





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

## STATE ONLY OPERATING PERMIT

Issue Date: April 20, 2016 Effective Date: April 20, 2016

**Expiration Date:** March 31, 2021

> 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: 25-01034

Federal Tax Id - Plant Code: 80-0787682-1

Owner Information					
Name: EMKEY GAS PROC LLC					
Mailing Address: 558 W 6TH ST STE 200					
ERIE, PA 16507-1129					
Plant Information					
Plant information					
Plant: EMKEY GAS PROC LLC/UNION CITY GAS PLT					
Location: 25 Erie County 25934 Union Township					
SIC Code: 1311 Mining - Crude Petroleum And Natural Gas					
Responsible Official					
Name: KYLE RHOADES					
Title: OPERATIONS SUPERVISOR					
Phone: (716) 450 - 3190					
Permit Contact Person					
Name: KYLE RHOADES					
Title: OPERATIONS SUPERVISOR					
Phone: (716) 450 - 3190					
[Signature]					
CHRISTINA S. NAGY, NORTHWEST REGION AIR PROGRAMMANAGER					





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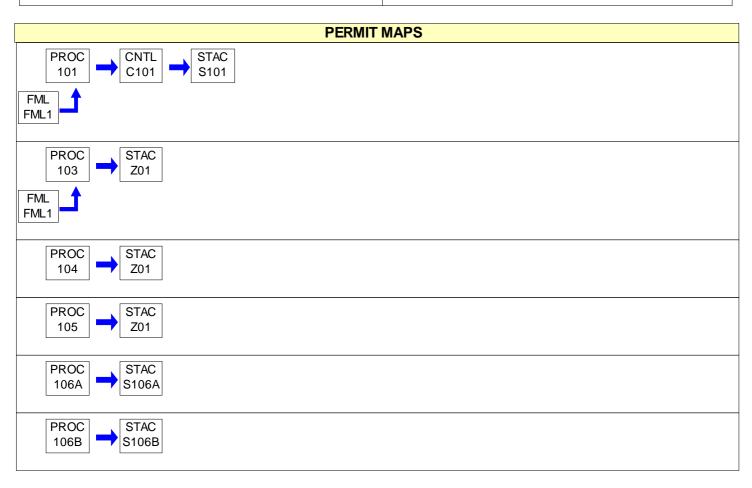
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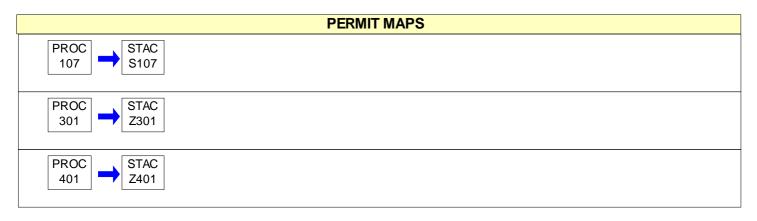


# SECTION A. Site Inventory List

Source II	O Source Name	Capacity/	Throughput	Fuel/Material
101	PROPANE REFRIGERATION COMPRESSOR	2,111.400	CF/HR	Natural Gas
103	HEAT MEDIUM HEATER	6.640	MCF/HR	Natural Gas
104	STORAGE TANKS	8,000.000	Gal/HR	
105	EQUIPMENT LEAKS - GAS PROCESSING PLANT		N/A	
106A	INLET COMPRESSOR ENGINE UC1	6,202.000	CF/HR	Natural Gas
106B	INLET COMPRESSOR ENGINE UC2	6,202.000	CF/HR	Natural Gas
107	ENG-1 AJAX DPC-2803-LE 600 BHP	4,680.000	CF/HR	Natural Gas
301	TANKS/VESSELS	30.000	Gal/HR	
401	DEHYDRATOR UNIT 1 SIVALLS 9-TRAY	208.000	MCF/HR	
C101	OXIDATION CATALYST			
FML1	NATURAL GAS			
S101	REFRIGERANT COMPRESSOR STACK			
S106A	INLET COMPRESSOR UC1 EXHAUST STACK			
S106B	INLET COMPRESSOR UC2 EXHAUST STACK			
S107	ENG-1 AJAX 600 BHP EXHAUST STACK			
Z01	FUGITIVE			
Z301	TANKS/VESSELS STACK			
Z401	DEHYDRATOR UNIT 1 STACK			













#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)&(c)]

#### 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 and an additional annual administrative fee as specified in 25 Pa. Code § 127.703(b) and (c). The fees shall be made payable to "The Commonwealth of Pennsylvania - Clean Air Fund" and shall be for the amount specified in the following schedule specified in 25 Pa. Code § 127.703(b) and (c).
  - (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.
- (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.

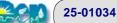
#004 [25 Pa. Code § 127.703]

Operating Permit Fees under Subchapter I.

- (a) The permittee shall pay fees according to the following schedule specified in 25 Pa. Code § 127.703(b):
  - (1) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (2) Three hundred seventy-five dollars for applications filed for the calendar years beginning in 2005.

This fee schedule shall apply to the processing of an application for an operating permit as well as the extension,







modification, revision, renewal, and re-issuance of each operating permit or part thereof.

- (b) The permittee shall pay an annual operating permit administrative fee according to the fee schedule established in 25 Pa. Code § 127.703(c).
  - (1) Two hundred fifty dollars for applications filed during the 1995-1999 calendar years.
  - (2) Three hundred dollars for applications filed during the 2000-2004 calendar years.
  - (3) Three hundred seventy-five dollars for applications filed during the years beginning in 2005.
- (c) The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund".

#### #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

#### #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:

- (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]

**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:

- (b) Administrative Amendments. The permittee shall make 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 make minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.
- (d) Permit modifications which do not qualify as minor permit modifications under 25 Pa. Code § 127.541 will be treated as a significant operating permit revision subject to the public notification procedures in §§ 127.424 and 127.425.

#### #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 NOx from a single source during the term of the permit and 5 tons of NOx 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 PM10 from a single source during the term of the permit and 3.0 tons of PM10 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:





- (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)







- (6) Section 127.462 (relating to minor operating permit modifications)
- (7) Subchapter H (relating to general plan approvals and general operating permits)

#### #015 [25 Pa. Code § 127.11]

### Reactivation

- (a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).
- (b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#### #016 [25 Pa. Code § 127.36]

Health Risk-based Emission Standards and Operating Practice Requirements.

- (a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].
- (b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#### #017 [25 Pa. Code § 121.9]

### Circumvention.

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

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

## Reporting Requirements.

- (a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.
- (b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.
- (c) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

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

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







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.







### I. RESTRICTIONS.

## **Emission Restriction(s).**

#### # 001 [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) Not applicable.
  - (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 standard requirements.
  - (d) Not applicable.

#### # 002 [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 Section C, Condition #001 (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

#### # 003 [25 Pa. Code §123.31]

## Limitations

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.





## # 004 [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.

## # 005 [25 Pa. Code §123.42]

## **Exceptions**

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

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).
  - (4) Not Applicable.

### II. TESTING REQUIREMENTS.

## # 006 [25 Pa. Code §123.43]

### Measuring techniques

Visible emissions may be measured using either of the following:

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

## 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).

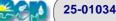
### V. REPORTING REQUIREMENTS.

## # 007 [25 Pa. Code §135.3]

### Reporting

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

## # 008 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

[From: 25 Pa. Code §123.1(c)]

A person responsible for any source specified in Section C, Condition #001 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.

## # 009 [25 Pa. Code §129.14]

## **Open burning operations**

- (a) Not Applicable.
- (b) 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) Not Applicable.
  - (5) Not Applicable.
  - (6) A fire set solely for recreational or ceremonial purposes.
  - (7) A fire set solely for cooking food.
- (d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:
  - (1) As used in this subsection the following terms shall have the following meanings:







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

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

- (2) Not Applicable.
- (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.

This permit does not constitute authorization to burn solid waste pursuant to Section 610(3) of the Solid Waste Management Act, 35 P.S. Section 6018.610(3), or any other provision of the Solid Waste Management Act.]

#### VII. ADDITIONAL REQUIREMENTS.

#### # 010 [25 Pa. Code §121.7]

Prohibition of air pollution.

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

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5360] Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution What is the purpose of this subpart?

This subpart establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO2) emissions from affected facilities that commence construction, modification or reconstruction after August 23, 2011.

# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5365] Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution 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 (g) of this section for which you commence construction, modification or reconstruction after August 23, 2011.

- (a) Not applicable
- (b) Not applicable
- (c) Each reciprocating compressor affected facility, which is a single reciprocating compressor located between the wellhead and the point of custody transfer to the natural gas transmission and storage segment. 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) Not applicable [The pneumatic controllers use process air instead of natural gas]
- (e) Not applicable



## 25-01034



## **SECTION C.** Site Level Requirements

- (f) The group of all equipment, except compressors, within a process unit 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 §§ 60.5400, 60.5401, 60.5402, 60.5421, and 60.5422 of this subpart 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 §§ 60.5400, 60.5401, 60.5402, 60.5421, and 60.5422 of this subpart.
- (3) The equipment within a process unit of an affected facility located at onshore natural gas processing plants and described in paragraph (f) of this section are exempt from this subpart if they are subject to and controlled according to subparts Wa, GGG or GGGa of this part.
- (g) Not applicable
- (h) Not applicable

[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58435, Sept. 23, 2013; 79 FR 79036, Dec. 31, 2014; 80 FR 48268, Aug. 12, 2015]

- # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5370]
  Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution When must I comply with this subpart?
- (a) You must be in compliance with the standards of this subpart no later than October 15, 2012 or upon startup, whichever is later.
- (b) 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.
- (c) You are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not otherwise required by law to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a). Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart.
- # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5385]
  Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution What standards apply to reciprocating compressor affected facilities?

You must comply 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) 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 October 15, 2012, 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) [Not applicable]
- (b) You must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by §60.5410.
- (c) You must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities







as required by §60.5415.

(d) You must perform the required notification, recordkeeping, and reporting as required by §60.5420.

