuant to 25 Pa. Code §§ 139.53(a)(1) and 139.53(a)(3):

(1) All submittals, except test notifications & portable emission monitor tests, shall be accomplished through PSIMS\*Online, available through <https://www.depgreenport.state.pa.us/ecommm/Login.jsp>, if it is available.

(2) For test notifications & portable analyzer results, or if internet submittal cannot be accomplished, one electronic copy of the test submission (notifications, protocols, reports, supplemental information, etc.) shall be sent to both PSIMS Administration in Central Office and to the Regional Office AQ Program Manager at the following addresses.

CENTRAL OFFICE:  
RA-EPstacktesting@pa.gov

SOUTHWEST REGIONAL OFFICE:  
RA-EPSWstacktesting@pa.gov

(i) The permittee shall ensure all federal reporting requirements contained in the applicable subpart of 40 CFR are 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.

**SECTION C. Site Level Requirements****(j) Actions Related to Noncompliance Demonstrated by a Stack Test:**

(1) If the results of a stack test, performed as required by this approval, exceed the level specified in any condition of this approval, the Permittee shall take appropriate corrective actions. Within 30 days of the Permittee receiving the stack test results, a written description of the corrective actions shall be submitted to the Department. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. The Department shall notify the Permittee within 30 days, if the corrective actions taken are deficient. Within 30 days of receipt of the notice of deficiency, the Permittee shall submit a description of additional corrective actions to the Department. The Department reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(2) If the results of the required stack test exceed any limit defined in this permit, the test was not performed in accordance with the stack test protocol or the source and/or air cleaning device was not operated in accordance with the permit, then another stack test shall be performed to determine compliance. Within 120 days of the Permittee receiving the original stack test results, a retest shall be performed. The Department may extend the retesting deadline if the Permittee demonstrates, to the Department's satisfaction, that retesting within 120 days is not practicable. Failure of the second test to demonstrate compliance with the limits in the permit, not performing the test in accordance with the stack test protocol or not operating the source and/or air cleaning device in accordance with the permit may be grounds for immediate revocation of the permit to operate the affected source.

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

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

- a. Visible stack emissions;
- b. Fugitive emissions; and
- c. 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 §123.2, and potentially objectionable odors 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.

**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner/Operator shall conduct a fractional gas analysis performed on the inlet gas to the facility at a minimum of once per quarter of each calendar year. Each sample shall be collected no sooner than 30 days from the previous sample.

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

Records of each daily inspection for visible stack, fugitive, and potentially objectionable odors when the site is visited by the Owner/Operator shall be maintained in a log, or electronically, and at the minimum include the date, time, name and title of the observer, along with any corrective action taken as a result.

**# 014 [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.

**SECTION C. Site Level Requirements****# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner/Operator shall maintain the following records:

- a. Monthly hours of operation and monthly fuel consumption for each air cleaning device, including each flare, combustor, and regenerative thermal oxidizer.
- b. Monthly fuel consumption for each 40.92 MMBtu/hr HMO heater, 6.22 MMBtu/hr NGL Dehy Regen Heater, 8.5 MMBtu/hr Regenerator Gas Heater, and combined fuel consumption for all catalytic heaters.
- c. Records including a description of testing methods, results, appropriate operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for each air contamination source or air cleaning device subject to performance testing or portable analyzer testing requirements.
- d. Copies of the report that demonstrates that the HMO heaters were operating at rated capacities during performance testing.
- e. Copies of the manufacturer's recommended maintenance schedule for all air contamination sources and air cleaning devices including, but not limited to, each amine sweetening unit, heater, flare, combustor, regenerative thermal oxidizer, and electric compressors.
- f. Records of any maintenance conducted on each air contamination source and air cleaning device including, but not limited to, each amine sweetening unit, heater, flare, combustor, regenerative thermal oxidizer, and electric compressors.
- g. Records of the total daily throughput (per 24-hour period) through the amine sweetening unit.
- h. Records of total throughput through each condensate tank (by volume) on a 12-month rolling basis (calculated monthly).
- i. Records of the date, time, duration, volume of gas released, and emissions from each blowdown and emergency shutdown at the facility.
- j. Records of each visible stack, fugitive, and potentially objectionable odor inspection shall be maintained in a log and at a minimum include the date, time, name and title of the observer, along with any corrective action taken as a result.
- k. Records of any leak detected and associated repair activity through the leak detection and repair or maintenance program.
- l. Facility-wide 12-month rolling totals, calculated monthly, of the following pollutants: NO<sub>x</sub>, CO, VOC, SO<sub>x</sub>, PM-10, PM-2.5, HAPs (including but not limited to benzene, formaldehyde, hexane, and methanol) and greenhouse gases as CO<sub>2</sub> equivalent (CO<sub>2</sub>e).
- m. Records of pigging events including, but not necessarily limited to, information on:
  - (i) The identification, location, and date of construction of each pig launcher or receiver.
  - (ii) Records of each pigging operation including the identification of the pig chamber used, the date and time of the pigging operation, and the type and volume of liquids cleared.
  - (iii) The launcher or receiver pressure prior to venting to the atmosphere, and prior to routing emissions to a flare, where applicable.
  - (iv) Gas composition data representative of the composition of gas at the pig chambers.
  - (v) The emissions calculation for each pig chamber, using the Department's spreadsheet found at <http://files.dep.state.pa.us/> or other equivalent method.
- n. Records of the location, date of installation, and manufacturer's specifications for each pump.
- o. Records of construction documentation, including, but not limited to, the following:

**SECTION C. Site Level Requirements**

- (i) Record of construction documentation that indicate new and reworked valves, piping, compressor systems, and pump systems conform to American Petroleum Institute (API), American National Standards Institute (ANSI), American Society of Mechanical Engineers (ASME), or equivalent code
- (ii) Record of construction indicating that new underground drain piping shall be welded.
- (iii) Record of construction showing that piping connections are welded, flanged, or screwed (if two-inch diameter or smaller).
- (iv) A list of all difficult-to-monitor or unsafe-to-monitor components at the facility.
- (v) A record of hydraulic testing, gas testing, or gas analyzer results on new or reworked piping connections.

p. For each tanker truck load-out operation, the owner or operator shall maintain the following records:

- (i) The identification, location, and date of construction of each vapor recovery load-out system;
- (ii) Records of each tanker truck load-out operation including the date and time of the liquids load-out, the type and volume of liquids loaded, the truck collection efficiency based on an annual leak test or demonstrating a minimum 99% control of VOC emissions.
- (iii) Liquid loadout volumes on a 12-month rolling basis (calculated monthly).
- (iv) The emissions calculation for each tanker truck load-out operation in accordance with 25 Pa. Code §135.5.

q. For each control device, the owner or operator shall maintain the following records:

- (i) For non-manufacturer-tested models, the owner or operator must maintain records in accordance with 40 CFR §60.5420(c)(13) and (14) or §60.5420a(c)(13) and (14) as applicable.
- (ii) For manufacturer-tested models, the owner or operator must maintain records in accordance with 40 CFR §60.5413(d)(12) and (e) or §60.5413a(d)(12) and (e) as applicable.
- (iii) The summary for each complete test report described in Section C, if applicable.

r. The permittee shall, upon the request of the Department, provide fuel analyses, fuel supplier certifications, or fuel samples of the fuel used in any air contamination source or air cleaning device authorized to operate under this state-only operating permit.

s. For each combustion unit, the owner or operator shall maintain the following records, including information on:

- (i) The location of the combustion unit;
- (ii) Either the summary for each complete test report described or the results of each periodic monitoring;
- (iii) The tune-up/inspection records, which shall at a minimum include:
  - (a) The date the tune-up/inspection was conducted;
  - (b) The concentrations in the effluent stream of CO in ppmv and O<sub>2</sub> in volume percent; and
  - (c) A description of any corrective actions taken as part of the tune-up; and
- (iv) The emissions calculations for the combustion unit in accordance with 25 Pa. Code §135.5.

t. Daily gas throughput to the MSS flare and a calculated daily heat content to the MSS flare based on the closed drain gas composition.

u. The applicable recordkeeping requirements of 40 CFR §60.5421a.

v. Copies of quarterly inlet gas sampling.

**# 016 [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.

**SECTION C. Site Level Requirements****V. REPORTING REQUIREMENTS.****# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Malfunction reporting shall be conducted as follows:

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

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

In accordance with 25 Pa. Code §135.3, the owner or operator of a facility shall submit to the Department via AES\*Online or AES\*XML at [www.dep.greenport.state.pa.us/](http://www.dep.greenport.state.pa.us/) by March 1st of each year, a facility inventory report for the preceding calendar year for all sources regulated under this state-only operating permit. The inventory report shall include all emissions information for all sources operated during the preceding calendar year. Emissions data including, but not limited to, the following shall be reported:

- (i) NO<sub>x</sub>;
- (ii) CO;
- (iii) SO<sub>x</sub>;
- (iv) PM<sub>10</sub>;

**SECTION C. Site Level Requirements**

- (v) PM<sub>2.5</sub>;
- (vi) VOC;
- (vii) Speciated HAP including, but not limited to, benzene, ethyl benzene, formaldehyde, n-hexane, toluene, isomers and mixtures of xylenes, and 2,2,4-trimethylpentane;
- (viii) Total HAP;
- (ix) CO<sub>2</sub>e;
- (x) CH<sub>4</sub>; and
- (xi) N<sub>2</sub>O.

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.**

The owner/operator shall submit an annual report to the Department. The annual report is required to be submitted either in electronic format, by hand-delivery, courier, or sent by certified mail, return receipt requested, to the Air Program Manager of the appropriate DEP Regional Office.

The reporting period specified by the owner/operator shall be no later than one year from the start of operations of the facility, unless otherwise approved by the Department. The initial and subsequent annual reports shall be submitted within 60 days of the end of the reporting periods. General information required on all reports includes:

- (i) Company Name;
- (ii) Facility Site Name;
- (iii) The operating permit number;
- (iv) Either:
  - (A) The address of the site; or
  - (B) A description of the site and the location using latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of 5 decimal degrees using the North American Datum of 1983;
- (v) The beginning and ending dates of the reporting period;
- (vi) A certification form demonstrating annual certification of compliance with the terms and conditions in this state-only operating permit for the previous year, including the emission limitations, standards, or work practices, which must include:
  - (A) The statement: "Based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."; and
  - (B) The signature of the certifying Responsible Official;
- (vii) Identification of each source included in the report;
- (viii) The identification of each term or condition of the state-only operating permit that is the basis of the certification, the compliance status, and the methods used for determining the compliance status of the source, currently and over the reporting period; and
- (ix) The records of the facility's emissions to demonstrate compliance with 25 Pa. Code §135.3 and §135.5.

**# 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 proceeding 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.

**SECTION C. Site Level Requirements**

(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.

**VI. WORK PRACTICE REQUIREMENTS.****# 021 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

(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.

(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.

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

All air contamination sources and air cleaning devices authorized under this state-only operating permit shall be operated per the manufacturer's specifications and maintained in accordance with the manufacturer's recommended maintenance schedule.

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

The owner/operator shall conduct a winterization procedure at the facility at least once per calendar year. This procedure shall include a log of what procedures were conducted and the date when these procedures occurred. This log shall be maintained for a minimum of five years and shall be made available to the Department upon request.

**VII. ADDITIONAL REQUIREMENTS.****# 024 [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 State-Only Operating Permit may be in excess of the limitations specified in, or established pursuant to this State-Only Operating Permit, the permittee may be required to conduct test methods and procedures deemed necessary by the Department to determine the actual emissions rate. Such testing shall be conducted in accordance with 25 Pa. Code Chapter 139, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required.

**# 025 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

In instances of multiple applicable emission limitations or conflicting regulatory requirements, the most stringent emission limitation or requirement applies.

**# 026 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]****Subpart A - General Provisions****Address.**

The Facility is subject to New Source Performance Standards from 40 CFR Part 60 Subpart OOOOa. In accordance with 40 CFR §60.4, copies of all requests, reports, applications, submittals, and other communications regarding affected sources

**SECTION C. Site Level Requirements**

shall be forwarded to both the EPA and the Department at the addresses listed below unless otherwise noted or directed by the Department or the EPA.

Associate Director  
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

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

**# 027 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.7]****Subpart A - General Provisions****Notification and record keeping.**

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), 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), and opacity observations (within 30 days).