[77 FR 49542, Aug. 16, 2012, as amended at 79 FR 79037, Dec. 31, 2014]

# 015 [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) (c) [Not applicable]
- (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.
- # 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5401]
  Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution What are the exceptions to the equipment leak standards for affected facilities at onshore natural gas processing plants?
- (a) You may comply with the following exceptions to the provisions of §60.5400(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 §60.5400(c) and in paragraph (b)(4) of this section, and §60.482-4a(a) through (c) of subpart Wa.
- (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 on-site, instead of within 5 days as specified in paragraph (b)(1) of this section and §60.482-4a(b)(1) of subpart VVa.
- (ii) No pressure relief device described in paragraph (b)(4)(i) of this section must 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) Pumps in light liquid service, valves in gas/vapor and light liquid service, pressure relief devices in gas/vapor service, and connectors in gas/vapor service and in light liquid service that are located at a nonfractionating plant that does not have the design capacity to process 283,200 standard cubic meters per day (scmd) (10 million standard cubic feet per day) or more of field gas are exempt from the routine monitoring requirements of §§60.482-2a(a)(1), 60.482-7a(a), 60.482-11a(a), and paragraph (b)(1) of this section.
- (e) Pumps in light liquid service, valves in gas/vapor and light liquid service, pressure relief devices in gas/vapor service, and connectors in gas/vapor service and in light liquid service within a process unit that is located in the Alaskan North Slope are exempt from the routine monitoring requirements of §§60.482-2a(a)(1), 60.482-7a(a), 60.482-11a(a), and paragraph (b)(1) of this section.
- (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 °C (302 °F) 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 °C (302 °F) 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 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.

[77 FR 49542, Aug. 16, 2012, as amended at 79 FR 79038, Dec. 31, 2014]

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5410] Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution How do I demonstrate initial compliance with the standards for my gas well affected facility, my centrifugal compressor affected facility, my reciprocating compressor affected facility, my pneumatic controller affected facility, my storage vessel affected facility, and my equipment leaks and sweetening unit affected facilities at onshore natural gas processing plants?

You must determine initial compliance with the standards for each affected facility using the requirements in paragraphs (a) through (i) of this section. The initial compliance period begins on October 15, 2012, or upon initial startup, whichever is later, and ends no later than one year after the initial startup date for your affected facility or no later than one year after October 15, 2012. The initial compliance period may be less than one full year.

- (a) (b) [Not applicable]
- (c) To achieve initial compliance with the standards for each reciprocating compressor affected facility you must comply with paragraphs (c)(1) through (4) of this section.
- (1) If complying with §60.5385(a)(1) or (2), during the initial compliance period, you must continuously monitor the number of hours of operation or track the number of months since the last rod packing replacement.
- (2) [Not applicable]
- (3) You must submit the initial annual report for your reciprocating compressor as required in §60.5420(b).







- (4) You must maintain the records as specified in §60.5420(c)(3) for each reciprocating compressor affected facility.
- (d) Not applicable.
- (e) [Reserved]
- (f) For affected facilities at onshore natural gas processing plants, initial compliance with the VOC requirements is demonstrated if you are in compliance with the requirements of §60.5400.
- (g) (i) [Not applicable]

[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58437, Sept. 23, 2013; 79 FR 79038, Dec. 31, 2014]

- # 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5415]
  Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution
  How do I demonstrate continuous compliance with the standards for my gas well affected facility, my centrifugal
  compressor affected facility, my stationary reciprocating compressor affected facility, my pneumatic controller
  affected facility, my storage vessel affected facility, and my affected facilities at onshore natural gas processing
  plants?
- (a) (b) [Not applicable]
- (c) For each reciprocating compressor affected facility complying with §60.5385(a)(1) or (2), you must demonstrate continuous compliance according to paragraphs (c)(1) through (3) of this section. For each reciprocating compressor affected facility complying with §60.5385(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 October 15, 2012, or the date of the most recent reciprocating compressor rod packing replacement, whichever is later.
- (2) You must submit the annual report as required in §60.5420(b) and maintain records as required in §60.5420(c)(3).
- (3) You must replace the reciprocating compressor rod packing 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) [Not applicable]
- (d) (e) [Not applicable]
- (f) For affected facilities at onshore natural gas processing plants, continuous compliance with VOC requirements is demonstrated if you are in compliance with the requirements of §60.5400.
- (g) [Not applicable]

[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58442, Sept. 23, 2013; 79 FR 79039, Dec. 31, 2014]

- # 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420]
  Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution What are my notification, reporting, and recordkeeping requirements?
- (a) 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 §60.5365 that was constructed, modified, or reconstructed during the reporting period.
- (1) If you own or operate a gas well, pneumatic controller, centrifugal compressor, reciprocating compressor or storage vessel affected facility you are not required to submit the notifications required in §60.7(a)(1), (3), and (4).





### (2) [Not applicable]

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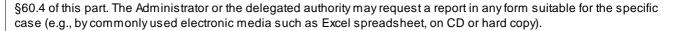
- (b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (6) of this section to the Administrator and performance test reports as specified in paragraph (b)(7) or (8) of this section. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to §60.5410. 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 (6) 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.
- (i) The company name and address of the affected facility.
- (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 (ii) of this section.
- (i) The cumulative number of hours of operation or the number of months since initial startup, since October 15, 2012, or since the previous reciprocating compressor rod packing replacement, whichever is later.
- (ii) Records of deviations specified in paragraph (c)(3)(iii) of this section that occurred during the reporting period.
- (5) (6) [Not applicable]
- (7)(i) Within 60 days after the date of completing each performance test (see §60.8 of this part) as required by this subpart, except testing conducted by the manufacturer as specified in §60.5413(d), you must submit the results of the performance tests required by this subpart to the EPA as follows. You must use the latest version of the EPA's Electronic Reporting Tool (ERT) (see http://www.epa.gov/ttn/chief/ert/index.html) existing at the time of the performance test to generate a submission package file, which documents the performance test. You must then submit the file generated by the ERT through the EPA's Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed by logging in to the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). Only data collected using test methods supported by the ERT as listed on the ERT Web site are subject to this requirement for submitting reports electronically. Owners or operators who claim that some of the information being submitted for performance tests is confidential business information (CBI) must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, you must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority. For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test to the Administrator at the appropriate address listed in §60.4.
- (ii) All reports, except as specified in paragraph (b)(8) of this section, required by this subpart not subject to the requirements in paragraph (a)(2)(i) of this section must be sent to the Administrator at the appropriate address listed in



SECTION C.



# **Site Level Requirements**



- (8) [Not applicable]
- (c) Recordkeeping requirements. You must maintain the records identified as specified in §60.7(f) and in paragraphs (c)(1) through (13) 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.
- (1) (2) [Not applicable]
- (3) For each reciprocating compressors affected facility, you must maintain the records in paragraphs (c)(3)(i) through (iii) of this section.
- (i) Records of the cumulative number of hours of operation or number of months since initial startup or October 15, 2012, or the previous replacement of the reciprocating compressor rod packing, whichever is later.
- (ii) Records of the date and time of each reciprocating compressor rod packing replacement.
- (iii) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in §60.5385.
- (4) (13) [Not applicable]

[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58445, Sept. 23, 2013; 79 FR 79039, Dec. 31, 2014]

- # 020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5421]
  Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution
  What are my additional recordkeeping requirements for my affected facility subject to 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 §60.5401(b)(1) of this subpart.
- (1) When each leak is detected as specified in §60.5401(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 §60.5401(b)(2), the following information 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 paragraph (a) of this section 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.
- (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.
- # 021 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5422]
  Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution
  What are my additional reporting requirements for my affected facility subject to 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), (c)(2)(i) through (iv), and (c)(2)(vii) through (viii).
- (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 (4): Number of pressure relief devices subject to the requirements of §60.5401(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 following information in all semiannual reports in addition to the information required in §60.487a(c)(2)(i) through (vi):
- (1) Number of pressure relief devices for which leaks were detected as required in §60.5401(b)(2); and
- (2) Number of pressure relief devices for which leaks were not repaired as required in §60.5401(b)(3).
- # 022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5425]
  Subpart OOOO Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution What part 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.

# 023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430] Subpart OOOO - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution 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 following terms shall have the specific meanings given them.

Acid gas means a gas stream of hydrogen sulfide (H2S) and carbon dioxide (CO2) that has been separated from sour natural gas by a sweetening unit.

Alaskan North Slope means the approximately 69,000 square-mile area extending from the Brooks Range to the Arctic Ocean.

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

Bleed rate means the rate in standard cubic feet per hour at which natural gas is continuously vented (bleeds) from a pneumatic controller.

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

Certifying official means one of the following:





- (1) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
- (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
- (ii) The Administrator is notified of such delegation of authority prior to the exercise of that authority. The Administrator reserves the right to evaluate such delegation;
- (2) For a partnership (including but not limited to general partnerships, limited partnerships, and limited liability partnerships) or sole proprietorship: A general partner or the proprietor, respectively. If a general partner is a corporation, the provisions of paragraph (1) of this definition apply;
- (3) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA); or
- (4) For affected facilities:
- (i) The designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; or
- (ii) The designated representative for any other purposes under part 60.

City gate means the delivery point at which natural gas is transferred from a transmission pipeline to the local gas utility.

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

Completion combustion device means any ignition device, installed horizontally or vertically, used in exploration and production operations to combust otherwise vented emissions from completions.

Compressor station means any permanent combination of one or more compressors that move natural gas at increased pressure from fields, in transmission pipelines, or into storage.

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

Continuous bleed means a continuous flow of pneumatic supply natural gas to the process control device (e.g., level control, temperature control, pressure control) where the supply gas pressure is modulated by the process condition, and then flows to the valve controller where the signal is compared with the process set-point to adjust gas pressure in the valve actuator.

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

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

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







- (1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

Delineation well means a well drilled in order to determine the boundary of a field or producing reservoir.

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

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

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

Flare means a thermal oxidation system using an open (without enclosure) flame. Completion combustion devices as defined in this section are not considered flares.

Flow line means a pipeline used to transport oil and/or gas to a processing facility, a mainline pipeline, re-injection, or routed to a process or other useful purpose.

Flowback means the process of allowing fluids and entrained solids to flow from a natural gas well following a treatment, either in preparation for a subsequent phase of treatment or in preparation for cleanup and returning the well to production. The term flowback also means the fluids and entrained solids that emerge from a natural gas well during the flowback process. The flowback period begins when material introduced into the well during the treatment returns to the surface following hydraulic fracturing or refracturing. The flowback period ends when either the well is shut in and permanently disconnected from the flowback equipment or at the startup of production. The flowback period includes the initial flowback stage and the separation flowback stage.

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

Gas well or natural gas well means an onshore well drilled principally for production of natural gas.

Group 1 storage vessel means a storage vessel, as defined in this section, for which construction, modification or reconstruction has commenced after August 23, 2011, and on or before April 12, 2013.

Group 2 storage vessel means a storage vessel, as defined in this section, for which construction, modification or reconstruction has commenced after April 12, 2013.

Hydraulic fracturing or refracturing means the process of directing pressurized fluids containing any combination of water, proppant, and any added chemicals to penetrate tight formations, such as shale or coal formations, that subsequently require high rate, extended flowback to expel fracture fluids and solids during completions.

Hydraulic refracturing means conducting a subsequent hydraulic fracturing operation at a well that has previously undergone a hydraulic fracturing operation.

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







In wet gas service means that a compressor or piece of equipment contains or contacts the field gas before the extraction step at a gas processing plant process unit.

Initial flowback stage means the period during a well completion operation which begins at the onset of flowback and ends at the separation flowback stage.

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

Intermittent/snap-action pneumatic controller means a pneumatic controller that vents non-continuously.

Liquefied natural gas unit means a unit used to cool natural gas to the point at which it is condensed into a liquid which is colorless, odorless, non-corrosive and non-toxic.

Low pressure gas well means a well with reservoir pressure and vertical well depth such that 0.445 times the reservoir pressure (in psia) minus 0.038 times the true vertical well depth (in feet) minus 67.578 psia is less than the flow line pressure at the sales meter.

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

Natural gas-driven pneumatic controller means a pneumatic controller powered by pressurized natural gas.

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

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

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

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

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

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

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

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

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

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





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

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

Recovered gas means gas recovered through the separation process during flowback.

Recovered liquids means any crude oil, condensate or produced water recovered through the separation process during flowback.

Reduced emissions completion means a well completion following fracturing or refracturing where gas flowback that is otherwise vented is captured, cleaned, and routed to the flow line or collection system, re-injected into the well or another well, used as an on-site fuel source, or used for other useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.

Reduced sulfur compounds means H2S, carbonyl sulfide (COS), and carbon disulfide (CS2).

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

Responsible official means one of the following:

- (1) For a corporation: A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
- (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or
- (ii) The delegation of authority to such representatives is approved in advance by the permitting authority;
- (2) For a partnership or sole proprietorship: A general partner or the proprietor, respectively;
- (3) For a municipality, State, Federal, or other public agency: Either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA); or
- (4) For affected facilities:
- (i) The designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the Clean Air Act or the regulations promulgated thereunder are concerned; or
- (ii) The designated representative for any other purposes under part 60.

Returned to service means that a Group 1 or Group 2 storage vessel affected facility that was removed from service has been:

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





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

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

Separation flowback stage means the period during a well completion operation when it is technically feasible for a separator to function. The separation flowback stage ends either at the startup of production, or when the well is shut in and permanently disconnected from the flowback equipment.

Startup of production means the beginning of initial flow following the end of flowback when there is continuous recovery of salable quality gas and separation and recovery of any crude oil, condensate or produced water.

Storage vessel means a tank or other vessel that contains an accumulation of crude oil, condensate, intermediate hydrocarbon liquids, or produced water, and that is constructed primarily of nonearthen materials (such as wood, concrete, steel, fiberglass, or plastic) which provide structural support. A well completion vessel that receives recovered liquids from a well after startup of production following flowback for a period which exceeds 60 days is considered a storage vessel under this subpart. A tank or other vessel shall not be considered a storage vessel if it has been removed from service in accordance with the requirements of §60.5395(f) until such time as such tank or other vessel has been returned to service. A tank or other vessel shall not be considered a storage vessel if it has been removed from service in accordance with the requirements of §60.5395(f) until such time as such tank or other vessel has been returned to service. For the purposes of this subpart, the following are not considered storage vessels:

- (1) Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If you do not keep or are not able to produce records, as required by \$60.5420(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel from the date the original vessel was first located at the site. This exclusion does not apply to a well completion vessel as described above.
- (2) Process vessels such as surge control vessels, bottoms receivers or knockout vessels.
- (3) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.

Sulfur production rate means the rate of liquid sulfur accumulation from the sulfur recovery unit.

Sulfur recovery unit means a process device that recovers element sulfur from acid gas.

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

Sweetening unit means a process device that removes hydrogen sulfide and/or carbon dioxide from the sour natural gas stream.

Total Reduced Sulfur (TRS) means the sum of the sulfur compounds hydrogen sulfide, methyl mercaptan, dimethyl sulfide, and dimethyl disulfide as measured by Method 16 of appendix A to part 60 of this chapter.

Total SO2 equivalents means the sum of volumetric or mass concentrations of the sulfur compounds obtained by adding the quantity existing as SO2 to the quantity of SO2 that would be obtained if all reduced sulfur compounds were converted to SO2 (ppmv or kg/dscm (lb/dscf)).

Underground storage vessel means a storage vessel stored below ground.

Well means an oil or gas well, a hole drilled for the purpose of producing oil or gas, or a well into which fluids are injected.





Well completion means the process that allows for the flowback of petroleum or natural gas from newly drilled wells to expel drilling and reservoir fluids and tests the reservoir flow characteristics, which may vent produced hydrocarbons to the atmosphere via an open pit or tank.

Well completion operation means any well completion with hydraulic fracturing or refracturing occurring at a gas well affected facility.

Well completion vessel means a vessel that contains flowback during a well completion operation following hydraulic fracturing or refracturing. A well completion vessel may be a lined earthen pit, a tank or other vessel that is skid-mounted or portable. A well completion vessel that receives recovered liquids from a well after startup of production following flowback for a period which exceeds 60 days is considered a storage vessel under this subpart.

Well site means one or more areas that are directly disturbed during the drilling and subsequent operation of, or affected by, production facilities directly associated with any oil well, gas well, or injection well and its associated well pad.

Wellhead means the piping, casing, tubing and connected valves protruding above the earth's surface for an oil and/or natural gas well. The wellhead ends where the flow line connects to a wellhead valve. The wellhead does not include other equipment at the well site except for any conveyance through which gas is vented to the atmosphere.

Wildcat well means a well outside known fields or the first well drilled in an oil or gas field where no other oil and gas production exists.

[77 FR 49542, Aug. 16, 2012, as amended at 78 FR 58447, Sept. 23, 2013; 79 FR 79040, Dec. 31, 2014; 80 FR 48268, Aug. 12, 2015]

### VIII. COMPLIANCE CERTIFICATION.

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

### IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

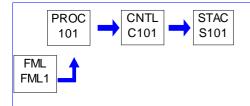




Source ID: 101 Source Name: PROPANE REFRIGERATION COMPRESSOR

Source Capacity/Throughput: 2,111.400 CF/HR Natural Gas

Conditions for this source occur in the following groups: 40 CFR 60 SUBPART JJJJ



## I. RESTRICTIONS.

## **Emission Restriction(s).**

## # 001 [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 SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

## # 002 [25 Pa. Code §127.12b]

### Plan approval terms and conditions.

[Plan approval 25-1034A]

(a) This source is subject to 25 Pa Code Sections 123.1 and 123.31 for fugitive and odor emissions, respectively.

### [Plan Approval 25-1034A]

(b) No person may permit the emission into the outdoor atmosphere of filterable particulate matter (FPM) in a manner that the concentration of filterable particulate matter in the effluent gas exceeds 0.02 grain per dry standard cubic foot.

### [Plan Approval 25-1034A]

- (c) The internal combustion engine shall be designed and operated so emissions do not exceed the following:
- 1. NOx at rated brake horsepower and operating at rated speed 1.0 grams per brake horsepower-hour (gms/bhp-hr) for gas fired units; [Compliance with this condition will assure compliance with 40 CFR 60.4233(e)]
- 2. VOC (NMNEHC) at rated brake horsepower and operating at rated speed 0.33 gms/bhp-hr as propane; [Compliance with this condition will assure compliance with 40 CFR 60.4233(e)]
- 3. CO at rated brake horsepower and operating at rated speed 0.23 gms/bhp-hr; [Compliance with this condition will assure compliance with 40 CFR 60.4233(e)]
- 4. Formaldehyde at rated horsepower and operating at rated speed 0.09 gms/bhp-hr; and,
- 5. At operating conditions less than rated capacity, internal combustion engines shall, on a pounds per hour basis, emit no more than they emit at rated brake horsepower and rated speed.
- 6. Visible emissions in excess of the following limitations:
  - (a) Equal to or greater than 10% for a period or periods aggregating more than 3 minutes in any one hour.
  - (b) Equal to or greater than 30% at any time.







[Plan Approval 25-1034A]

(d) The emission limitations shall apply at all times except during periods of start-up and shut-down, provided, however, that the duration of start-up and shut-down do not exceed one hour per occurrence.

## Fuel Restriction(s).

# 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]

The compressor shall burn natural gas fuel only.

## II. TESTING REQUIREMENTS.

#### # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]

- (a) Within 60 days after achieving the normal production rate at which the affected source will be operated, but not later than 180 days after initial start-up of the source, a stack test shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection. The stack test shall be performed while the aforementioned source is operating at the maximum or normal rated capacity as stated on the application. The stack test shall be conducted for Formaldehyde.
- 1. [25 Pa. Code § 139.53(a)(3)] At least 60 calendar days prior to commencing an emissions testing program, a test protocol shall be submitted to the Department's Division of Source Testing and Monitoring and two copies to the appropriate Regional Office 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.
- 2. [25 Pa. Code § 139.53(a)(3)] 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 appropriate Regional Office. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.
- 3. [25 Pa. Code § 139.53(a)(3)] Within 15 calendar days after completion of the on-site testing portion of an emission test program, if a complete test report has not yet been submitted, an electronic mail notification shall be sent to the Department's Division of Source Testing and Monitoring and the appropriate Regional Office indicating the completion date of the on-site testing.
- 4. [40 CFR Part 60.8(a), 40 CFR Part 61.13(f) and 40 CFR Part 63.7(g)] A complete test report shall be submitted to the Department no later than 60 calendar days after completion of the on-site testing portion of an emission test program. For those tests being conducted pursuant to 40 CFR Part 61, a complete test report shall be submitted within 31 days after completion of the test.
- 5. [25 Pa. Code Section 139.53(b)] A complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or noncompliance with all applicable permit conditions. 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.