**# 028 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.7]****Subpart A - General Provisions****Notification and record keeping.**

Compliance with mass emission limits established in this authorization may be demonstrated using engineering calculations based on fuel and raw material purchase records, laboratory analyses, manufacturers specifications, source test results, production and operating records, material balance methods, and/or other applicable methods, with written Department approval.

**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.**

#029 30-JUN-25

In accordance with 25 Pa. Code § 127.445, within 30 days of the Department's written approval or alternative timeline specified in a Consent Order & Agreement, the permittee shall complete the Plant Flare Blower System Upgrade project proposed in the May 1, 2025, Control Plan (Revised May 23, 2025).

#030 30-JUN-25

In accordance with 25 Pa. Code § 127.445, within 30 days of the Department's written approval or alternative timeline specified in a Consent Order & Agreement, the permittee shall complete the Plant Flare Tip Replacement project proposed in the May 1, 2025, Control Plan (Revised May 23, 2025).

**SECTION D. Source Level Requirements**

Source ID: 031

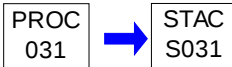
Source Name: 40.92 MMBTU/HR HMO HEATER 1

Source Capacity/Throughput:

40.600 MCF/HR

Natural Gas

Conditions for this source occur in the following groups: HMO HEATERS

**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: 032

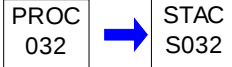
Source Name: 40.92 MMBTU/HR HMO HEATER 2

Source Capacity/Throughput:

40.600 MCF/HR

Natural Gas

Conditions for this source occur in the following groups: HMO HEATERS

**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: 033

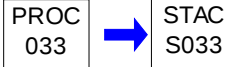
Source Name: 40.92 MMBTU/HR HMO HEATER 3

Source Capacity/Throughput:

40.600 MCF/HR

Natural Gas

Conditions for this source occur in the following groups: HMO HEATERS

**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**

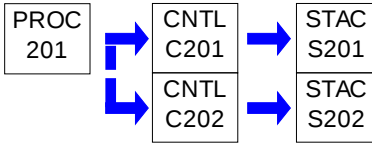
Source ID: 201

Source Name: 200 GPM AMINE UNIT 1

Source Capacity/Throughput:

N/A

Conditions for this source occur in the following groups: ENCLOSED COMBUSTION DEVICES

**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: 204

Source Name: ELECTRIC COMPRESSOR ROD PACKING

Source Capacity/Throughput: 227.000 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**

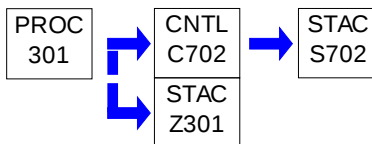
Source ID: 301

Source Name: TANKS/VESSELS

Source Capacity/Throughput:

N/A

Conditions for this source occur in the following groups: ENCLOSED COMBUSTION DEVICES

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

(a) No person may permit the placing, storing or holding in a stationary tank, reservoir or other container with a capacity greater than 40,000 gallons of volatile organic compounds with a vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions unless the tank, reservoir or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed and equipped with one of the following vapor loss control devices:

(1) An external or an internal floating roof. This control equipment may not be permitted if the volatile organic compounds have a vapor pressure of 11 psia (76 kilopascals) or greater under actual storage conditions.

(2) Vapor recovery system. A vapor recovery system, consisting of a vapor gathering system capable of collecting the volatile organic compound vapors and gases discharged and a vapor disposal system capable of processing such volatile organic vapors and gases so as to prevent their emission to the atmosphere. Tank gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place. The vapor recovery system shall be maintained in good working order and recover at least 80% of the vapors emitted by such tank.

(b) An external floating roof shall be fitted with a primary seal and a continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal). The external floating roof shall meet the following equipment requirements:

(1) Seal closure devices shall meet the following requirements:

(i) There are no visible holes, tears or other openings in the seals or seal fabric.

(ii) The seals are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.

(iii) For tanks with vapor-mounted primary seals, the accumulated area of gaps exceeding 1/8 inch in width between the secondary seal and the tank wall shall not exceed 1 square inch per foot of tank diameter. Compliance with this subsection shall be determined by physically measuring the length and width of gaps around the entire circumference of the secondary seal in each place where a 1/8 inch uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall and by summing the area of the individual gaps.

(2) Openings in the external floating roof, except for automatic bleeder vents, rim space vents and leg sleeves, are as follows:

(i) Equipped with covers, seals or lids in the closed position except when the openings are in actual use.

(ii) Equipped with projections into the tank which remain below the liquid surface at all times.

(3) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports.

**SECTION D. Source Level Requirements**

(4) Rim vents are set to open when the roof is being floated off the leg supports or at the recommended setting of the manufacturer.

(5) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90% of the area of the opening.

(c) An internal floating roof shall be fitted with a primary seal and shall comply with the following equipment requirements:

(1) A closure seal or seals, to close the space between the roof edge and tank wall is used.

(2) There are no holes, tears or other openings in the seal or a seal fabric or materials.

(3) Openings except stub drains are equipped with covers, lids or seals such that:

(i) The cover, lid or seal is in the closed position at all times except when in actual use.

(ii) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports.

(iii) Rim vents, if provided are set to open when the roof is being floated off the roof leg supports or at the recommended setting of the manufacturer.

(d) This section does not apply to petroleum liquid storage vessels which:

(1) Are used to store waxy, heavy pour crude oil.

(2) Have capacities less than 420,000 gallons and are used to store produced crude oil and condensate prior to lease custody transfer.

(e) For the purposes of this section, the petroleum liquid storage vessels listed in this subsection comply with the equipment requirements of this section. These tanks shall comply with the maintenance, inspection and reporting requirements of this section. These petroleum liquid storage vessels are those:

(1) Which contain a petroleum liquid with a true vapor pressure less than 4 psia (27.6 kilopascals) and which are of welded construction and which presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal or other closure device of demonstrated equivalence approved by the Department.

(2) Which are of welded construction, equipped with a metallic-type shoe primary seal and has a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal).

(f) The owner or operator of a petroleum liquid storage vessel with a floating roof subject to this regulation shall:

(1) Perform routine inspections annually in order to insure compliance with subsection (b) or (c). The inspection shall include a visual inspection of the secondary seal gap when inspecting external floating roof tanks.

(2) For external floating roof tanks, measure the secondary seal gap annually in accordance with subsection (b)(1)(iii) when the floating roof is equipped with a vapor-mounted primary seal.

(3) Maintain records of the types of volatile petroleum liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed in subsection (f)(1) and (2). Copies of the records shall be retained by the owner or operator for a period of 2 years after the date on which the record was made and shall be made available to the Department upon written or verbal request at a reasonable time.

(g) For volatile organic compounds whose storage temperature is governed by ambient weather conditions, the vapor pressure under actual storage conditions shall be determined using a temperature which is representative of the average storage temperature for the hottest month of the year in which the storage takes place.

**SECTION D. Source Level Requirements**

(h) If a failure is detected during inspections required in this section, the owner or operator, or both, shall repair the items or empty and remove the storage vessel from service within 45 days. If this failure cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Department. A request for an extension shall document that alternate storage capacity is unavailable and specify a schedule of actions the owner or operator will take that will assure that the equipment will be repaired or the vessel will be emptied as soon as possible but within the additional 30-day time requested.

**# 002 [25 Pa. Code §129.57]****Storage tanks less than or equal to 40,000 gallons capacity containing VOCs**

The provisions of this section shall apply to above ground stationary storage tanks with a capacity equal to or greater than 2,000 gallons which contain volatile organic compounds with vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions. Storage tanks covered under this section shall have pressure relief valves which are maintained in good operating condition and which are set to release at no less than 0.7 psig (4.8 kilopascals) of pressure or 0.3 psig (2.1 kilopascals) of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department. Section 129.56(g) (relating to storage tanks greater than 40,000 gallons capacity containing volatile organic compounds) applies to this section. Petroleum liquid storage vessels which are used to store produced crude oil and condensate prior to lease custody transfer shall be exempt from the requirements of this section.

**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: 401

Source Name: HEATERS

Source Capacity/Throughput:

N/A

Natural Gas

PROC  
401STAC  
S401**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.11]****Combustion units**

(a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:

(1) The rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

(2) - (3) Not applicable.

(b) Not applicable.

**# 002 [25 Pa. Code §123.22]****Combustion units**

(a) Nonair basin areas. Combustion units in nonair basin areas must conform with the following:

(1) General provision. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO<sub>2</sub>, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over a 1-hour period, except as provided in paragraph (4).

(2) - (4) Not applicable.

(b) - (e) Not applicable.

**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).



## **SECTION D. Source Level 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**

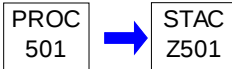
Source ID: 501

Source Name: PNEUMATIC DEVICES

Source Capacity/Throughput:

8.510 CF/HR

AIR-ACTUATED

**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.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The permittee shall maintain records of the location, date of installation, and manufacturer's specifications for each pump.

**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**

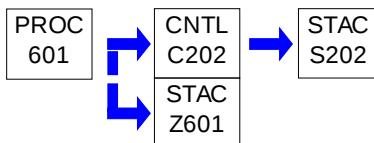
Source ID: 601

Source Name: VENTING/BLOWDOWNS

Source Capacity/Throughput:

11.270 MCF/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.****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The Owner/Operator shall maintain records of the date, time, duration, volume of natural gas released, and emissions from each blowdown and emergency shutdown at the facility.

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

The owner/operator shall report each emergency shutdown (ESD) event that occurs at this facility in accordance with the malfunction reporting requirements of Section C of this operating permit.

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

The Owner/Operator shall minimize blowdown gas generated as a result of equipment maintenance and emergency shutdowns to the extent practical.

**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: 701

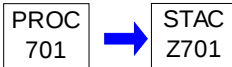
Source Name: FUGITIVES

Source Capacity/Throughput:

N/A

Natural Gas

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

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

For each fugitive emissions component constructed and authorized to operate on or after August 8, 2018, the following applies:

(i) No later than 30 days after an emission source commences operation, and at least monthly thereafter, the owner or operator of a facility shall conduct an AVO inspection.

(ii) No later than 60 days after initial startup, and quarterly thereafter, the owner or operator shall conduct an LDAR program using Method 21 in conformance with the 28 VHP program.

(A) The owner or operator may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the appropriate DEP Regional Office.

(B) Any fugitive emissions components that are difficult-to-monitor or unsafe-to-monitor must be identified in the monitoring plan in accordance with 40 CFR §60.5397a(b) through (d).

(iii) The detection devices must be operated and maintained in accordance with manufacturer-recommended procedures, as required by the test method, or a Department-approved method.

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

(a) For each fugitive emissions component constructed and authorized to operate by the Department on or after February 2, 2013, but prior to August 8, 2018, the following applies:

(i) The owner or operator of the natural gas compression and/or processing facility shall, at a minimum, on a monthly basis perform a leak detection and repair program that includes audible, visual, and olfactory (AVO) inspections.

(ii) Within 180 days after the initial startup of a source, the owner or operator of the facility shall at a minimum, on a quarterly basis, use forward looking infrared (FLIR) cameras or other leak detection monitoring devices approved by the Department for the detection of fugitive leaks. The Department may grant an extension for use of FLIR camera upon receipt of a written request from the owner or operator of the facility documenting the justification for the requested extension.

(iii) If any leak is detected, the owner or operator of the facility shall repair the leak as expeditiously as practicable, but no

**SECTION D. Source Level Requirements**

later than fifteen (15) calendar days after the leak is detected, except as provided in 40 CFR §§ 60.482-60.489. The owner or operator shall record each leak detected and the associated repair activity.

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

For fugitive emissions components, the owner or operator shall maintain the following records:

(a) The fugitive emissions monitoring plan in accordance with 40 CFR §60.5397a(b) through (d).

(b) Records of each monitoring survey which must include:

- (i) The facility name and location;
- (ii) The operating permit number;
- (iii) The date, start time, and end time of the survey;
- (iv) The name of the operator(s) performing the survey;
- (v) The monitoring instrument used;
- (vi) The ambient temperature, sky conditions, and maximum wind speed at the time of the survey;
- (vii) Any deviations from the monitoring plan or a statement that there were none; and
- (viii) Documentation of each fugitive emission including:

(A) The identification of each component from which fugitive emissions were detected;

(B) The instrument reading of each fugitive emissions component that meets the definition of a leak.

(C) The status of repair of each component including:

- (1) The repair methods applied in each attempt to repair the component;
- (2) The tagging or digital photographing of each component not repaired during the monitoring survey in which the fugitive emissions were discovered;
- (3) The reasons a component was placed on delay of repair;
- (4) The date of successful repair of the component; and
- (5) The information on the instrumentation or method used to resurvey the component after repair, if it was not completed during the monitoring survey in which the fugitive emissions were discovered.

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

The Owner/Operator shall maintain the following records:

- (1) Record of construction documentation that indicate new and reworked valves, piping, compressor systems, and pump systems conform to American Petroleum Institute (API), American National Standards Institute (ANSI), American Society of Mechanical Engineers (ASME), or equivalent code
- (2) Record of construction indicating that new underground drain piping shall be welded.
- (3) Record of construction showing that piping connections are welded, flanged, or screwed (if two-inch diameter or smaller).
- (4) A list of all difficult-to-monitor or unsafe-to-monitor components at the facility.
- (5) A record of hydraulic testing, gas testing, or gas analyzer results on new or reworked piping connections.

**SECTION D. Source Level 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) and/or Section E (Source Group Restrictions).

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

(i) Any leak detected from a fugitive emission component shall be repaired by the owner or operator of the facility as expeditiously as practicable. A first attempt at repair must be attempted within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:

(A) The owner or operator must purchase parts, in which case the repair must be completed no later than 10 calendar days after the receipt of the purchased parts; or

(B) The repair or replacement is technically infeasible, would require a vent blowdown, a compressor station, processing plant or transmission station shutdown, or would be unsafe to repair during operation of the unit, in which case the repair or replacement must be completed during the next scheduled compressor station, processing plant or transmission station shutdown, after a planned vent blowdown or within 2 years, whichever is earlier.

(ii) Once a fugitive emission component has been repaired or replaced, the owner or operator must resurvey the component as soon as practicable, but no later than 30 calendar days after the leak is repaired.

(A) For repairs that cannot be made during the monitoring survey when the leak is initially found, either a digital photograph must be taken of the component or the component must be tagged for identification purposes.

(B) A leak is considered repaired if:

- (1) There are no detectable emissions consistent with Section 8.3.2 of 40 CFR Part 60, Appendix A-7, Method 21;
- (2) A leak concentration of less than 500 ppm as methane is detected when the gas leak detector probe inlet is placed at the surface of the component;
- (3) There is no visible leak image when using an OGI camera calibrated at a detection sensitivity level of 60 grams/hour; or
- (4) There is no bubbling at the leak interface using a soap solution bubble test specified in Section 8.3.3 of 40 CFR Part 60, Appendix A-7, Method 21.

(iii) The Department determined that the VOC and methane emissions remaining after the implementation of BAT requirements, including LDAR, are of minor significance with regard to causing air pollution, and will not, on their own, be preventing or interfering with the attainment or maintenance of an ambient air quality standard.

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

A leak is defined as:

- (A) Any positive indication, whether audible, visual, or odorous, determined during an AVO inspection;
- (B) Any visible emissions detected by an OGI camera calibrated according to 40 CFR § 60.18 and a detection sensitivity level of 60 grams/hour; or
- (C) A concentration of 500 ppm calibrated as methane or greater detected by an instrument reading.

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

For quarterly inspections using a gas leak detector in accordance with 40 CFR Part 60, Appendix A-7, Method 21, the owner

**SECTION D. Source Level Requirements**

or operator may choose to adjust the detection instrument readings to account for the background organic concentration level as determined according to the procedures in Section 8.3.2.

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

New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least daily by operating personnel walk-through.

Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;

(1) a cap, blind flange, plug, or second valve must be installed on the line or valve;

or

(2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once within the 72 hour period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

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

Hydraulic testing or gas testing of new and reworked piping connections, at no lower than operating pressure, shall be completed before components are returned to service. Alternatively, the components may be monitored for leaks by utilizing an approved gas analyzer within fifteen (15) days of return to services. To obtain leak-free operation, necessary adjustments shall be made.

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

Each open-ended line and open-ended valve shall be equipped with an appropriately sized blind flange, cap, plug, or a second valve to seal the line. Both valves shall be closed except during sampling procedures. This condition does not apply if when open-ended line or open-ended valve is out of service and properly follows lockout and tagout procedures.

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

For annual emissions reporting purposes, cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the EPA correlation approach or by other methods acceptable to the Department.

**# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Within ten (10) days of when the most recent leaking component is added to the delay of repair list, the cumulative daily emission calculations, which include every component listed on the delay of repair list shall be updated. If the equation,

**SECTION D. Source Level Requirements**

below, occurs, the Owner/Operator shall notify the department within fifteen (15) days of this determination. Depending on the severity or number of tagged leaks, early shutdown, or other appropriate responses may result:

(Cumulative daily emission rate of all components on the delay of repair list)\*(days until the next scheduled unit shutdown)  
>= (total emissions from a unit shutdown)

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

To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak checking during plant operation.

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

For the purposes of this operating permit, a leak is defined as:

- (1) Any positive indication, whether audible, visual, or odorous, determined during an AVO inspection;
- (2) Any visible emissions detected by an OGI camera calibrated according to 40 CFR § 60.18 and a detection sensitivity level of 60 grams/hour; or
- (3) A concentration of 500 ppm calibrated as methane or greater detected by an instrument reading.
- (4) Any equipment or component that is designed to protect the equipment or safety of personnel is not considered a "leak".

A release from any equipment or component designed by the manufacturer to protect the equipment, controller, personnel, to prevent ground water contamination, gas migration, or an emergency is also not considered a leak.

**SECTION D. Source Level Requirements**

Source ID: 702

Source Name: TRUCK LOADING

Source Capacity/Throughput:

N/A

Conditions for this source occur in the following groups: ENCLOSED COMBUSTION DEVICES

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

(a) The owner/operator shall ensure that VOC emissions from truck loadout are controlled by a minimum of 99% or meet the requirements of (b) below.

(b) As an alternative to controlling truck loadout VOC emissions by a minimum of 99%, the owner/operator may implement the following annual leak test program:

- (i) Use a vapor balancing system when removing liquids from the storage vessel; and
- (ii) Ensure that each tanker truck that is used to remove liquids from the storage vessel has passed one of the following annual leak tests:

(A) A tanker truck that does not indicate more than 1" H<sub>2</sub>O pressure change within 5 minutes after being pressurized to 18" H<sub>2</sub>O and after being depressurized to 6" H<sub>2</sub>O vacuum has passed a MACT-level test and is assumed to have a collection efficiency of 99.2%.

(B) A tanker truck that does not indicate more than 3" H<sub>2</sub>O pressure change within 5 minutes after being pressurized to 18" H<sub>2</sub>O and after being depressurized to 6" H<sub>2</sub>O vacuum has passed an NSPS-level test and is assumed to have a collection efficiency of 98.7%.

(C) A tanker truck that has passed a leak test performed in accordance with 49 CFR § 180.407 is accepted as equivalent to an NSPS-level collection efficiency of 98.7%.

(D) A tanker truck that has passed a leak test performed in accordance with 40 CFR Part 60, Appendix A-8, Method 27 is accepted as equivalent to an NSPS-level collection efficiency of 98.7%.

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

For each tanker truck load-out operation, the owner or operator shall maintain the following records:

- (a) The identification, location, and date of construction of each vapor recovery load-out system;
- (b) Records of each tanker truck load-out operation including the date and time of the liquids load-out, the type and volume

**SECTION D. Source Level Requirements**

of liquids loaded, the truck collection efficiency based on an annual leak test or demonstrating a minimum 99% control of VOC emissions.

(c) Liquid loadout volumes on a 12-month rolling basis, calculated monthly.

(d) The emissions calculation for each tanker truck load-out operation in accordance with 25 Pa. Code §135.5.

**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.**

**# 003 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Each 21,000-gallon 2-lb RVP condensate storage tank, each 90,000-gallon 12-lb RVP condensate storage tank (TK-811A & TK-811B), and truck loadout operations shall be controlled by the 1.0 MMBtu/hr truck loading combustor with 0.086 MMBtu/hr pilot at all times while truck loadout operations are occurring.

**# 004 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Truck loadout operations shall use dedicated normal service filled by submerged loading.

**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: 801

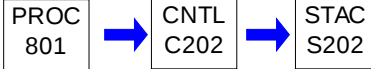
Source Name: PIGGING OPERATIONS

Source Capacity/Throughput:

N/A

Natural Gas

Conditions for this source occur in the following groups: ENCLOSED COMBUSTION DEVICES

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

For each pigging operation, the owner or operator shall maintain the following records, including information on:

- (a) The identification, location, and date of construction of each pig launcher or receiver;
- (b) Records of each pigging operation including the identification of the pig chamber used, the date and time of the pigging operation, and the type and volume of liquids cleared; and
- (c) The emissions calculation for each pig chamber, using the Department's spreadsheet found at <http://files.dep.state.pa.us/> or other equivalent method.

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

The owner or operator that conducts pigging operations shall employ best management practices to minimize the liquids present in the pig receiver chamber and to minimize emissions from the pig receiver chamber including, but not limited to, installing liquids ramps, installing liquids drain, routing high-pressure chambers to a low-pressure line or vessel, using ball valve type chambers, or using multiple pig chambers, as applicable.



## **SECTION D. Source Level Requirements**

### **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: C201

Source Name: 5.54 MMBTU/HR AMINE UNIT THERMAL OXIDIZER 1

Source Capacity/Throughput:

N/A

Natural Gas

Conditions for this source occur in the following groups: ENCLOSED COMBUSTION DEVICES

**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: C202

Source Name: 906 MMBTU/HR REV CRYO 1 PLANT FLARE

Source Capacity/Throughput:

N/A

Natural Gas

Conditions for this source occur in the following groups: MSS FLARE

**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: C702

Source Name: 1.0 MMBTU/HR TRUCK LOADING COMBUSTOR

Source Capacity/Throughput:

N/A

Natural Gas

Conditions for this source occur in the following groups: ENCLOSED COMBUSTION DEVICES

**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 E. Source Group Restrictions.**

Group Name: ENCLOSED COMBUSTION DEVICES

Group Description: Requirements from the GP-5 (2018) for Enclosed Combustion Devices

Sources included in this group

| ID   | Name                                        |
|------|---------------------------------------------|
| 201  | 200 GPM AMINE UNIT 1                        |
| 301  | TANKS/VESSELS                               |
| 702  | TRUCK LOADING                               |
| 801  | PIGGING OPERATIONS                          |
| C201 | 5.54 MMBTU/HR AMINE UNIT THERMAL OXIDIZER 1 |
| C702 | 1.0 MMBTU/HR TRUCK LOADING COMBUSTOR        |

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

The owner or operator must conduct performance tests within 180 days of each reauthorization unless:

- (A) The combustion control device is a manufacturer-tested model tested in accordance with 40 CFR § 60.5413(d) or § 60.5413a(d);
- (B) A performance test conducted on a device of the same make and model in similar service at another facility within the Commonwealth approved by the Department may be used to satisfy this requirement;
- (C) The Department uses EPA's National Stack Testing Guidance for stack test waivers. or
- (D) The combustion control device established a correlation between the outlet TOC performance level and the firebox or combustion chamber temperature during the initial performance test.

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

If performance testing is required within 180 days of each reauthorization, the owner or operator must conduct performance tests in accordance with the following:

When conducting a performance test, the owner or operator must submit the test protocol described in Section C. The owner or operator should conduct the following test procedures:

- (a) Conduct three test runs of at least one-hour duration while operating the control device within 5% of the required operating temperature.
- (b) Select the sampling port location and the number and location of traverse points at the exhaust using 40 CFR Part 60, Appendix A-1, Method 1 or 1A depending on stack diameter.
  - (i) If demonstrating compliance with a percent reduction requirement, sampling sites must be located at the inlet of the first control device and the outlet of the final control device; or
  - (ii) If demonstrating compliance with an outlet concentration requirement, the sampling site must be located at the outlet of the control device.
- (c) Determine the effluent characteristics including:
  - (i) The flow velocity, stack temperature, static pressure, and barometric pressure using 40 CFR Part 60, Appendix A-1, Method 2 or 2C depending on stack diameter;
  - (ii) The gas density using 40 CFR Part 60, Appendix A-2, Method 3A; and

**SECTION E. Source Group Restrictions.**

- (iii) The moisture content using 40 CFR Part 60, Appendix A-3, Method 4.
- (d) To demonstrate compliance with (b)(i), use 40 CFR Part 60, Appendix A-7, Method 25A to determine the Total Organic Compounds (TOC) and then convert to dry basis using the moisture content from (c)(iii) above and calculate the inlet and outlet mass rates as propane and the percent reduction.
- (e) To demonstrate compliance with (b)(ii), use 40 CFR Part 60, Appendix A-7, Method 25A to determine the TOC and 40 CFR Part 60, Appendix A-6, Method 18 to determine the methane and ethane concentration, and then correct the TOC concentration, minus methane and ethane, for percent oxygen from (c)(ii) above.