- 6. [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.
- 7. All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.
- 8. [25 Pa. Code Section 139.53(a)(1) and 139.53(a)(3)] All submittals, besides notifications, shall be accomplished through PSIMS\*Online available through https://www.depgreenport.state.pa.us/ecomm/Login.jsp when it becomes available. If internet submittal can not be accomplished, one copy of the submittal shall be sent to the Pennsylvania Department of Environmental Protection, Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachael Carson State Office Building, Harrisburg, PA 17105-8468 with deadlines verified through document postmarks. In a like manner, two copies of the submittal shall be sent to the appropriate Regional Office.
- 9. 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.
- 10. Actions Related to Noncompliance Demonstrated by a Stack Test:
- (a) If the results of a stack test, performed as required by this approval, exceed the level specified in any condition of this approval, the Permitee shall take appropriate corrective actions. Within 30 days of the Permitee receiving the stack test results, a written description of the corrective actions shall be submitted to the Department. The Permitee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. The Department shall notify the Permitee within 30 days, if the corrective actions taken are deficient. Within 30 days of receipt of the notice of deficiency, the Permitee 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.
- (b) If the results of the required stack test exceed any limit defined in this plan approval, 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 plan approval, then another stack test shall be performed to determine compliance. Within 120 days of the Permitee 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 plan approval, 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 plan approval may be grounds for immediate revocation of the plan approval to operate the affected source.

#### [Plan Approval 25-1034A]

(b) In addition to the stack testing required by this condition, the facility must conduct subsequent performance testing within six (6) to twelve (12) months prior to operating permit renewal, for formaldehyde, NOx, CO, and VOC emissions in accordance with the provisions of Chapter 139 (relating to sampling and testing) and 40 CFR 60.4244 for NOx, CO, & VOC.

## [Plan Approval 25-1034A]

(c) If, at any time, the Department has cause to believe that air contaminant emissions are in excess of the limitations specified in, or established pursuant to, any applicable regulation contained in 25 Pa. Code, Subpart C, Article III, the Department shall require the permittee to conduct tests deemed necessary to demonstrate compliance. The permittee shall perform such testing in accordance applicable provisions of 25 Pa. Code Chapter 139 (relating to sampling and testing) and in accordance with any restrictions or limitations established by the Department at the time the permittee is notified, in writing, of the testing requirement.

## 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).







### RECORDKEEPING REQUIREMENTS.

#### # 005 [25 Pa. Code §127.12b]

## Plan approval terms and conditions.

[Plan Approval 25-1034A]

(a) Recordkeeping shall commence at the time of start-up of each source, shall be retained for a minimum of five years, and shall be made available to the Department upon request.

[Plan Approval 25-1034A]

- (b) The permittee shall maintain comprehensive accurate records which, at a minimum, shall include the following.
- 1. The number of hours that each engine operated on a 12-month rolling total.
- 2. The amount of fuel used in each engine on a 12-month rolling total.

[Plan Approval 25-1034A]

(c) The permittee shall maintain a record of all preventative maintenance inspections of the source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, and any routine maintenance performed.

[Plan Approval 25-1034A]

- (d) The permittee shall maintain a record of the following from the operational inspections:
- 1. Engine Load daily defined as once per calendar day
- 2. Engine Speed daily defined as once per calendar day
- 3. Inlet and outlet temperature of the oxidation catalyst daily defined as once per calendar day

### 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).

### WORK PRACTICE REQUIREMENTS.

#### # 006 [25 Pa. Code §127.12b]

## Plan approval terms and conditions.

[Plan Approval 25-1034A]

(a) The permittee shall perform a daily operational inspection of the source for any day the source is in operation.

[Plan Approval 25-1034A]

- (b) The permittee shall adhere to the approved indicator range for the control device so that operation within the range shall provide reasonable assurance of compliance. A departure from the specified indicator range over a specified averaging period shall be defined as an excursion. The approved indicator range for the following shall be determined during the initial performance test or any subsequently approved performance tests unless otherwise stated:
- 1. Catalyst Temperature: 450 to 650F or as established during compliant testing

The permittee, with prior Departmental approval, may conduct additional performance tests to determine a new catalyst temperature range. Within 24-hours of discovery of a reading outside of the prescribed range the permittee shall perform a maintenance inspection on the control device and take corrective action. Records of all maintenance inspections on the control device, and corrective actions taken, shall be maintained on site for a minimum period of five years. In the event of more than one documented excursion outside the prescribed range in any calendar quarter the permittee shall submit a corrective measure plan to the Department. Corrective measures may include an increase of the frequency of required preventative maintenance inspections of the control device, a modification of the prescribed range, or other appropriate action as approved by the Department. Upon receipt of a corrective measure plan the Department shall determine the







appropriate corrective measure on a case-by case basis.

[Plan Approval 25-1034A]

(c) The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

## 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).

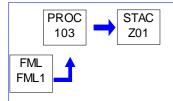






Source ID: 103 Source Name: HEAT MEDIUM HEATER

Source Capacity/Throughput: 6.640 MCF/HR Natural Gas



### 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) Not applicable
  - (3) Not applicable
- (b) Allowable emissions under subsection (a) are graphically indicated in Appendix A.

### # 002 [25 Pa. Code §123.22]

#### Combustion units

- (a) Nonair basin areas. Combustion units in nonair basin areas shall conform with the following:
- (1) General provision. No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period except as provided for in paragraph (4).
  - (2) Not applicable
  - (3) Not applicable
  - (4) Not applicable
- (b) Not applicable
- (c) Not applicable
- (d) Not applicable
- (e) Not applicable

## Fuel Restriction(s).

## # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]







The heater shall burn natural gas fuel only.

### 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.

## # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]

(a) Recordkeeping shall commence at the time of start-up of each source, shall be retained for a minimum of five years, and shall be made available to the Department upon request.

[Plan Approval 25-1034A]

(b) The permittee shall maintain a record of all preventative maintenance inspections of the source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, and any routine maintenance performed.

[Plan Approval 25-1034A]

- (c) The permittee shall maintain a record of the following from the operational inspections:
- 1. Operational check performed

## 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.

## # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]

(a) The permittee shall perform a daily operational inspection of the source for any day the source is in operation.

[Plan Approval 25-1034A]

(b) The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

### VII. ADDITIONAL REQUIREMENTS.

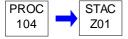
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).





Source ID: 104 Source Name: STORAGE TANKS

Source Capacity/Throughput: 8,000.000 Gal/HR



#### 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 §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]

(a) Recordkeeping shall commence at the time of start-up of each source, shall be retained for a minimum of five years, and shall be made available to the Department upon request.

[Plan Approval 25-1034A]

(b) The permittee shall maintain a record of all preventative maintenance inspections of the source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, and any routine maintenance performed.

[Plan Approval 25-1034A]

- (c) The permittee shall maintain a record of the following from the operational inspections:
- Operational check performed

#### V. REPORTING REQUIREMENTS.

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

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]

(a) The permittee shall perform a daily operational inspection of the source for any day the source is in operation.

[Plan Approval 25-1034A]

(b) The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.





# VII. ADDITIONAL REQUIREMENTS.

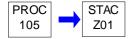
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements).





Source ID: 105 Source Name: EQUIPMENT LEAKS - GAS PROCESSING PLANT

Source Capacity/Throughput: N/A



#### I. RESTRICTIONS.

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

### II. TESTING REQUIREMENTS.

# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485a]
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals
Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Test methods and procedures.

- (a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
- (b) The owner or operator shall determine compliance with the standards in §§60.482-1a through 60.482-11a, 60.483a, and 60.484a as follows:
- (1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 of appendix A-7 of this part. The following calibration gases shall be used:
- (i) Zero air (less than 10 ppm of hydrocarbon in air); and
- (ii) A mixture of methane or n-hexane and air at a concentration no more than 2,000 ppm greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the owner or operator need not calibrate the scales that will not be used during that day's monitoring.
- (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)(7). Calculate the average algebraic difference between the three meter readings and the most recent calibration value. Divide this algebraic difference by the initial calibration value 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 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.
- (c) The owner or operator shall determine compliance with the no-detectable-emission standards in §§60.482-2a(e), 60.482-3a(i), 60.482-4a, 60.482-7a(f), and 60.482-10a(e) as follows:
- (1) The requirements of paragraph (b) shall apply.





- (2) Method 21 of appendix A-7 of this part shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
- (d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:
- (1) [See 40 CFR §60.5400(f)]
- (2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
- (3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d)(1) and (2) of this section shall be used to resolve the disagreement.
- (e) The owner or operator shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:
- (1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see §60.17) shall be used to determine the vapor pressures.
- (2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F) is equal to or greater than 20 percent by weight.
- (3) The fluid is a liquid at operating conditions.
- (f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment.
- (g) (Not Applicable).
- (h) The owner or operator shall determine compliance with §60.483-1a or §60.483-2a as follows:
- (1) The percent of valves leaking shall be determined using the following equation:

%VL = (VL / VT) \* 100

Where:

%VL = Percent leaking valves.

VL = Number of valves found leaking.

VT = The sum of the total number of valves monitored.

- (2) The total number of valves monitored shall include difficult-to-monitor and unsafe-to-monitor valves only during the monitoring period in which those valves are monitored.
- (3) The number of valves leaking shall include valves for which repair has been delayed.
- (4) Any new valve that is not monitored within 30 days of being placed in service shall be included in the number of valves leaking and the total number of valves monitored for the monitoring period in which the valve is placed in service.







- (5) If the process unit has been subdivided in accordance with §60.482-7a(c)(1)(ii), the sum of valves found leaking during a monitoring period includes all subgroups.
- (6) The total number of valves monitored does not include a valve monitored to verify repair.

#### 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.

#### # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]

(a) All recordkeeping shall commence upon initial source/control device startup. These records shall be kept for a minimum of five years and made available to the Department upon request.

[Plan Approval 25-1034A]

(b) The permittee shall maintain a record of all preventative maintenance inspections of this source. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, any actions taken to correct the problems or defects, and any routine maintenance performed.

[Plan Approval 25-1034A]

(c) The permittee shall maintain monthly records of the hours of operation of this source.

[Plan Approval 25-1034A]

(d) The permittee shall maintain monthly records of the amount of natural gas processed.

- # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486a]
  Subpart VVa Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals
  Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
  Recordkeeping requirements.
- (a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
- (2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.
- (3) The owner or operator shall record the information specified in paragraphs (a)(3)(i) through (v) of this section for each monitoring event required by §§60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a.
- (i) Monitoring instrument identification.
- (ii) Operator identification.
- (iii) Equipment identification.
- (iv) Date of monitoring.
- (v) Instrument reading.
- (b) When each leak is detected as specified in §§60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following requirements apply:



- (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
- (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482-7a(c) and no leak has been detected during those 2 months.
- (3) The identification on a connector may be removed after it has been monitored as specified in §60.482-11a(b)(3)(iv) and no leak has been detected during that monitoring.
- (4) The identification on equipment, except on a valve or connector, may be removed after it has been repaired.
- (c) When each leak is detected as specified in §§60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
- (1) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.
- (2) The date the leak was detected and the dates of each attempt to repair the leak.
- (3) Repair methods applied in each attempt to repair the leak.
- (4) Maximum instrument reading measured by Method 21 of appendix A-7 of this part at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping.
- (5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
- (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
- (7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
- (8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
- (9) The date of successful repair of the leak.
- (d) (Not Applicable).
- (e) The following information pertaining to all equipment subject to the requirements in §§60.482-1a to 60.482-11a shall be recorded in a log that is kept in a readily accessible location:
- (1) A list of identification numbers for equipment subject to the requirements of this subpart.
- (2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§60.482-2a(e), 60.482-3a(i), and 60.482-7a(f).
- (ii) The designation of equipment as subject to the requirements of §60.482-2a(e), §60.482-3a(i), or §60.482-7a(f) shall be signed by the owner or operator. Alternatively, the owner or operator may establish a mechanism with their permitting authority that satisfies this requirement.
- (3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482-4a.
- (4)(i) The dates of each compliance test as required in §§60.482-2a(e), 60.482-3a(i), 60.482-4a, and 60.482-7a(f).
- (ii) The background level measured during each compliance test.
- (iii) The maximum instrument reading measured at the equipment during each compliance test.



- (5) A list of identification numbers for equipment in vacuum service.
- (6) A list of identification numbers for equipment that the owner or operator designates as operating in VOC service less than 300 hr/yr in accordance with §60.482-1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.
- (7) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service.
- (8) Records of the information specified in paragraphs (e)(8)(i) through (vi) of this section for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 of this part and §60.485a(b).
- (i) Date of calibration and initials of operator performing the calibration.
- (ii) Calibration gas cylinder identification, certification date, and certified concentration.
- (iii) Instrument scale(s) used.
- (iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A-7 of this part.
- (v) Results of each calibration drift assessment required by §60.485a(b)(2) (i.e., instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value).
- (vi) If an owner or operator makes their own calibration gas, a description of the procedure used.
- (9) The connector monitoring schedule for each process unit as specified in §60.482-11a(b)(3)(v).
- (10) Records of each release from a pressure relief device subject to §60.482-4a.
- (f) The following information pertaining to all valves subject to the requirements of §60.482-7a(g) and (h), all pumps subject to the requirements of §60.482-2a(g), and all connectors subject to the requirements of §60.482-11a(e) shall be recorded in a log that is kept in a readily accessible location:
- (1) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector.
- (2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
- (g) The following information shall be recorded for valves complying with §60.483-2a:
- (1) A schedule of monitoring.
- (2) The percent of valves found leaking during each monitoring period.
- (h) The following information shall be recorded in a log that is kept in a readily accessible location:
- (1) Design criterion required in §§60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and
- (2) Any changes to this criterion and the reasons for the changes.
- (i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in §60.480a(d):
- (1) An analysis demonstrating the design capacity of the affected facility,







- (2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
- (3) An analysis demonstrating that equipment is not in VOC service.
- (j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.
- (k) The provisions of §60.7(b) and (d) do not apply to affected facilities subject to this subpart.

# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.7]

**Subpart A - General Provisions** 

Notification and record keeping.

[40 CFR 60.7(f)] Any owner or operator subject to the provisions of this part shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records.

#### V. REPORTING REQUIREMENTS.

# 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]

All notifications, requests, reports, applications and other communications to the Administrator shall be submitted to both the:

- 1) Regional Air Quality Program Manager, PA-DEP, 230 Chestnut St., Meadville, PA 16335; and
- 2) Director, Air Toxics and Radiation Division, U.S. EPA Region III, 1650 Arch St., Philadelphia, PA 19103-2029.

[Compliance with this streamlined permit condition ensures compliance with 40 CFR 60.4(a)]

- # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487a]
  Subpart VVa Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals
  Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
  Reporting requirements.
- (a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning 6 months after the initial startup date.
- (b) The initial semiannual report to the Administrator shall include the following information:
- (1) Process unit identification.
- (2) Number of valves subject to the requirements of §60.482-7a, excluding those valves designated for no detectable emissions under the provisions of §60.482-7a(f).
- (3) Number of pumps subject to the requirements of §60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of §60.482-2a(e) and those pumps complying with §60.482-2a(f).
- (4) Number of compressors subject to the requirements of §60.482-3a, excluding those compressors designated for no detectable emissions under the provisions of §60.482-3a(i) and those compressors complying with §60.482-3a(h).
- (5) Number of connectors subject to the requirements of §60.482-11a.



- (c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §60.486a:
- (1) Process unit identification.

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- (2) For each month during the semiannual reporting period,
- (i) Number of valves for which leaks were detected as described in §60.482-7a(b) or §60.483-2a,
- (ii) Number of valves for which leaks were not repaired as required in §60.482-7a(d)(1),
- (iii) Number of pumps for which leaks were detected as described in §60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),
- (iv) Number of pumps for which leaks were not repaired as required in §60.482-2a(c)(1) and (d)(6),
- (v) Number of compressors for which leaks were detected as described in §60.482-3a(f),
- (vi) Number of compressors for which leaks were not repaired as required in §60.482-3a(g)(1),
- (vii) Number of connectors for which leaks were detected as described in §60.482-11a(b)
- (viii) Number of connectors for which leaks were not repaired as required in §60.482-11a(d), and
- (ix)-(x) [Reserved]
- (xi) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
- (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
- (4) Revisions to items reported according to paragraph (b) of this section if changes have occurred since the initial report or subsequent revisions to the initial report.
- (d) An owner or operator electing to comply with the provisions of §§60.483-1a or 60.483-2a shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.
- (e) An owner or operator shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.
- (f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a state under section 111(c) of the CAA, approves reporting requirements or an alternative means of compliance surveillance adopted by such state. In that event, affected sources within the state will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the state.

# # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.7]

# Subpart A - General Provisions

Notification and record keeping.

[40 CFR 60.7(a)] Any owner or operator subject to the provisions of this part shall furnish the Administrator written notification as follows:

[40 CFR 60.7(a)(4)] A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is







commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

#### VI. WORK PRACTICE REQUIREMENTS.

# 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 25-1034A]

(a) The permittee shall install, maintain, and operate this source in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[Plan Approval 25-1034A]

(b) The permittee shall install a device to measure the amount of natural gas processed during a calendar month.

#### # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.11]

Subpart A - General Provisions

Compliance with standards and maintenance requirements.

[40 CFR 60.11(d)] At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, 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.

[40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-11a] Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards: Connectors in gas/vapor service and in light liquid service.

- (a) The owner or operator shall initially monitor all connectors in the process unit for leaks by the later of either 12 months after the compliance date or 12 months after initial startup. If all connectors in the process unit have been monitored for leaks prior to the compliance date, no initial monitoring is required provided either no process changes have been made since the monitoring or the owner or operator can determine that the results of the monitoring, with or without adjustments, reliably demonstrate compliance despite process changes. If required to monitor because of a process change, the owner or operator is required to monitor only those connectors involved in the process change.
- (b) Except as allowed in §60.482-1a(c), §60.482-10a, or as specified in paragraph (e) of this section, the owner or operator shall monitor all connectors in gas and vapor and light liquid service as specified in paragraphs (a) and (b)(3) of this section.
- (1) The connectors shall be monitored to detect leaks by the method specified in §60.485a(b) and, as applicable, §60.485a(c).
- (2) If an instrument reading greater than or equal to 500 ppm is measured, a leak is detected.
- (3) The owner or operator shall perform monitoring, subsequent to the initial monitoring required in paragraph (a) of this section, as specified in paragraphs (b)(3)(i) through (iii) of this section, and shall comply with the requirements of paragraphs (b)(3)(iv) and (v) of this section. The required period in which monitoring must be conducted shall be determined from paragraphs (b)(3)(i) through (iii) of this section using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in paragraph (c) of this section.
- (i) If the percent leaking connectors in the process unit was greater than or equal to 0.5 percent, then monitor within 12 months (1 year).
- (ii) If the percent leaking connectors in the process unit was greater than or equal to 0.25 percent but less than 0.5 percent, then monitor within 4 years. An owner or operator may comply with the requirements of this paragraph by monitoring at least

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

40 percent of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4-year monitoring period.