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

For each control device, the owner or operator shall maintain the following records:

- (i) For non-manufacturer-tested models, the owner or operator must maintain records in accordance with 40 CFR §60.5420(c)(13) and (14) or §60.5420a(c)(13) and (14) as applicable.
- (ii) For manufacturer-tested models, the owner or operator must maintain records in accordance with 40 CFR §60.5413(d)(12) and (e) or §60.5413a(d)(12) and (e) as applicable.
- (iii) The summary for each complete test report described in Section C, if applicable.

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

In the required annual report, the information about each control device in operation during the reporting period shall be done in accordance with 40 CFR §60.5420(b) or §60.5420a(b) as applicable.

**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: HMO HEATERS

Group Description: Combustion Units (Derived from GP-1)

Sources included in this group

| ID  | Name                        |
|-----|-----------------------------|
| 031 | 40.92 MMBTU/HR HMO HEATER 1 |
| 032 | 40.92 MMBTU/HR HMO HEATER 2 |
| 033 | 40.92 MMBTU/HR HMO HEATER 3 |

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.11]****Combustion units**

(a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:

(1) The rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

(2) - (3) N/A

(b) N/A

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

The combustion unit(s) shall be fired only on gas (natural or liquefied petroleum) or No. 2 commercial fuel oil to which there has been no reclaimed or waste oil or other waste materials added.

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

The permittee shall construct the combustion units capable of reducing nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO) emissions to or below:

i. 30 ppm<sub>dv</sub> NO<sub>x</sub> at 3% O<sub>2</sub> and

ii. 300 ppm<sub>dv</sub> CO at 3% O<sub>2</sub>.

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.42c]****Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units  
Standard for sulfur dioxide.**

(a) - (g) Not applicable.

(h) For affected facilities listed under paragraphs (h)(1), (2), or (3) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under §60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) - (3) Not applicable.

(i) - (j) Not applicable.

**SECTION E. Source Group Restrictions.****II. TESTING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) When conducting periodic monitoring on a combustion unit, the owner or operator may follow the procedures below. If the owner or operator decides to deviate from those procedures, they must submit a request to use an alternate procedure, in writing, at least 60 days prior to performing the periodic monitoring. In the alternate procedure request, the owner or operator must demonstrate the alternate procedure's equivalence to the standard procedure to the satisfaction of the Division of Source Testing and Monitoring.

(b) Standardized Periodic Monitoring Procedure.

(i) Conduct three test runs of at least 20-minutes duration within 10% of 100% peak (or the highest achievable) load.

(ii) Determine NO<sub>x</sub> and CO emissions and O<sub>2</sub> concentrations in the exhaust with either an electro-chemical cell portable gas analyzer used and maintained in accordance with the manufacturer's specifications and following the procedures specified in the current version of ASTM D6522 or by following the procedures in this section.

(iii) If the measured NO<sub>x</sub> or CO emissions concentrations are in exceedance of the emissions limit, the owner or operator must perform a stack test within 180 days of the periodic monitoring.

(iv) Periodic monitoring for each combustion unit shall be conducted within 180 days of authorization of this state-only operating permit and at a minimum frequency of once every three (3) calendar years thereafter. A performance test may be used in lieu of periodic monitoring.

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

(a) When conducting a performance test, the owner or operator must submit the test protocol for review and approval in accordance with Section C, Condition #010.

(b) The owner or operator should conduct the following test procedures.

(i) Conduct three test runs of at least one-hour duration within 10% of 100% peak (or the highest achievable) load.

(ii) Select the sampling port location and the number and location of traverse points at the exhaust using 40 CFR Part 60, Appendix A-1, Method 1 or 1A depending on stack diameter.

(iii) Determine the effluent characteristics including:

(A) The flow velocity, stack temperature, static pressure, and barometric pressure using 40 CFR Part 60, Appendix A-1, Method 2 or 2C depending on stack diameter;

(B) The gas density using 40 CFR Part 60, Appendix A-2, Method 3A; and

(C) The moisture content using 40 CFR Part 60, Appendix A-3, Method 4.

(iv) Simultaneous to the determination of the O<sub>2</sub> concentration in (iii)(B) above, determine:

(A) The NO<sub>x</sub> concentration of the exhaust gas using 40 CFR Part 60, Appendix A-4, Method 7E; and

(B) The CO concentration of the exhaust gas using 40 CFR Part 60, Appendix A-4, Method 10.

(c) If at any time the owner or operator operates the combustion unit in excess of the highest achievable load plus 10%, the owner or operator must perform a stack test within 180 days from the anomalous operation.

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

For each small combustion unit (< 100 MMBtu/hr) constructed and authorized to operate under this state-only operating permit, the owner or operator shall, within 180 days after authorization of this state-only operating permit, conduct either a performance test or periodic monitoring.

**SECTION E. Source Group Restrictions.**

At a minimum frequency of once every three (3) calendar years from the date of the previous performance test or periodic monitoring, the owner or operator shall measure the concentrations in the effluent stream of NO<sub>x</sub> and CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable analyzer as long as it is calibrated and operated according to the manufacturer's recommendations, the procedures specified in ASTM D-6522, and the following requirements:

- (i) The portable analyzer shall undergo factory laboratory calibration and cleaning every three years.
- (ii) The portable analyzer shall have on-site calibration checks using certified calibration gases demonstrating the analyzer accuracy requirements specified in ASTM D-6522.
- (iii) In order to verify emissions, the owner or operator shall conduct three, 20-minute test runs recording emissions data at least once each minute.
- (iv) Depending on concentrations observed, fresh air purges should be performed according to manufacturer's recommendations.
- (v) Re-zeroing of the portable analyzer should be performed according to manufacturer's recommendations or at least before every test run.

A performance test may be used in lieu of periodic monitoring.

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

The permittee shall, upon the request of the Department, provide fuel analyses, or fuel samples of the fuel used in any combustion unit authorized to operate under this state-only operating permit.

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

For each combustion unit, the owner or operator shall maintain the following records, including information on:

- (a) The tune-up/inspection records, which shall at a minimum include:
  - (i) The concentrations of NO<sub>x</sub> and CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the small combustion unit;
  - (ii) A description of any corrective actions taken as part of the tune-up;
  - (iii) The date(s) the annual tune-up/inspection was conducted;
  - (iv) The factory calibration certification sheets for the portable analyzer; and
  - (v) The type and amount of fuel used over the 12 months prior to the tune-up; and
- (b) The emissions calculations for the combustion unit in accordance with 25 Pa. Code §135.5.

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.46c]****Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units  
Emission monitoring for sulfur dioxide**

- (a) - (d) Not applicable.
- (e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to §60.42c(h)(1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, as described under §60.48c(f), as applicable.
- (f) Not applicable.

**SECTION E. Source Group Restrictions.****# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]****Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

(a) - (e) Not applicable.

(f) Fuel supplier certification shall include the following information:

(1) - (3) Not applicable.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g) (1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(h) - (j) 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.****# 012 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The combustion unit and any associated air cleaning devices shall be:

- a. Operated in such a manner as not to cause air pollution.
- b. Operated and maintained in a manner consistent with good operating and maintenance practices.
- c. Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this state-only operating permit.

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

For each small combustion unit (< 100 MMBtu/hr) constructed and authorized to operate under this state-only operating permit, the owner or operator shall conduct an annual tune-up/inspection on the small combustion unit. At a minimum the tune-up/inspection shall consist of the following:

- (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary;
- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;

**SECTION E. Source Group Restrictions.**

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with the NO<sub>x</sub> requirement to which the small combustion unit is subject.

**VII. ADDITIONAL REQUIREMENTS.**

**# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.40c]**

**Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units**  
**Applicability and delegation of authority.**

(a) Except as provided in paragraph (d) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(b) - (i) Not applicable.

**SECTION E. Source Group Restrictions.**

Group Name: MSS FLARE

Group Description: MSS Plant Flare Requirements

Sources included in this group

| ID   | Name                                |
|------|-------------------------------------|
| C202 | 906 MMBTU/HR REV CRYO 1 PLANT FLARE |

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

Emissions from the MSS flare stack shall not exceed the following emissions on a 12-month rolling basis (calculated monthly):

- a.) 1.65 TPY NO<sub>x</sub>;
- b.) 7.52 TPY CO.

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

The owner or operator shall conduct visible emissions observations using either the methods in paragraph (1) of this section or, alternatively, the methods in paragraph (2) of this section. The owner or operator must record and report any instances where visible emissions are observed for more than 5 minutes during any 2 consecutive hours as specified in §60.18(c)(1).

(1) At least once per day for each day a process is routed to the flare, conduct visible emissions observations using an observation period of 5 minutes using Method 22 at 40 CFR part 60, appendix A-7. If at any time the owner or operator sees visible emissions while a process is routed to the flare, even if the minimum required daily visible emission monitoring has already been performed, the owner or operator shall immediately begin an observation period of 5 minutes using Method 22 at 40 CFR part 60, appendix A-7. If visible emissions are observed for more than one continuous minute during any 5-minute observation period, the observation period using Method 22 at 40 CFR part 60, appendix A-7 must be extended to 2 hours or until 5-minutes of visible emissions are observed. Daily 5-minute Method 22 observations are not required to be conducted for days the flare does not receive any volumetric flow from any process.

(2) Use a video surveillance camera to continuously record (at least one frame every 15 seconds with time and date stamps) images of the flare flame and a reasonable distance above the flare flame at an angle suitable for visual emissions observations. The owner or operator must provide real-time video surveillance camera output to the control room or other continuously manned location where the camera images may be viewed at any time.

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

The owner or operator shall operate each flare with a pilot flame present on an individual burner or stage of burners at all times when a process is routed to the flare. Each 15-minute block during which there is at least one minute where no pilot flame on an individual burner or stage of burners is present when a process is routed to the flare is a deviation of the standard. Deviations in different 15-minute blocks from the same event are considered separate deviations. The owner or operator shall monitor for the presence of a pilot flame on an individual burner or stage of burners using a device (including, but not limited to, a thermocouple, ultraviolet beam sensor, or infrared sensor) capable of detecting that the pilot flame(s) is present.

**SECTION E. Source Group Restrictions.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the volumetric flow rate in the flare header or headers that feed the flare as well as any flare supplemental gas used. Different flow monitoring methods may be used to measure different gaseous streams that make up the flare vent gas provided that the flow rates of all gas streams that contribute to the flare vent gas are determined. If assist air or assist steam is used, the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the volumetric flow rate of assist air and/or assist steam used with the flare. If pre-mix assist air and perimeter assist are both used, the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of separately measuring, calculating, and recording the volumetric flow rate of premix assist air and perimeter assist air used with the flare. Flow monitoring system requirements and acceptable alternatives are provided in paragraphs (1) through (6) of this section.

(1) The flow rate monitoring systems must be able to correct for the temperature and pressure of the system and output parameters in standard conditions (i.e., a temperature of 20°C (68°F) and a pressure of 1 atmosphere).

(2) Mass flow monitors may be used for determining volumetric flow rate of flare vent gas provided the molecular weight of the flare vent gas is determined using compositional analysis so that the mass flow rate can be converted to volumetric flow at standard conditions using the following equation.

$$Q_{vol} = [(Q_{mass})(385.3)]/MW_t$$

Where:

$Q_{vol}$  = Volumetric flow rate, standard cubic feet per second.

$Q_{mass}$  = Mass flow rate, pounds per second.

385.3 = Conversion factor, standard cubic feet per pound-mole.

$MW_t$  = Molecular weight of the gas at the flow monitoring location, pounds per pound-mole.

(3) Mass flow monitors may be used for determining volumetric flow rate of assist air or assist steam. Use equation in paragraph (2) of this section to convert mass flow rates to volumetric flow rates. Use a molecular weight of 18 pounds per pound-mole for assist steam and use a molecular weight of 29 pounds per pound-mole for assist air.