- (iii) If the percent leaking connectors in the process unit was less than 0.25 percent, then monitor as provided in paragraph (b)(3)(iii)(A) of this section and either paragraph (b)(3)(iii)(B) or (b)(3)(iii)(C) of this section, as appropriate.
- (A) An owner or operator shall monitor at least 50 percent of the connectors within 4 years of the start of the monitoring period.
- (B) If the percent of leaking connectors calculated from the monitoring results in paragraph (b)(3)(iii)(A) of this section is greater than or equal to 0.35 percent of the monitored connectors, the owner or operator shall monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period. At the conclusion of monitoring, a new monitoring period shall be started pursuant to paragraph (b)(3) of this section, based on the percent of leaking connectors within the total monitored connectors.
- (C) If the percent of leaking connectors calculated from the monitoring results in paragraph (b)(3)(iii)(A) of this section is less than 0.35 percent of the monitored connectors, the owner or operator shall monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period.
- (iv) If, during the monitoring conducted pursuant to paragraphs (b)(3)(i) through (iii) of this section, a connector is found to be leaking, it shall be re-monitored once within 90 days after repair to confirm that it is not leaking.
- (v) The owner or operator shall keep a record of the start date and end date of each monitoring period under this section for each process unit.
- (c) For use in determining the monitoring frequency, as specified in paragraphs (a) and (b)(3) of this section, the percent leaking connectors as used in paragraphs (a) and (b)(3) of this section shall be calculated by using the following equation:

%CL = CL / Ct \* 100

#### Where:

- %CL = Percent of leaking connectors as determined through periodic monitoring required in paragraphs (a) and (b)(3)(i) through (iii) of this section.
- CL = Number of connectors measured at 500 ppm or greater, by the method specified in §60.485a(b).
- Ct = Total number of monitored connectors in the process unit or affected facility.
- (d) When a leak is detected pursuant to paragraphs (a) and (b) of this section, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9a. A first attempt at repair as defined in this subpart shall be made no later than 5 calendar days after the leak is detected.
- (e) Any connector that is designated, as described in §60.486a(f)(1), as an unsafe-to-monitor connector is exempt from the requirements of paragraphs (a) and (b) of this section if:
- (1) The owner or operator of the connector demonstrates that the connector is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraphs (a) and (b) of this section; and
- (2) The owner or operator of the connector has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (d) of this section if a leak is detected.
- (f) Inaccessible, ceramic, or ceramic-lined connectors. (1) Any connector that is inaccessible or that is ceramic or ceramic-





lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of paragraphs (a) and (b) of this section, from the leak repair requirements of paragraph (d) of this section, and from the recordkeeping and reporting requirements of §§63.1038 and 63.1039. An inaccessible connector is one that meets any of the provisions specified in paragraphs (f)(1)(i) through (vi) of this section, as applicable:

- (i) Buried;
- (ii) Insulated in a manner that prevents access to the connector by a monitor probe;
- (iii) Obstructed by equipment or piping that prevents access to the connector by a monitor probe;
- (iv) Unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground;
- (v) Inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; or
- (vi) Not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.
- (2) If any inaccessible, ceramic, or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical.
- (g) Except for instrumentation systems and inaccessible, ceramic, or ceramic-lined connectors meeting the provisions of paragraph (f) of this section, identify the connectors subject to the requirements of this subpart. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated.
- [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards: General.
- (a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§60.482-1a through 60.482-10a or §60.480a(e) for all equipment within 180 days of initial startup.
- (b) Compliance with §§60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485a.
- (c) [Not applicable]
- (d) Equipment that is in vacuum service is excluded from the requirements of §§60.482-2a through 60.482-10a if it is identified as required in §60.486a(e)(5).
- (e) (g) [Not applicable]
- [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2a] # 012 Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards: Pumps in light liquid service.
- (a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485a(b), except as provided in §60.482-1a(c) and (f) and paragraphs (d), (e), and (f) of this section. A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the



end of its startup period, except for a pump that replaces a leaking pump and except as provided in §60.482-1a(c) and paragraphs (d), (e), and (f) of this section.

- (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in §60.482-1a(f).
- (b)(1) The instrument reading that defines a leak is specified in paragraphs (b)(1)(i) and (ii) of this section.
- (i) 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers;
- (ii) 2,000 ppm or greater for all other pumps.
- (2) If there are indications of liquids dripping from the pump seal, the owner or operator shall follow the procedure specified in either paragraph (b)(2)(i) or (ii) of this section. This requirement does not apply to a pump that was monitored after a previous weekly inspection and the instrument reading was less than the concentration specified in paragraph (b)(1)(i) or (ii) of this section, whichever is applicable.
- (i) Monitor the pump within 5 days as specified in §60.485a(b). A leak is detected if the instrument reading measured during monitoring indicates a leak as specified in paragraph (b)(1)(i) or (ii) of this section, whichever is applicable. The leak shall be repaired using the procedures in paragraph (c) of this section.
- (ii) Designate the visual indications of liquids dripping as a leak, and repair the leak using either the procedures in paragraph (c) of this section or by eliminating the visual indications of liquids dripping.
- (c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9a.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in paragraphs (c)(2)(i) and (ii) of this section, where practicable.
- (i) Tightening the packing gland nuts;
- (ii) Ensuring that the seal flush is operating at design pressure and temperature.
- (d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a) of this section, provided the requirements specified in paragraphs (d)(1) through (6) of this section are met.
- (1) Each dual mechanical seal system is:
- (i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
- (ii) (Not Applicable); or
- (iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
- (2) The barrier fluid system is in heavy liquid service or is not in VOC service.
- (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
- (4)(i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
- (ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the owner or operator shall follow the procedure specified in either paragraph (d)(4)(ii)(A) or (B) of this section prior to the next required inspection.





- (A) Monitor the pump within 5 days as specified in §60.485a(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 2,000 ppm or greater is measured, a leak is detected.
- (B) Designate the visual indications of liquids dripping as a leak.
- (5)(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm.
- (ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- (iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in paragraph (d)(5)(ii) of this section, a leak is detected.
- (6)(i) When a leak is detected pursuant to paragraph (d)(4)(ii)(A) of this section, it shall be repaired as specified in paragraph (c) of this section.
- (ii) A leak detected pursuant to paragraph (d)(5)(iii) of this section shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.
- (iii) A designated leak pursuant to paragraph (d)(4)(ii)(B) of this section shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.
- (e) Any pump that is designated, as described in §60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:
- (1) Has no externally actuated shaft penetrating the pump housing;
- (2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in §60.485a(c); and
- (3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.
- (f) (Not Applicable).
- (g) Any pump that is designated, as described in §60.486a(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:
- (1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and
- (2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.
- (h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.
- # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4a]
  Subpart VVa Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals
  Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
  Standards: Pressure relief devices in gas/vapor service.
- (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods







specified in §60.485a(c).

- (b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in §60.482-9a.
- (2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485a(c).
- (c) (Not Applicable).
- (d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.
- (2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482-9a.
- # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6a]
  Subpart VVa Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals
  Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
  Standards: Open-ended valves or lines.
- (a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1a(c) and paragraphs (d) and (e) of this section.
- (2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
- (b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- (c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) of this section at all other times.
- (d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b), and (c) of this section.
- (e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.
- # 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7a]
  Subpart VVa Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals
  Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
  Standards: Valves in gas/vapor service and in light liquid service.
- (a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485a(b) and shall comply with paragraphs (b) through (e) of this section, except as provided in paragraphs (f), (g), and (h) of this section, §60.482-1a(c) and (f), and §§60.483-1a and 60.483-2a.
- (2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to paragraphs (a)(2)(i) or (ii), except for a valve that replaces a leaking valve and except as provided in paragraphs (f), (g), and (h) of this section, §60.482-1a(c), and §§60.483-1a and 60.483-2a.
- (i) Monitor the valve as in paragraph (a)(1) of this section. The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.



- (ii) If the existing valves in the process unit are monitored in accordance with §60.483-1a or §60.483-2a, count the new valve as leaking when calculating the percentage of valves leaking as described in §60.483-2a(b)(5). If less than 2.0 percent of the valves are leaking for that process unit, the valve must be monitored for the first time during the next scheduled monitoring event for existing valves in the process unit or within 90 days, whichever comes first.
- (b) If an instrument reading of 500 ppm or greater is measured, a leak is detected.
- (c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
- (ii) As an alternative to monitoring all of the valves in the first month of a quarter, an owner or operator may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The owner or operator must keep records of the valves assigned to each subgroup.
- (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
- (d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §60.482-9a.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
- (1) Tightening of bonnet bolts;
- (2) Replacement of bonnet bolts;
- (3) Tightening of packing gland nuts;
- (4) Injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in §60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) of this section if the valve:
- (1) Has no external actuating mechanism in contact with the process fluid,
- (2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485a(c), and
- (3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.
- (g) Any valve that is designated, as described in §60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:
- (1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section, and
- (2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
- (h) Any valve that is designated, as described in §60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) of this section if:







- (1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
- (2) The process unit within which the valve is located either:
- (i) Becomes an affected facility through §60.14 or §60.15 and was constructed on or before January 5, 1981; or
- (ii) Has less than 3.0 percent of its total number of valves designated as difficult-to-monitor by the owner or operator.
- (3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.
- # 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9a] Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards: Delay of repair.
- (a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.
- (b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
- (c) Delay of repair for valves and connectors will be allowed if:
- (1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
- (2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §60.482-10a.
- (d) Delay of repair for pumps will be allowed if:
- (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
- (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
- (e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
- (f) When delay of repair is allowed for a leaking pump, valve, or connector that remains in service, the pump, valve, or connector may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

#### VII. ADDITIONAL REQUIREMENTS.

#### # 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.11] **Subpart A - General Provisions**

Compliance with standards and maintenance requirements.

[40 CFR 60.11(g)] For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in this part, nothing in this part shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.







# 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.12]

**Subpart A - General Provisions** 

Circumvention.

No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.



SECTION D.



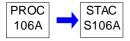
**Source Level Requirements** 

Source ID: 106A Source Name: INLET COMPRESSOR ENGINE UC1

Source Capacity/Throughput: 6,202.000 CF/HR Natural Gas

Conditions for this source occur in the following groups: 40 CFR 60 SUBPART JJJJ

**GP5 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.

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).



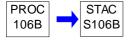


Source ID: 106B Source Name: INLET COMPRESSOR ENGINE UC2

Source Capacity/Throughput: 6,202.000 CF/HR Natural Gas

Conditions for this source occur in the following groups: 40 CFR 60 SUBPART JJJJ

**GP5 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.

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).







Source ID: 107 Source Name: ENG-1 AJAX DPC-2803-LE 600 BHP

Source Capacity/Throughput: 4,680.000 CF/HR Natural Gas

PROC STAC S107

#### I. RESTRICTIONS.

# **Emission Restriction(s).**

### # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[From GP5-25-00892 issued 11/10/2011]

Condition 13 (b):

This internal combustion engine shall be equipped and operated with air cleaning devices that reduce emissions to levels to or less than:

- i. NOx at rated bhp and operating at rated speed two grams per bhp-hour (gms/bhp-hr);
- ii. VOC at rated bhp and operating at rated speed two gms/bhp-hr;
- iii. CO at rated bhp and operating at rated speed two gms/bhp-hr; and,
- iv. At operating conditions less than rated capacity, the internal combustion engine shall, on a pounds-per-hour basis, emit no more thatn they emit at rated bhp and rated speed.
- v. Visible emission in excess of the following limitations:
  - A. Equal to or greater than 10% for a period or periods aggregating more than 3 minutes in any on hour.
  - B. Equal to or greater than 30% at any time.

### [Conditition 18:]

The emission limits stated in Condition 13.b shall apply at all times except during periods of start-up and shut-down, provided, however, that the duration of start-up and shut-down do not exceed one hour per occurrence.

#### II. TESTING REQUIREMENTS.

#### # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[From GP5-25-00892 issued 11/10/2011]

Condition 16 (b).

i. [Not applicable]

ii. For a new internal combustion engine installed in accordance with Conditions 2 and 13.b and that has a rated capacity greater than 500 bhp, but no greater than 1500 bhp, the permittee shall perform stack testing in accordance with 25 Pa. Code Chapter 139, within one hundred eighty (180) days after the issuance of this General Permit. A Department-approved portable analyzer may be used in lieu of initial stack testing. The submittal of the initial testing will be extended to one year, should the permittee elect to demonstrate compliance, in lieu of testing, through an alternate means. Alternate means may include parametric monitoring of engine parameters to confirm that engine emissions are within the emission limitations.



In addition to the stack testing required by this condition, within twelve (12) months after the initial stack testing, and annually therafter, the permittee shall perform NOx emissions testing, and annually therafter, the permittee shall perform NOx emissions tests upon each of the respective engines as stated n Condition 13.b herein using a portable analyzer approved by the Department. The Department may alter the frequency of annual portable analyzer tests based on the results. The Department may also waive all or parts of this requirement if the permittee demonstrates compliance, in lieu of testing, through alternate means satisfactory to the Department.

The Department reserves the right to require stack tests in accordance with EPA reference methods should the data from the portable analyzer warrant. The purpose of this testing is to demonstrate compliance with te emission limitations required for new engines.

iii. If, at any time, the Department has cause to believe that air contaminant emissions from the facility covered by this General Permit are in excess of the limitations specified in, or established pursuant to, Article III, the Department shall require the permittee to conduct stack tests deemed necessary to demonstrate compliance. The permittee shall perform such testing in accordance with the applicable provisions of 25 Pa. Code Chapter 139 (relating to sampling and testing) and in accordance with any restrictions or limitations established by the Department at the time the permittee is notified, in writing, of the testing requirement.

#### 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 §127.12b]

Plan approval terms and conditions.

[From GP5-25-00892 issued 11/10/2011]

Condition 17.

- a. The permittee shall maintain comprehensive, accurate records which, at a minimu, shall include:
  - i. The number of hours per calendar year that each engine is operated.
  - ii. The amount of fuel used per calendar year in each engine.
- b. When a new internal combustion engine is installed in accordance with Conditions 2 and 13.b and is required to conduct a performance test, the permittee shall maintain records or report the following:
- i. Records including a description of testing methods, results, all engine operating data collected during the tests, and a copy of the calculations performed to determine compliance with emission standards.
- ii. Copies of the report that demonstrates that the engines were operating at rated bhp and rated speed conditions during performance testing.
- iii. Submittal of reports in accordance with the requirements and schedules outlined in Condition 16.a of this General Permit.

#### V. REPORTING REQUIREMENTS.

# 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[From GP5-25-00892 issued 11/10/2011]

Condition 6.





The owner or operator shall notify the Department by telephone within twenty-four (24) hours of the discovery of any malfunction of a natural gas facility operating pursuant to this General Permit, or any malfunction of an associated air cleaning device that results in, or may possibly be resulting in, the emission of air contaminants in excess of any applicable limitation specified herein or in excess of the limitations specified inany applicable rule or regulation contained in 25 Pa. Code Chapters 121 through 145, or that otherwise results in, or may possibly be resulting in, noncompliance with the requirements specified in any applicable condition of this General Permit. If the facility owner or operator is unable to provide notification within twenty-four (24) hours of discovery due to a weekend or holiday, the notification shall be made to the Department by no later than 4 p.m. on the first Department business day following the respective weekend or holiday. Additional information regarding any reported malfunction shall be provided in writing to the Department, upon request.

#### VI. WORK PRACTICE REQUIREMENTS.

# 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[From GP5-25-00892 issued 11/10/2011]

Condition 4.

Any facility operating under this General Permit must comply with the terms and conditions of the General Permit. The facility shall be:

- a. operated in such a manner as not to cause air pollution, as defined in 25 Pa. Code §121.1.
- b. operated and maintained in a manner consistent with good operating and maintenance practices; and
- c. operated and maintained in accordance with the manufacturer's specifications, the specifications in the Application for Authorization to Use GP-5 and the applicable terms and conditions of this General Permit.

#### ADDITIONAL REQUIREMENTS.

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





Source ID: 301 Source Name: TANKS/VESSELS

Source Capacity/Throughput: 30.000 Gal/HR



#### 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).

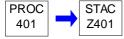






Source ID: 401 Source Name: DEHYDRATOR UNIT 1 SIVALLS 9-TRAY

> Source Capacity/Throughput: 208.000 MCF/HR



#### RESTRICTIONS.

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

#### TESTING REQUIREMENTS.

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

#### MONITORING REQUIREMENTS. III.

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 §127.12b]

Plan approval terms and conditions.

[From GP5-25-00892 issued 11/10/2011]

Condition 17.

- d. For a Glycol unit for which exemptions from Conditions 2 and 13.c are being claimed, the permittee shal maintain the following records:
  - i. VOC emissions using GRI-GLYCalc computer software or an alternative method as approved by te Department.
  - ii A record of actual throughput per day and the glycol circulation rate.

#### V. REPORTING REQUIREMENTS.

# 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[From GP5-25-00892 issued 11/10/2011]

Condition 6.

The owner or operator shall notify the Department by telephone within twenty-four (24) hours of the discovery of any malfunction of a natural gas facility operating pursuant to this General Permit, or any malfunction of an associated air cleaning device that results in, or may possibly be resulting in, the emission of air contaminants in excess of any applicable limitation specified herein or in excess of the limitations specified inany applicable rule or regulation contained in 25 Pa. Code Chapters 121 through 145, or that otherwise results in, or may possibly be resulting in, noncompliance with the requirements specified in any applicable condition of this General Permit. If the facility owner or operator is unable to provide notification within twenty-four (24) hours of discovery due to a weekend or holiday, the notification shall be made to the Department by no later than 4 p.m. on the first Department business day following the respective weekend or holiday. Additional information regarding any reported malfunction shall be provided in writing to the Department, upon request.







#### WORK PRACTICE REQUIREMENTS. VI.

# 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[From GP5-25-00892 issued 11/10/2011]

Condition 4.

Any facility operating under this General Permit must comply with the terms and conditions of the General Permit. The facility shall be:

- a. operated in such a manner as not to cause air pollution, as defined in 25 Pa. Code §121.1.
- b. operated and maintained in a manner consistent with good operating and maintenance practices; and
- c. operated and maintained in accordance with the manufacturer's specifications, the specifications in the Application for Authorization to Use GP-5 and the applicable terms and conditions of this General Permit.

#### ADDITIONAL REQUIREMENTS.

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







Group Name: 40 CFR 60 SUBPART JJJJ

Group Description: Requirements of 40 CFR 60 Subpart JJJJ

Sources included in this group

ID	Name	
101	PROPANE REFRIGERATION COMPRESSOR	
106A INLET COMPRESSOR ENGINE UC1		
106B	INLET COMPRESSOR ENGINE UC2	

#### I. RESTRICTIONS.

### **Emission Restriction(s).**

#### # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4233]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What emission standards must I meet if I am an owner or operator of a stationary SI internal combustion engine?

(a) - (d) [Not applicable]

(e)Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich burn engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE. For owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 100 HP (except gasoline and rich burn engines that use LPG) manufactured prior to January 1, 2011 that were certified to the certification emission standards in 40 CFR part 1048 applicable to engines that are not severe duty engines, if such stationary SIICE was certified to a carbon monoxide (CO) standard above the standard in Table 1 to this subpart, then the owners and operators may meet the CO certification (not field testing) standard for which the engine was certified.

### (f) - (g) [Not applicable]

(h) Owners and operators of stationary SI ICE that are required to meet standards that reference 40 CFR 1048.101 must, if testing their engines in use, meet the standards in that section applicable to field testing, except as indicated in paragraph (e) of this section.

INOx: 2.0 g/hp-hr (160 ppmvd @ 15% O2); CO: 4.0 g/hp-hr (540 ppmvd @ 15% O2); VOC: 1.0 g/hp-hr (86 ppmvd @ 15% O2) for 100 < hp < 500] These emission limits for Source 101 have been streamlined from the permit in favor of the more stringent plan approval limits.

[NOx: 1.0 g/hp-hr (82 ppmvd @ 15% O2); CO: 2.0 g/hp-hr (270 ppmvd @ 15% O2); VOC: 0.7 g/hp-hr (60 ppmvd @ 15% O2) for 500 < hp < 1,350 manufactured after 7/1/2010] These emission lmits for Sources 106A and 106B have been streamlined from the permit in favor of the more stringent GP5-25-1034A limits.

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37973, June 28, 2011]

#### # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4234]

Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines How long must I meet the emission standards if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in §60.4233 over the entire life of the engine.

#### II. TESTING REQUIREMENTS.

# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4244] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What test methods and other procedures must I use if I am an owner or operator of a stationary SI internal combustion engine?

Owners and operators of stationary SI ICE who conduct performance tests must follow the procedures in paragraphs (a) through (f) of this section.

(a) Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and





according to the requirements in §60.8 and under the specific conditions that are specified by Table 2 to this subpart.

- (b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in §60.8(c). If your stationary SI internal combustion engine is non-operational, you do not need to startup the engine solely to conduct a performance test; however, you must conduct the performance test immediately upon startup of the engine.
- (c) You must conduct three separate test runs for each performance test required in this section, as specified in §60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
- (d) To determine compliance with the NOX mass per unit output emission limitation, convert the concentration of NOX in the engine exhaust using Equation 1 of this section:

Where:

- ER = Emission rate of NOX in g/HP-hr.
- Cd = Measured NOX concentration in parts per million by volume (ppmv).
- 1.912 x 10-3 = Conversion constant for ppm NOX to grams per standard cubic meter at 20 degrees Celsius.
- Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.
- T = Time of test run, in hours.
- HP-hr = Brake work of the engine, horsepower-hour (HP-hr).
- (e) To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using Equation 2 of this section:

Where:

- ER = Emission rate of CO in g/HP-hr.
- Cd = Measured CO concentration in ppmv.
- 1.164 x 10-3 = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.
- Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.
- T = Time of test run, in hours.
- HP-hr = Brake work of the engine, in HP-hr.
- (f) For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using Equation 3 of this section:

Where:

- ER = Emission rate of VOC in g/HP-hr.
- Cd = VOC concentration measured as propane in ppmv.
- 1.833 x 10-3 = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.