(4) Continuous pressure/temperature monitoring system(s) and appropriate engineering calculations may be used in lieu of a continuous volumetric flow monitoring systems provided the molecular weight of the gas is known. For assist steam, use a molecular weight of 18 pounds per pound-mole. For assist air, use a molecular weight of 29 pounds per pound-mole. For flare vent gas, molecular weight must be determined using compositional analysis as specified in paragraph (b) of this section.

(5) Continuously monitoring fan speed or power and using fan curves is an acceptable method for continuously monitoring assist air flow rates.

(6) For perimeter assist air intentionally entrained in lower and/or upper steam, the monitored steam flow rate and the maximum design air-to-steam volumetric flow ratio of the entrainment system may be used to determine the assist air flow rate.

(b) The owner or operator shall determine the concentration of individual components in the flare vent gas using either the methods provided in paragraph (b)(1) or (2) of this section. Alternatively, the owner or operator may elect to directly monitor the net heating value of the flare vent gas following the methods provided in paragraphs (b)(3) of this section and, if desired, may directly measure the hydrogen concentration in the flare vent gas following the methods provided in paragraphs (b)(4) of this section. The owner or operator may elect to use different monitoring methods for different gaseous streams that make up the flare vent gas using different methods provided the composition or net heating value of all gas streams that contribute to the flare vent gas are determined.

(1) Except as provided in paragraphs (b)(5) and (6) of this section, the owner or operator shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring (i.e., at least once every 15-minutes), calculating, and recording the individual component concentrations present in the flare vent gas.

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(2) Except as provided in paragraphs (b)(5) and (6) of this section, the owner or operator shall install, operate, and maintain a grab sampling system capable of collecting an evacuated canister sample for subsequent compositional analysis at least once every eight hours while there is flow of a process to the flare. Subsequent compositional analysis of the samples must be performed according to Method 18 of 40 CFR part 60, appendix A-6, ASTM D6420-99 (Reapproved 2010), ASTM D1945-03 (Reapproved 2010), ASTM D1945-14 or ASTM UOP539-12 (all incorporated by reference—see § 63.14).

(3) Except as provided in paragraphs (b)(5) and (6) of this section, the owner or operator shall install, operate, calibrate, and maintain a calorimeter capable of continuously measuring, calculating, and recording NHWg at standard conditions.

(4) If the owner or operator uses a continuous net heating value monitor according to paragraph (b)(3) of this section, the owner or operator may, at their discretion, install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the hydrogen concentration in the flare vent gas.

(5) Direct compositional or net heating value monitoring is not required for purchased ("pipeline quality") natural gas streams. The net heating value of purchased natural gas streams may be determined using annual or more frequent grab sampling at any one representative location. Alternatively, the net heating value of any purchased natural gas stream can be assumed to be 920 Btu/scf.

(6) Direct compositional or net heating value monitoring is not required for gas streams that have been demonstrated to have consistent composition (or a fixed minimum net heating value).

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

Records of the emissions of criteria pollutants, VOCs, HAPs, and greenhouse gases from the MSS flare shall be maintained on a monthly and on a 12-month rolling basis.

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

The permittee shall maintain records of the daily gas throughput for the MSS flare. These records shall be maintained on a monthly and on a 12-month rolling basis.

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

The owner or operator must record and report any instances where visible emissions are observed for more than 5 minutes during any 2 consecutive hours as specified in §60.18(c)(1).

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

The Owner/Operator shall operate the MSS flare in accordance with the manufacturer specifications and the manufacturer's recommended operating parameters to minimize emission of air pollutants.

**VII. ADDITIONAL REQUIREMENTS.****# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]****Subpart A - General Provisions****General control device requirements.**

(a) Introduction.

(1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and

**SECTION E. Source Group Restrictions.**

61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(2) This section also contains requirements for an alternative work practice used to identify leaking equipment. This alternative work practice is placed here for administrative convenience and is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(b) Flares. Paragraphs (c) through (f) apply to flares.

(c)

(1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f).

(3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.

(i)

(A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity,  $V_{max}$ , as determined by the following equation:

$$V_{max} = (XH2 - K1) * K2$$

Where:

$V_{max}$  = Maximum permitted velocity, m/sec.

K1 = Constant, 6.0 volume-percent hydrogen.

K2 = Constant, 3.9(m/sec)/volume-percent hydrogen.

XH2 = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in § 60.17).

(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.

(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.

(4)

(i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.

(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).

(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity,  $V_{max}$ , as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.

(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity,  $V_{max}$ , as determined by the method specified in paragraph (f)(6).

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(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.

(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.

(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(f)

(1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22.

(2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.

(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$HT = K \sum_{i=1}^n C_i H_i$$

where:

HT = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25°C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;

$$K = \text{Constant, } (1/\text{ppm})(\text{g mole/scm})(\text{MJ/kcal}) \\ 1.740(10^{-7})$$

Where the standard temperature for (g mole/scm) is 20°C;

C<sub>i</sub> = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in §60.17); and

H<sub>i</sub> = Net heat of combustion of sample component i, kcal/g mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §60.17) if published values are not available or cannot be calculated.

(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.

(5) The maximum permitted velocity, V<sub>max</sub>, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

$$\text{Log}_{10} (V_{\text{max}}) = (HT + 28.8)/31.7$$

V<sub>max</sub> = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

HT = The net heating value as determined in paragraph (f)(3).

(6) The maximum permitted velocity, V<sub>max</sub>, for air-assisted flares shall be determined by the following equation.

$$V_{\text{max}} = 8.706 + 0.7084 (HT)$$

V<sub>max</sub> = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

HT = The net heating value as determined in paragraph (f)(3).

**SECTION E. Source Group Restrictions.****# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]****Subpart A - General Provisions****General control device requirements.**

(g) Alternative work practice for monitoring equipment for leaks. Paragraphs (g), (h), and (i) of this section apply to all equipment for which the applicable subpart requires monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor, except for closed vent systems, equipment designated as leakless, and equipment identified in the applicable subpart as having no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background. An owner or operator may use an optical gas imaging instrument instead of a 40 CFR part 60, appendix A-7, Method 21 monitor. Requirements in the existing subparts that are specific to the Method 21 instrument do not apply under this section. All other requirements in the applicable subpart that are not addressed in paragraphs (g), (h), and (i) of this section apply to this standard. For example, equipment specification requirements, and non-Method 21 instrument recordkeeping and reporting requirements in the applicable subpart continue to apply. The terms defined in paragraphs (g)(1) through (5) of this section have meanings that are specific to the alternative work practice standard in paragraphs (g), (h), and (i) of this section.

(1) Applicable subpart means the subpart in 40 CFR parts 60, 61, 63, or 65 that requires monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(2) Equipment means pumps, valves, pressure relief valves, compressors, open-ended lines, flanges, connectors, and other equipment covered by the applicable subpart that require monitoring with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(3) Imaging means making visible emissions that may otherwise be invisible to the naked eye.

(4) Optical gas imaging instrument means an instrument that makes visible emissions that may otherwise be invisible to the naked eye.

(5) Repair means that equipment is adjusted, or otherwise altered, in order to eliminate a leak.

(6) Leak means:

(i) Any emissions imaged by the optical gas instrument;

(ii) Indications of liquids dripping;

(iii) Indications by a sensor that a seal or barrier fluid system has failed; or

(iv) Screening results using a 40 CFR part 60, appendix A-7, Method 21 monitor that exceed the leak definition in the applicable subpart to which the equipment is subject.

(h) The alternative work practice standard for monitoring equipment for leaks is available to all subparts in 40 CFR parts 60, 61, 63, and 65 that require monitoring of equipment with a 40 CFR part 60, appendix A-7, Method 21 monitor.

(1) An owner or operator of an affected source subject to CFR parts 60, 61, 63, or 65 can choose to comply with the alternative work practice requirements in paragraph (i) of this section instead of using the 40 CFR part 60, appendix A-7, Method 21 monitor to identify leaking equipment. The owner or operator must document the equipment, process units, and facilities for which the alternative work practice will be used to identify leaks.

(2) Any leak detected when following the leak survey procedure in paragraph (i)(3) of this section must be identified for repair as required in the applicable subpart.

(3) If the alternative work practice is used to identify leaks, re-screening after an attempted repair of leaking equipment must be conducted using either the alternative work practice or the 40 CFR part 60, appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart to which the equipment is subject.

(4) The schedule for repair is as required in the applicable subpart.

(5) When this alternative work practice is used for detecting leaking equipment, choose one of the monitoring frequencies listed in Table 1 to subpart A of this part in lieu of the monitoring frequency specified for regulated equipment in the applicable subpart. Reduced monitoring frequencies for good performance are not applicable when using the alternative work practice.

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(6) When this alternative work practice is used for detecting leaking equipment the following are not applicable for the equipment being monitored:

- (i) Skip period leak detection and repair;
- (ii) Quality improvement plans; or
- (iii) Complying with standards for allowable percentage of valves and pumps to leak.

(7) When the alternative work practice is used to detect leaking equipment, the regulated equipment in paragraph (h)(1)(i) of this section must also be monitored annually using a 40 CFR part 60, appendix A-7, Method 21 monitor at the leak definition required in the applicable subpart. The owner or operator may choose the specific monitoring period (for example, first quarter) to conduct the annual monitoring. Subsequent monitoring must be conducted every 12 months from the initial period. Owners or operators must keep records of the annual Method 21 screening results, as specified in paragraph (i)(4)(vii) of this section.

(i) An owner or operator of an affected source who chooses to use the alternative work practice must comply with the requirements of paragraphs (i)(1) through (i)(5) of this section.

(1) Instrument Specifications. The optical gas imaging instrument must comply with the requirements in (i)(1)(i) and (i)(1)(ii) of this section.

(i) Provide the operator with an image of the potential leak points for each piece of equipment at both the detection sensitivity level and within the distance used in the daily instrument check described in paragraph (i)(2) of this section. The detection sensitivity level depends upon the frequency at which leak monitoring is to be performed.

(ii) Provide a date and time stamp for video records of every monitoring event.

(2) Daily Instrument Check. On a daily basis, and prior to beginning any leak monitoring work, test the optical gas imaging instrument at the mass flow rate determined in paragraph (i)(2)(i) of this section in accordance with the procedure specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each camera configuration used during monitoring (for example, different lenses used), unless an alternative method to demonstrate daily instrument checks has been approved in accordance with paragraph (i)(2)(v) of this section.

(i) Calculate the mass flow rate to be used in the daily instrument check by following the procedures in paragraphs (i)(2)(i)(A) and (i)(2)(i)(B) of this section.

(A) For a specified population of equipment to be imaged by the instrument, determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level.

(B) Multiply the standard detection sensitivity level, corresponding to the selected monitoring frequency in Table 1 of subpart A of this part, by the mass fraction of detectable chemicals from the stream identified in paragraph (i)(2)(i)(A) of this section to determine the mass flow rate to be used in the daily instrument check, using the following equation.

$$Edic = (Esds) \sum_{k=1}^k x_i$$

Where:

$Edic$  = Mass flow rate for the daily instrument check, grams per hour

$x_i$  = Mass fraction of detectable chemical(s)  $i$  seen by the optical gas imaging instrument, within the distance to be used in paragraph (i)(2)(iv)(B) of this section, at or below the standard detection sensitivity level,  $Esds$ .

$Esds$  = Standard detection sensitivity level from Table 1 to subpart A, grams per hour

$k$  = Total number of detectable chemicals emitted from the leaking equipment and seen by the optical gas imaging instrument.

(ii) Start the optical gas imaging instrument according to the manufacturer's instructions, ensuring that all appropriate settings conform to the manufacturer's instructions.

(iii) Use any gas chosen by the user that can be viewed by the optical gas imaging instrument and that has a purity of no

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less than 98 percent.

(iv) Establish a mass flow rate by using the following procedures:

(A) Provide a source of gas where it will be in the field of view of the optical gas imaging instrument.

(B) Set up the optical gas imaging instrument at a recorded distance from the outlet or leak orifice of the flow meter that will not be exceeded in the actual performance of the leak survey. Do not exceed the operating parameters of the flow meter.

(C) Open the valve on the flow meter to set a flow rate that will create a mass emission rate equal to the mass rate specified in paragraph (i)(2)(i) of this section while observing the gas flow through the optical gas imaging instrument viewfinder. When an image of the gas emission is seen through the viewfinder at the required emission rate, make a record of the reading on the flow meter.

(v) Repeat the procedures specified in paragraphs (i)(2)(ii) through (i)(2)(iv) of this section for each configuration of the optical gas imaging instrument used during the leak survey.

(vi) To use an alternative method to demonstrate daily instrument checks, apply to the Administrator for approval of the alternative under § 60.13(i).

(3) Leak Survey Procedure. Operate the optical gas imaging instrument to image every regulated piece of equipment selected for this work practice in accordance with the instrument manufacturer's operating parameters. All emissions imaged by the optical gas imaging instrument are considered to be leaks and are subject to repair. All emissions visible to the naked eye are also considered to be leaks and are subject to repair.

(4) Recordkeeping. You must keep the records described in paragraphs (i)(4)(i) through (i)(4)(vii) of this section:

(i) The equipment, processes, and facilities for which the owner or operator chooses to use the alternative work practice.

(ii) The detection sensitivity level selected from Table 1 to subpart A of this part for the optical gas imaging instrument.

(iii) The analysis to determine the piece of equipment in contact with the lowest mass fraction of chemicals that are detectable, as specified in paragraph (i)(2)(i)(A) of this section.

(iv) The technical basis for the mass fraction of detectable chemicals used in the equation in paragraph (i)(2)(i)(B) of this section.

(v) The daily instrument check. Record the distance, per paragraph (i)(2)(iv)(B) of this section, and the flow meter reading, per paragraph (i)(2)(iv)(C) of this section, at which the leak was imaged. Keep a video record of the daily instrument check for each configuration of the optical gas imaging instrument used during the leak survey (for example, the daily instrument check must be conducted for each lens used). The video record must include a time and date stamp for each daily instrument check. The video record must be kept for 5 years.

(vi) Recordkeeping requirements in the applicable subpart. A video record must be used to document the leak survey results. The video record must include a time and date stamp for each monitoring event. A video record can be used to meet the recordkeeping requirements of the applicable subparts if each piece of regulated equipment selected for this work practice can be identified in the video record. The video record must be kept for 5 years.

(vii) The results of the annual Method 21 screening required in paragraph (h)(7) of this section. Records must be kept for all regulated equipment specified in paragraph (h)(1) of this section. Records must identify the equipment screened, the screening value measured by Method 21, the time and date of the screening, and calibration information required in the existing applicable subpart.

(5) Reporting. Submit the reports required in the applicable subpart. Submit the records of the annual Method 21 screening required in paragraph (h)(7) of this section to the Administrator via e-mail to CCG-AWP@EPA.GOV.

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Group Name: SUBPART OOOOA REQUIREMENTS

Group Description: Subpart OOOOa Requirements

Sources included in this group

| ID  | Name      |
|-----|-----------|
| 701 | FUGITIVES |

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5370a]**

**Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015**

**When must I comply with this subpart?**

(a) You must be in compliance with the standards of this subpart no later than August 2, 2016 or upon startup, whichever is later.

(b) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to this subpart.

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5411a]**

**Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015**

**What additional requirements must I meet to determine initial compliance for my covers and closed vent systems routine**

You must meet the applicable requirements of this section for each cover and closed vent system used to comply with the emission standards for your centrifugal compressor wet seal degassing systems, reciprocating compressors, pneumatic pumps and storage vessels except as provided in paragraph (e) of this section.

(a) - (c) Not applicable.

(d) Closed vent systems requirements for centrifugal compressor wet seal fluid degassing systems, reciprocating compressors, pneumatic pumps and storage vessels using a control device or routing emissions to a process.

(1) You must conduct an assessment that the closed vent system is of sufficient design and capacity to ensure that all emissions from the storage vessel are routed to the control device and that the control device is of sufficient design and capacity to accommodate all emissions from the affected facility and have it certified by a qualified professional engineer in accordance with paragraphs (d)(1)(i) and (ii) of this section.

(i) You must provide the following certification, signed and dated by the qualified professional engineer: "I certify that the closed vent system design and capacity assessment was prepared under my direction or supervision. I further certify that the closed vent system design and capacity assessment was conducted and this report was prepared pursuant to the requirements of subpart OOOOa of 40 CFR part 60. Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that there are penalties for knowingly submitting false information."

(ii) The assessment shall be prepared under the direction or supervision of the qualified professional engineer who signs the certification in paragraph (d)(1)(i) of this section.

(2) [Reserved]

(e) Not applicable.

**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).

**III. MONITORING REQUIREMENTS.****# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5401a]****Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015****What are the exceptions to the equipment leak GHG and VOC standards for affected facilities at onshore natural gas processing plants?**

(a) You may comply with the following exceptions to the provisions of § 60.5400a(a) and (b).

(b)

(1) Each pressure relief device in gas/vapor service may be monitored quarterly and within 5 days after each pressure release to detect leaks by the methods specified in § 60.485a(b) except as provided in § 60.5400a(c) and in paragraph (b)(4) of this section, and § 60.482-4a(a) through (c) of subpart VVa of this part.

(2) If an instrument reading of 500 ppm or greater is measured, a leak is detected.

(3)

(i) When a leak is detected, it must be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in § 60.482-9a.

(ii) A first attempt at repair must be made no later than 5 calendar days after each leak is detected.

(4)

(i) Any pressure relief device that is located in a nonfractionating plant that is monitored only by non-plant personnel may be monitored after a pressure release the next time the monitoring personnel are onsite, instead of within 5 days as specified in paragraph (b)(1) of this section and § 60.482-4a(b)(1).

(ii) No pressure relief device described in paragraph (b)(4)(i) of this section may be allowed to operate for more than 30 days after a pressure release without monitoring.

(c) Sampling connection systems are exempt from the requirements of § 60.482-5a.

(d) - (e) Not applicable.

(f) An owner or operator may use the following provisions instead of § 60.485a(e):

(1) Equipment is in heavy liquid service if the weight percent evaporated is 10 percent or less at 150 °Celsius (302 °Fahrenheit) as determined by ASTM Method D86-96 (incorporated by reference as specified in § 60.17).

(2) Equipment is in light liquid service if the weight percent evaporated is greater than 10 percent at 150 °Celsius (302 °Fahrenheit) as determined by ASTM Method D86-96 (incorporated by reference as specified in § 60.17).

(g) An owner or operator may use the following provisions instead of § 60.485a(b)(2): A calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day. Check the instrument using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 of this part, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the instrument reading for each scale used as specified in § 60.486a(e)(8). Divide these readings by the initial calibration values for each scale and multiply by 100 to express the calibration drift as a percentage. If any calibration drift assessment shows a negative drift of more than 10 percent from the initial calibration value, then all equipment monitored since the last calibration with instrument readings below the appropriate leak definition and above the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) must be re-monitored. If any calibration drift assessment shows a

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positive drift of more than 10 percent from the initial calibration value, then, at the owner/operator's discretion, all equipment since the last calibration with instrument readings above the appropriate leak definition and below the leak definition multiplied by (100 plus the percent of positive drift/divided by 100) may be re-monitored.

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5416a]****Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015****What are the initial and continuous cover and closed vent system inspection and monitoring requirements for my centrifugal compressor, reciprocating compressor, pneumatic pump, and storage vessel affected facilities?**

For each closed vent system or cover at your storage vessel, centrifugal compressor, reciprocating compressor and pneumatic pump affected facilities, you must comply with the applicable requirements of paragraphs (a) through (c) of this section, except as provided in paragraph (d) of this section.

(a) Inspections for closed vent systems and covers installed on each centrifugal compressor, reciprocating compressor or pneumatic pump affected facility. Except as provided in paragraphs (b)(11) and (12) of this section, you must inspect each closed vent system according to the procedures and schedule specified in paragraphs (a)(1) and (2) of this section, inspect each cover according to the procedures and schedule specified in paragraph (a)(3) of this section, and inspect each bypass device according to the procedures of paragraph (a)(4) of this section.

(1) For each closed vent system joint, seam, or other connection that is permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange), you must meet the requirements specified in paragraphs (a)(1)(i) and (ii) of this section.

(i) Not applicable.

(ii) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; liquid leaks; or broken or missing caps or other closure devices. You must monitor a component or connection using the test methods and procedures in paragraph (b) of this section to demonstrate that it operates with no detectable emissions following any time the component is repaired or replaced or the connection is unsealed. You must maintain records of the inspection results as specified in § 60.5420a(c)(6).

(2) For closed vent system components other than those specified in paragraph (a)(1) of this section, you must meet the requirements of paragraphs (a)(2)(i) through (iii) of this section.

(i) Not applicable.

(ii) Conduct annual inspections according to the test methods and procedures specified in paragraph (b) of this section to demonstrate that the components or connections operate with no detectable emissions. You must maintain records of the inspection results as specified in § 60.5420a(c)(6).

(iii) Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; liquid leaks; or broken or missing caps or other closure devices. You must maintain records of the inspection results as specified in § 60.5420a(c)(6).

(3) - (4) Not applicable.

(b) No detectable emissions test methods and procedures. If you are required to conduct an inspection of a closed vent system or cover at your centrifugal compressor, reciprocating compressor, or pneumatic pump affected facility as specified in paragraphs (a)(1), (2), or (3) of this section, you must meet the requirements of paragraphs (b)(1) through (13) of this section.

(1) You must conduct the no detectable emissions test procedure in accordance with Method 21 of appendix A-7 of this part.

(2) The detection instrument must meet the performance criteria of Method 21 of appendix A-7 of this part, except that the

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instrument response factor criteria in section 8.1.1 of Method 21 must be for the average composition of the fluid and not for each individual organic compound in the stream.

(3) You must calibrate the detection instrument before use on each day of its use by the procedures specified in Method 21 of appendix A-7 of this part.

(4) Calibration gases must be as specified in paragraphs (b)(4)(i) and (ii) of this section.

(i) Zero air (less than 10 parts per million by volume hydrocarbon in air).

(ii) A mixture of methane in air at a concentration less than 10,000 parts per million by volume.

(5) You may choose to adjust or not adjust the detection instrument readings to account for the background organic concentration level. If you choose to adjust the instrument readings for the background level, you must determine the background level value according to the procedures in Method 21 of appendix A-7 of this part.

(6) Your detection instrument must meet the performance criteria specified in paragraphs (b)(6)(i) and (ii) of this section.

(i) Except as provided in paragraph (b)(6)(ii) of this section, the detection instrument must meet the performance criteria of Method 21 of appendix A-7 of this part, except the instrument response factor criteria in section 8.1.1 of Method 21 must be for the average composition of the process fluid, not each individual volatile organic compound in the stream. For process streams that contain nitrogen, air, or other inerts that are not organic hazardous air pollutants or volatile organic compounds, you must calculate the average stream response factor on an inert-free basis.

(ii) If no instrument is available that will meet the performance criteria specified in paragraph (b)(6)(i) of this section, you may adjust the instrument readings by multiplying by the average response factor of the process fluid, calculated on an inert-free basis, as described in paragraph (b)(6)(i) of this section.

(7) You must determine if a potential leak interface operates with no detectable emissions using the applicable procedure specified in paragraph (b)(7)(i) or (ii) of this section.

(i) If you choose not to adjust the detection instrument readings for the background organic concentration level, then you must directly compare the maximum organic concentration value measured by the detection instrument to the applicable value for the potential leak interface as specified in paragraph (b)(8) of this section.

(ii) If you choose to adjust the detection instrument readings for the background organic concentration level, you must compare the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (b)(5) of this section with the applicable value for the potential leak interface as specified in paragraph (b)(8) of this section.

(8) A potential leak interface is determined to operate with no detectable organic emissions if the organic concentration value determined in paragraph (b)(7) of this section is less than 500 parts per million by volume.

(9) Repairs. In the event that a leak or defect is detected, you must repair the leak or defect as soon as practicable according to the requirements of paragraphs (b)(9)(i) and (ii) of this section, except as provided in paragraph (b)(10) of this section.

(i) A first attempt at repair must be made no later than 5 calendar days after the leak is detected.

(ii) Repair must be completed no later than 15 calendar days after the leak is detected.

(10) Delay of repair. Delay of repair of a closed vent system or cover for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, or if you determine that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. You must complete repair of such equipment by the end of the next shutdown.

(11) Unsafe to inspect requirements. You may designate any parts of the closed vent system or cover as unsafe to inspect

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if the requirements in paragraphs (b)(11)(i) and (ii) of this section are met. Unsafe to inspect parts are exempt from the inspection requirements of paragraphs (a)(1) through (3) of this section.

(i) You determine that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (a)(1), (2), or (3) of this section.

(ii) You have a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(12) Difficult to inspect requirements. You may designate any parts of the closed vent system or cover as difficult to inspect, if the requirements in paragraphs (b)(12)(i) and (ii) of this section are met. Difficult to inspect parts are exempt from the inspection requirements of paragraphs (a)(1) through (3) of this section.

(i) You determine that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface.

(ii) You have a written plan that requires inspection of the equipment at least once every 5 years.

(13) Records. Records shall be maintained as specified in this section and in § 60.5420a(c)(9).

(c) - (d) Not applicable.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5421a]**

**Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015**

**What are my additional recordkeeping requirements for my affected facility subject to GHG and VOC requirements for onshore natural gas processing plants?**

(a) You must comply with the requirements of paragraph (b) of this section in addition to the requirements of § 60.486a.

(b) The following recordkeeping requirements apply to pressure relief devices subject to the requirements of §60.5401a(b)(1).

(1) When each leak is detected as specified in § 60.5401a(b)(2), a weatherproof and readily visible identification, marked with the equipment identification number, must be attached to the leaking equipment. The identification on the pressure relief device may be removed after it has been repaired.

(2) When each leak is detected as specified in § 60.5401a(b)(2), the information specified in paragraphs (b)(2)(i) through (x) of this section must be recorded in a log and shall be kept for 2 years in a readily accessible location:

(i) The instrument and operator identification numbers and the equipment identification number.

(ii) The date the leak was detected and the dates of each attempt to repair the leak.

(iii) Repair methods applied in each attempt to repair the leak.

(iv) "Above 500 ppm" if the maximum instrument reading measured by the methods specified in § 60.5400a(d) after each repair attempt is 500 ppm or greater.

(v) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(vi) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

(vii) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

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(viii) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(ix) The date of successful repair of the leak.

(x) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §60.482-4a(a). The designation of equipment subject to the provisions of §60.482-4a(a) must be signed by the owner or operator.

**V. REPORTING REQUIREMENTS.**

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420a]**  
**Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015**  
**What are my notification, reporting, and recordkeeping requirements?**

(a) Notifications. You must submit the notifications according to paragraphs (a)(1) and (2) of this section if you own or operate one or more of the affected facilities specified in §60.5365a that was constructed, modified, or reconstructed during the reporting period.

(1) If you own or operate an affected facility that is the group of all equipment within a process unit at an onshore natural gas processing plant, or a sweetening unit, you must submit the notifications required in §§ 60.7(a)(1), (3), and (4) and 60.15(d). If you own or operate a well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump, storage vessel, collection of fugitive emissions components at a well site, or collection of fugitive emissions components at a compressor station, you are not required to submit the notifications required in §§ 60.7(a)(1), (3), and (4) and 60.15(d).

(2) - (3) 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) and (12) 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 is required for all reports.

(i) The company name, facility site name associated with the affected facility, U.S. Well ID or U.S. 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) - (3) Not applicable.

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

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(i) The cumulative number of hours of operation or the number of months since initial startup, since August 2, 2016, or since the previous reciprocating compressor rod packing replacement, whichever is latest. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.

(ii) If applicable, for each deviation that occurred during the reporting period and recorded as specified in paragraph (c)(3)(iii) of this section, the date and time the deviation began, duration of the deviation and a description of the deviation.

(iii) If required to comply with § 60.5385a(a)(3), the information in paragraphs (b)(4)(iii)(A) through (C) of this section.

(A) Dates of each inspection required under § 60.5416a(a) and (b);

(B) Each defect or leak identified during each inspection, and date of repair or date of anticipated repair if repair is delayed; and

(C) Date and time of each bypass alarm or each instance the key is checked out if you are subject to the bypass requirements of § 60.5416a(a)(4).

(5) - (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 website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) 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), except as outlined in this paragraph (b)(9)(i). (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 website. The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as confidential business information (CBI). Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, 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 website, including information claimed to be CBI, to the EPA following the procedures in paragraphs (b)(9)(i)(A) and (B) of this section. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. The same ERT or alternate file submitted to the CBI office with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (b)(9)(i).

(A) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov), and as described above, should include clear CBI markings. ERT files should be flagged to the attention of the Group Leader, Measurement Policy Group. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov) to request a file transfer link.

(B) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: U.S. EPA, Attn: OAQPS Document Control Officer and Measurement Policy Group Leader, Mail Drop: C404-02, 109 T.W. Alexander Drive, P.O. Box 12055, RTP, NC 27711. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website 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) For combustion control devices tested by the manufacturer in accordance with § 60.5413a(d), an electronic copy of the

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performance test results required by § 60.5413a(d) shall be submitted via email to Oil\_\_and\_\_Gas\_\_PT@EPA.GOV unless the test results for that model of combustion control device are posted at the following website: [epa.gov/airquality/oilandgas/](http://epa.gov/airquality/oilandgas/).

(11) You must submit reports to the EPA via CEDRI, except as outlined in this paragraph (b)(11). CEDRI can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). You must use the appropriate electronic report template on the CEDRI website for this subpart (<https://www.epa.gov/electronic-reporting-air-emissions/cedri/>). If the reporting form specific to this subpart is not available on the CEDRI website 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 date reporting forms become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim for some of the information in the report, submit a complete file using the appropriate electronic report template on the CEDRI website, including information claimed to be CBI, to the EPA following the procedures in paragraphs (b)(11)(i) and (ii) of this section. Clearly mark the part or all of the information that you claim to be CBI. Information not marked as CBI may be authorized for public release without prior notice. Information marked as CBI will not be disclosed except in accordance with procedures set forth in 40 CFR part 2. All CBI claims must be asserted at the time of submission. Anything submitted using CEDRI cannot later be claimed CBI. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available. Submit the same file submitted to the CBI office with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (b)(11).

(i) The preferred method to receive CBI is for it to be transmitted electronically using email attachments, File Transfer Protocol, or other online file sharing services. Electronic submissions must be transmitted directly to the OAQPS CBI Office at the email address [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov), and as described above, should include clear CBI markings. Files should be flagged to the attention of the Oil and Natural Gas Sector Lead. If assistance is needed with submitting large electronic files that exceed the file size limit for email attachments, and if you do not have your own file sharing service, please email [oaqpscbi@epa.gov](mailto:oaqpscbi@epa.gov) to request a file transfer link.

(ii) If you cannot transmit the file electronically, you may send CBI information through the postal service to the following address: U.S. EPA, Attn: OAQPS Document Control Officer and Oil and Natural Gas Sector Lead, Mail Drop: C404-02, 109 T.W. Alexander Drive, P.O. Box 12055, RTP, NC 27711. The mailed CBI material should be double wrapped and clearly marked. Any CBI markings should not show through the outer envelope.

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

(13) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (b)(13)(i) through (vi) of this section.

(i) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.

(ii) The outage must have occurred within the period of time beginning 5 business days prior to the date that the submission is due.

(iii) The outage may be planned or unplanned.

(iv) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting.

(v) You must provide to the Administrator a written description identifying:

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(A) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;

(B) A rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage;

(C) Measures taken or to be taken to minimize the delay in reporting; and

(D) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(vi) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(vii) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.

(14) If you are required to electronically submit a report through CEDRI in the EPA's CDX, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (b)(14)(i) through (v) of this section.

(i) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage).

(ii) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting.

(iii) You must provide to the Administrator:

(A) A written description of the force majeure event;

(B) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;

(C) Measures taken or to be taken to minimize the delay in reporting; and

(D) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.

(iv) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(v) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.

(c) Recordkeeping requirements. You must maintain the records identified as specified in § 60.7(f) and in paragraphs (c)(1) through (18) 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) - (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, since August 2, 2016, or since the previous replacement of the reciprocating compressor rod packing, whichever is latest. Alternatively, a

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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, including the date and time the deviation began, duration of the deviation, and a description of the deviation.

(4) - (5) Not applicable.

(6) Records of each closed vent system inspection required under § 60.5416a(a)(1) and (2) and (b) for centrifugal compressors and reciprocating compressors, § 60.5416a(c)(1) for storage vessels, or § 60.5416a(e) for pneumatic pumps as required in paragraphs (c)(6)(i) through (iii) of this section.

(i) A record of each closed vent system inspection or no detectable emissions monitoring survey. You must include an identification number for each closed vent system (or other unique identification description selected by you) and the date of the inspection.

(ii) For each defect or leak detected during inspections required by § 60.5416a(a)(1) and (2), (b), (c)(1), or (d), you must record the location of the defect or leak, a description of the defect or the maximum concentration reading obtained if using Method 21 of appendix A-7 of this part, the date of detection, and the date the repair to correct the defect or leak is completed.

(iii) If repair of the defect is delayed as described in § 60.5416a(b)(10), you must record the reason for the delay and the date you expect to complete the repair.

(7) - (13) Not applicable.

(14) A log of records as specified in § 60.5412a(d)(1)(iii), for all inspection, repair, and maintenance activities for each control device failing the visible emissions test.

(15) - (16) Not applicable.

(17) For each closed vent system routing to a control device or process, the records of the assessment conducted according to § 60.5411a(d):

(i) A copy of the assessment conducted according to § 60.5411a(d)(1);

(ii) A copy of the certification according to § 60.5411a(d)(1)(i); and

(iii) The owner or operator shall retain copies of all certifications, assessments, and any related records for a period of 5 years, and make them available if directed by the delegated authority.

(18) A copy of each performance test submitted under paragraph (b)(9) of this section.

**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5422a]****Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015****What are my additional reporting requirements for my affected facility subject to GHG and VOC requirements for onshore natural gas processing plants?**

(a) You must comply with the requirements of paragraphs (b) and (c) of this section in addition to the requirements of § 60.487a(a), (b)(1) through (3) and (5), and (c)(2)(i) through (iv) and (vi) through (vii). You must submit semiannual reports 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/>)). 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 website (<https://www3.epa.gov/ttn/chief/cedri/>). If the reporting form specific to this subpart is not available in CEDRI at the

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time that the report is due, 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 days, you must begin submitting all subsequent reports via CEDRI. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.

(b) An owner or operator must include the following information in the initial semiannual report in addition to the information required in §60.487a(b)(1) through (3) and (5): Number of pressure relief devices subject to the requirements of §60.5401a(b) except for those pressure relief devices designated for no detectable emissions under the provisions of §60.482-4a(a) and those pressure relief devices complying with §60.482-4a(c).

(c) An owner or operator must include the information specified in paragraphs (c)(1) and (2) of this section in all semiannual reports in addition to the information required in §60.487a(c)(2)(i) through (iv) and (vii) through (viii):

- (1) Number of pressure relief devices for which leaks were detected as required in §60.5401a(b)(2); and
- (2) Number of pressure relief devices for which leaks were not repaired as required in §60.5401a(b)(3).

**VI. WORK PRACTICE REQUIREMENTS.****# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5385a]****Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015****What GHG and VOC standards apply to reciprocating compressor affected facilities?**

You must reduce GHG (in the form of a limitation on emissions of methane) and VOC emissions by complying with the standards in paragraphs (a) through (d) of this section 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.

(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.

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5415a]****Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015****How do I demonstrate continuous compliance with the standards for my well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump,...and affected facilities at onshore natural gas processing plants?**

(a) - (b) Not applicable.

(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

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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 § 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).

(d) - (h) Not applicable.

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

In accordance with 40 CFR §60.5371a, this section applies to super-emitter events. For purposes of this section, a super-emitter event is defined as any emissions event that is located at or near an oil and gas facility (e.g., individual well site, natural gas processing plant or compressor station) and that is detected using remote detection methods and has a quantified emission rate of 100 kg/hr of methane or greater. Upon receiving a notification of a super emitter event issued by the EPA under §60.5371b(c) in subpart OOOOb of this part, owners or operators must take the actions listed in paragraphs (a) and (b) of this section. Within 5 calendar days of receiving a notification from the EPA of a super-emitter event, the owner or operator of an oil and natural gas facility (e.g., a well site, centralized production facility, natural gas processing plant, or compressor station) must initiate a super-emitter event investigation.

(a) Identification of super-emitter events.

(1) If you do not own or operate an oil and natural gas facility within 50 meters from the latitude and longitude provided in the notification subject to the regulation under this subpart, report this result to the EPA under paragraph 60.5371b(e). Your super-emitter event investigation is deemed complete under this subpart.

(2) If you own or operate an oil and natural gas facility within 50 meters from the latitude and longitude provided in the notification, and there is an affected facility or associated equipment subject to this subpart onsite, you must investigate to determine the source of the super-emitter event in accordance with paragraph (a)(2) of this section, maintain records of your investigation, and report the results in accordance with paragraph (b) of this section.

(3) The investigation required by paragraph (a)(2) of this section may include but is not limited to the actions specified below in paragraphs (a)(3)(i) through (iv) of this section.

(i) Review any maintenance activities or process activities from the affected facilities subject to regulation under this subpart, starting from the date of detection of the super-emitter event as identified in the notification, until the date of investigation, to determine if the activities indicate any potential source(s) of the super-emitter event emissions.

(ii) Review all monitoring data from control devices (e.g., flares) from the affected facilities subject to regulation under this subpart from the initial date of detection of the super-emitter event as identified in the notification, until the date of receiving the notification from the EPA to identify malfunctions of control devices or periods when the control devices were not in compliance with applicable requirements and that indicate a potential source of the super-emitter event emissions.

(iii) If you conducted a fugitive emissions survey in accordance with §60.5397a between the initial date of detection of the super-emitter event as identified in the notification and the date the notification from the EPA was received, review the results of the survey to identify any potential source(s) of the super-emitter event emissions.

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(iv) Screen the entire facility with OGI, Method 21 of appendix A-7 to this part, or an alternative test method(s) approved per § 60.5398b(d) of subpart OOOOb of this part, to determine if a super-emitter event is present.

(b) Super-emitter event report. You must submit the results of the super-emitter event investigation conducted under paragraph (a) of this section to the EPA in accordance with paragraph (b)(1) of this section. If the super-emitter event (i.e., emission at 100 kg/hr of methane or more) is ongoing at the time of this initial report, submit the additional information in accordance with paragraph (b)(2) of this section. You must attest to the information included in the report as specified in paragraph (b)(3) of this section.

(1) Within 15 days of receiving a notification from the EPA under § 60.5371b(c), you must submit a report of the super-emitter event investigation conducted under paragraph (a) of this section through the Super-Emitter Program Portal, at [www.epa.gov/super-emitter](http://www.epa.gov/super-emitter). You must include the applicable information in paragraphs (b)(1)(i) through (viii) of this section in the report. If you have identified a demonstrable error in the notification, the report may include a statement of the demonstrable error.

(i) Notification Report ID of the super-emitter event notification (which is provided in the EPA notification).

(ii) Identification of whether you are the owner or operator of an oil and natural gas facility within 50 meters from the latitude and longitude provided in the EPA notification. If you do not own or operate an oil and natural gas facility within 50 meters from the latitude and longitude provided in the EPA notification, you are not required to report the information in paragraphs (b)(1)(iii) through (viii) of this section.

(iii) General identification information for the facility, including facility name, the physical address, applicable ID Number (e.g., EPA ID Number, API Well ID Number), the owner or operator or responsible official (where applicable), and their email address.

(iv) Identification of whether there is an affected facility or associated equipment subject to regulation under this subpart at this oil and natural gas facility.

(v) Indication of whether you were able to identify the source of the super-emitter event. If you indicate you were unable to identify the source of the super-emitter event, you must certify that all applicable investigations specified in paragraphs (a)(2)(i) through (iv) of this section have been conducted for all affected facilities and associated equipment subject to regulation under this subpart that are at this oil and natural gas facility, and you have determined that these affected facilities and associated equipment are not the source of the super-emitter event. If you indicate that you were not able to identify the source of the super-emitter event, you are not required to report the information in paragraphs (b)(1)(vi) through (viii) of this section.

(vi) The source(s) of the super-emitter event.

(vii) Identification of whether the source of the super-emitter event is an affected facility or associated equipment subject to regulation under of this subpart. If the source of the super-emitter event is an affected facility or associated equipment subject to regulation under this subpart, identify the applicable regulation(s) under this subpart.

(viii) Indication of whether the super-emitter event is ongoing at the time of the initial report submittal (i.e., emissions at 100 kg/hr of methane or more).

(A) If the super-emitter event is not ongoing at the time of the initial report submittal, provide the actual (or if not known, estimated) date and time the super-emitter event ended.

(B) If the super-emitter event is ongoing at the time of the initial report submittal, provide a short narrative of your plan to end the super-emitter event, including the targeted end date for the efforts to be completed and the super-emitter event ended.

(2) If the super-emitter event is ongoing at the time of the initial report submittal, within 5 business days of the date the super-emitter event ends you must update your initial report through the Super-Emitter Program Portal, to provide the end date and time of the super-emitter event.

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(3) You must sign the following attestation when submitting data into the Super-Emitter Program Portal: "I certify that the information provided in this report regarding the specified super-emitter event was prepared under my direction or supervision. I further certify that the investigations were conducted, and this report was prepared pursuant to the requirements of § 60.5371a(a) and (b). Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete. I am aware that knowingly false statements may be punishable by fine or imprisonment."

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5365a]  
Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction,  
Modification or Reconstruction Commenced After September 18, 2015  
Am I subject to this subpart?**

You are subject to the applicable provisions of this subpart if you are the owner or operator of one or more of the onshore affected facilities listed in paragraphs (a) through (j) of this section, that is located within the Crude Oil and Natural Gas source category, as defined in § 60.5430a, for which you commence construction, modification, or reconstruction after September 18, 2015, and on or before December 6, 2022. Facilities located inside and including the Local Distribution Company (LDC) custody transfer station are not subject to this subpart. An affected facility must continue to comply with the requirements of this subpart until it begins complying with a more stringent requirement, that applies to the same affected facility, in an approved, and effective, state or Federal plan that implements subpart OOOOc of this part, or modifies or reconstructs after December 6, 2022, and thus becomes subject to subpart OOOOb of this part.

(a) - (b) Not applicable.

(c) Each reciprocating compressor affected facility, which is a single reciprocating compressor. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.

(d) - (e) Not applicable.

(f) The group of all equipment within a process unit at an onshore natural gas processing plant is an affected facility.

(1) Addition or replacement of equipment for the purpose of process improvement that is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(2) Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§ 60.5400a, 60.5401a, 60.5402a, 60.5421a, and 60.5422a if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§ 60.5400a, 60.5401a, 60.5402a, 60.5421a, and 60.5422a.

(3) Not applicable.

(g) Sweetening units located at onshore natural gas processing plants that commenced construction, modification, or reconstruction after September 18, 2015, and on or before November 16, 2020, and sweetening units that commence construction, modification, or reconstruction after November 16, 2020.

(1) Each sweetening unit that processes natural gas produced from either onshore or offshore wells is an affected facility, and

(2) Each sweetening unit that processes natural gas followed by a sulfur recovery unit is an affected facility.

(3) Facilities that have a design capacity less than 2 long tons per day (LT/D) of hydrogen sulfide (H<sub>2</sub>S) in the acid gas (expressed as sulfur) are required to comply with recordkeeping and reporting requirements specified in § 60.5423a(c) but are not required to comply with §§ 60.5405a through 60.5407a and §§ 60.5410a(g) and 60.5415a(g).

(4) Not applicable.

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(h) - (j) Not applicable.

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5400]****Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution****What equipment leak standards apply to affected facilities at an onshore natural gas processing plant?**

This section applies to the group of all equipment, except compressors, within a process unit.

(a) You must comply with the requirements of §§ 60.482-1a(a), (b), and (d), 60.482-2a, and 60.482-4a through 60.482-11a, except as provided in § 60.5401.

(b) You may elect to comply with the requirements of §§ 60.483-1a and 60.483-2a, as an alternative.

(c) You may apply to the Administrator for permission to use an alternative means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to that achieved by the controls required in this subpart according to the requirements of § 60.5402 of this subpart.

(d) You must comply with the provisions of § 60.485a of this part except as provided in paragraph (f) of this section.

(e) You must comply with the provisions of §§ 60.486a and 60.487a of this part except as provided in §§ 60.5401, 60.5421, and 60.5422 of this part.

(f) You must use the following provision instead of § 60.485a(d)(1): Each piece of equipment is presumed to be in VOC service or in wet gas service unless an owner or operator demonstrates that the piece of equipment is not in VOC service or in wet gas service. For a piece of equipment to be considered not in VOC service, it must be determined that the VOC content can be reasonably expected never to exceed 10.0 percent by weight. For a piece of equipment to be considered in wet gas service, it must be determined that it contains or contacts the field gas before the extraction step in the process. For purposes of determining the percent VOC content of the process fluid that is contained in or contacts a piece of equipment, procedures that conform to the methods described in ASTM E169-93, E168-92, or E260-96 (incorporated by reference as specified in § 60.17) must be used.

**# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5402a]****Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015****What are the alternative means of emission limitations for GHG and VOC equipment leaks from onshore natural gas processing plants?**

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in GHG and VOC emissions at least equivalent to the reduction in GHG and VOC emissions achieved under any design, equipment, work practice or operational standard, the Administrator will publish, in the Federal Register, a notice permitting the use of that alternative means for the purpose of compliance with that standard. The notice may condition permission on requirements related to the operation and maintenance of the alternative means.

(b) Any notice under paragraph (a) of this section must be published only after notice and an opportunity for a public hearing.

(c) The Administrator will consider applications under this section from either owners or operators of affected facilities, or manufacturers of control equipment.

(d) An application submitted under paragraph (c) of this section must meet the following criteria:

(1) The applicant must collect, verify and submit test data, covering a period of at least 12 months, necessary to support the finding in paragraph (a) of this section.

(2) The application must include operation, maintenance and other provisions necessary to assure reduction in methane and VOC emissions at least equivalent to the reduction in methane and VOC emissions achieved under the design, equipment, work practice or operational standard in paragraph (a) of this section by including the information specified in

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paragraphs (d)(1)(i) through (x) of this section.

- (i) A description of the technology or process.
  - (ii) The monitoring instrument and measurement technology or process.
  - (iii) A description of performance based procedures (i.e. method) and data quality indicators for precision and bias; the method detection limit of the technology or process.
  - (iv) The action criteria and level at which a fugitive emission exists.
  - (v) Any initial and ongoing quality assurance/quality control measures.
  - (vi) Timeframes for conducting ongoing quality assurance/quality control.
  - (vii) Field data verifying viability and detection capabilities of the technology or process.
  - (viii) Frequency of measurements.
  - (ix) Minimum data availability.
  - (x) Any restrictions for using the technology or process.
- (3) The application must include initial and continuous compliance procedures including recordkeeping and reporting.

**# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5425a]**  
**Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015**  
**What parts of the General Provisions apply to me?**

Table 3 to this subpart shows which parts of the General Provisions in §60.1 through §60.19 apply to you.

**# 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a]**  
**Subpart OOOOa - Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015**  
**What definitions apply to this subpart?**

As used in this subpart, 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 terms shall have the specific meanings given them under 40 CFR 60.5430a.

**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.

This state-only operating permit grants ETC Northeast Pipeline, LLC authorization to continue operating the following sources:

- Sources 031-033, three (3) 40.92 MMBtu/hr HMO heaters;
- Source 201, one (1) 200 gpm amine sweetening unit controlled by a 1.07 MMBtu/hr thermal oxidizer and MSS plant flare;
- Source 204, Rod Packing Emissions from three (3) Electric Compressors controlled by a 1.0 MMBtu/hr thermal oxidizer;
- Source 301, two (2) 90,000-gallon condensate tanks, two (2) 21,000 2-lb RVP tanks controlled by a 1.0 MMBtu/hr truck loading combustor, and miscellaneous storage tanks with varying capacities between 500 and 16,800-gallons;
- Source 401, one (1) 6.22 MMBtu/hr NGL dehydration regenerator heater, one (1) 8.5 MMBtu/hr regenerator gas heater, and fifteen (15) catalytic heaters totaling 0.85 MMBtu/hr;
- Source 501, Pneumatic Devices, consisting of two (2) air-actuated intermittent-bleed pneumatic devices;
- Source 601, Venting/Blowdowns, including a residue compressor (electric), stabilizer compressor downtime (electric), moisture analyzer, VRU compressor blowdowns, facility maintenance, a stabilizer compressor (electric), and miscellaneous blowdowns;
- Source 701, Fugitives, consisting of fugitive emission components such as valves, flanges, connectors, open-ended lines, etc.;
- Source 702, Truck Loadout, controlled by a 1.0 MMBtu/hr combustor with associated 0.086 MMBtu/hr pilot;
- Source 801, Pigging Operations, consisting of one (1) pig receiver and one (1) pig launcher controlled by the MSS plant flare; and
- One (1) maintenance, startup, and shutdown (MSS) facility flare rated at 906 MMBtu/hr.



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

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