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

T = Time of test run, in hours.

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

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

Where:

RFi = Response factor of compound i when measured with EPA Method 25A.

CMi = Measured concentration of compound i in ppmv as carbon.

CAi = True concentration of compound i in ppmv as carbon.

Where:

Cicorr = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

Cimeas = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

Where:

CPeq = Concentration of compound i in mg of propane equivalent per DSCM.

Table 2 to Subpart JJJJ of Part 60 - Requirements for Performance Tests

For compliance with the requirement to limit the concentration of NOX in the stationary SI internal combustion engine exhaust you must:

- Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine using Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate. Alternatively, for NOX, O2, and moisture measurement, ducts less than or equal to 6 inches in diameter may be sampled at a single point located at the duct centroid and ducts greater than 6 and less than or equal to 12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is greater than 12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A.;
- ii Determine the O2 concentration of the stationary internal combustion engine exhaust at the sampling port location using Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005). Measurements to determine O2 concentration must be made at the same time as the measurements for NOX concentration;
- If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust using Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7;
- iv. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location using Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03. Measurements to determine moisture must be made at the same time as the measurement for NOX concentration.; and







v. Measure NOX at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device using Method 7E of 40 CFR part 60, appendix A-4, ASTM Method D6522-00 (Reapproved 2005), Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03. Results of this test consist of the average of the three 1-hour or longer runs.

For compliance with the concentration of CO limit in the stationary SI internal combustion engine exhaust you must:

- i. Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine using Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate. Alternatively, for CO, O2, and moisture measurement, ducts less than or equal to 6 inches in diameter may be sampled at a single point located at the duct centroid and ducts greater than 6 and less than or equal to 12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is greater than 12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A;
- Determine the O2 concentration of the stationary internal combustion engine exhaust at the sampling port location using Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005). Measurements to determine O2 concentration must be made at the same time as the measurements for CO concentration;
- If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust using Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7;
- If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location using Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03. Measurements to determine moisture must be made at the same time as the measurement for CO concentration: and
- Measure CO at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site must be located at the outlet of the control device using Method 10 of 40 CFR part 60, appendix A4, ASTM Method D6522-00 (Reapproved 2005), Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03. Results of this test consist of the average of the three 1-hour or longer runs.

For compliance with the concentration limit of VOC in the stationary SI internal combustion engine exhaust, you must:

- Select the sampling port location and the number/location of traverse points at the exhaust of the stationary internal combustion engine using Method 1 or 1A of 40 CFR part 60, appendix A-1, if measuring flow rate. Alternatively, for VOC, O2, and moisture measurement, ducts less than or equal to 6 inches in diameter may be sampled at a single point located at the duct centroid and ducts greater than 6 and less than or equal to 12 inches in diameter may be sampled at 3 traverse points located at 16.7, 50.0, and 83.3% of the measurement line ('3-point long line'). If the duct is greater than 12 inches in diameter and the sampling port location meets the two and half-diameter criterion of Section 11.1.1 of Method 1 of 40 CFR part 60, appendix A, the duct may be sampled at '3-point long line'; otherwise, conduct the stratification testing and select sampling points according to Section 8.1.2 of Method 7E of 40 CFR part 60, appendix A;
- Determine the O2 concentration of the stationary internal combustion engine exhaust at the sampling port location using Method 3, 3A, or 3B of 40 CFR part 60, appendix A-2 or ASTM Method D6522-00 (Reapproved 2005). Measurements to determine O2 concentration must be made at the same time as the measurements for VOC concentration:
- If necessary, determine the exhaust flowrate of the stationary internal combustion engine exhaust using Method 2 or 2C of 40 CFR part 60, appendix A-1 or Method 19 of 40 CFR part 60, appendix A-7;
- If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location using Method 4 of 40 CFR part 60, appendix A-3, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03. Measurements to determine moisture must be made at the same time as the measurement for VOC concentration: and
- Measure VOC at the exhaust of the stationary internal combustion engine; if using a control device, the sampling site



**25-01034** 

# Mary Mary

# SECTION E. Source Group Restrictions.

must be located at the outlet of the control device using Methods 25A and 18 of 40 CFR part 60, appendices A-6 and A-7, Method 25A with the use of a methane cutter as described in 40 CFR 1065.265, Method 18 of 40 CFR part 60, appendix A-6, Method 320 of 40 CFR part 63, appendix A, or ASTM Method D 6348-03. Results of this test consist of the average of the three 1-hour or longer runs.

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#### 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.

# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4245]
Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary SI internal combustion engine?

Owners or operators of stationary SI ICE must meet the following notification, reporting and recordkeeping requirements.

- (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.
- (1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
- (2) Maintenance conducted on the engine.
- (3) If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
- (4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.
- (b) [Not applicable]
- (c) Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.
- (1) Name and address of the owner or operator;
- (2) The address of the affected source;
- (3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
- (4) Emission control equipment; and
- (5) Fuel used.
- (d) Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.
- (e) [Not applicable]

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 78 FR 6697, Jan. 30, 2013]







#### 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.

- # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4236] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What is the deadline for importing or installing stationary SI ICE produced in the previous model year?
- (a) After July 1, 2010, owners and operators may not install stationary SI ICE with a maximum engine power of less than 500 HP that do not meet the applicable requirements in §60.4233. [Pertains to Source 101]
- (b) After July 1, 2009, owners and operators may not install stationary SI ICE with a maximum engine power of greater than or equal to 500 HP that do not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP that do not meet the applicable requirements in §60.4233 may not be installed after January 1, 2010. [Pertains to Sources 106A and 106B]
- (c) (d) [Not applicable]
- (e) The requirements of this section do not apply to owners and operators of stationary SI ICE that have been modified or reconstructed, and they do not apply to engines that were removed from one existing location and reinstalled at a new location.
- # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4243] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What are my compliance requirements if I am an owner or operator of a stationary SI internal combustion engine?
- (a) [Not applicable]
- (b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.
- (1) [Not applicable]
- (2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.
- (i) If you are an owner or operator of a stationary SI internal combustion engine greater than 25 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance.[Pertains to Source 101]
- (ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance. [Pertains to Source 106A and 106B]
- (c) (d) [Not applicable]
- (e) Owners and operators of stationary SI natural gas fired engines may operate their engines using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, the owners and operators are required to conduct a performance test to demonstrate compliance with the emission standards of §60.4233.
- (f) If you are an owner or operator of a stationary SI internal combustion engine that is less than or equal to 500 HP and you





purchase a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you are required to perform initial performance testing as indicated in this section, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a).[Pertains to Source 101]

- (g) It is expected that air-to-fuel ratio controllers will be used with the operation of three-way catalysts/non-selective catalytic reduction. The AFR controller must be maintained and operated appropriately in order to ensure proper operation of the engine and control device to minimize emissions at all times.
- (h) (i) [Not applicable]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37974, June 28, 2011; 78 FR 6697, Jan. 30, 2013]

#### VII. ADDITIONAL REQUIREMENTS.

# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4230] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines Am I subject to this subpart?

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SI) internal combustion engines (ICE) as specified in paragraphs (a)(1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
- (1) (3) [Not applicable Only applies to the manufacturer]
- (4) Owners and operators of stationary SI ICE that commence construction after June 12, 2006, where the stationary SI ICE are manufactured:
- (i) [Not applicable];
- (ii) on or after January 1, 2008, for lean burn engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP [pertains to Sources 106A and B];
- (iii) on or after July 1, 2008, for engines with a maximum engine power less than 500 HP [pertains to Source 101]; or
- (iv) [Not applicable]
- (5) [Not applicable]
- (6) The provisions of §60.4236 of this subpart are applicable to all owners and operators of stationary SI ICE that commence construction after June 12, 2006.
- (b) (f) [Not applicable]

[73 FR 3591, Jan. 18, 2008, as amended at 76 FR 37972, June 28, 2011]

# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4246] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines 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.

# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4248] Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.



Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary SI ICE with a maximum engine power less than or equal to 19 KW (25 HP) are given in 40 CFR 90.105, 40 CFR 1054.107, and 40 CFR 1060.101, as appropriate. The values for certified emissions life for stationary SI ICE with a maximum engine power greater than 19 KW (25 HP) certified to 40 CFR part 1048 are given in 40 CFR 1048.101(g). The certified emissions life for stationary SI ICE with a maximum engine power greater than 75 KW (100 HP) certified under the voluntary manufacturer certification program of this subpart is 5,000 hours or 7 years, whichever comes first. You may request in your application for certification that we approve a shorter certified emissions life for an engine family. We may approve a shorter certified emissions life, in hours of engine operation but not in years, if we determine that these engines will rarely operate longer than the shorter certified emissions life. If engines identical to those in the engine family have already been produced and are in use, your demonstration must include documentation from such in-use engines. In other cases, your demonstration must include an engineering analysis of information equivalent to such in-use data, such as data from research engines or similar engine models that are already in production. Your demonstration must also include any overhaul interval that you recommend, any mechanical warranty that you offer for the engine or its components, and any relevant customer design specifications. Your demonstration may include any other relevant information. The certified emissions life value may not be shorter than any of the following:

- (i) 1,000 hours of operation.
- (ii) Your recommended overhaul interval.
- (iii) Your mechanical warranty for the engine.

Certified stationary internal combustion engine means an engine that belongs to an engine family that has a certificate of conformity that complies with the emission standards and requirements in this part, or of 40 CFR part 90, 40 CFR part 1048, or 40 CFR part 1054, as appropriate.

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

- (1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.
- (2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.
- (3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and carbon dioxide (CO2).

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the







requirements specified in §60.4243(d) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in §60.4243(d), then it is not considered to be an emergency stationary ICE under this subpart.

- (1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.
- (2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in §60.4243(d).
- (3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in §60.4243(d)(2)(ii) or (iii) and §60.4243(d)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO2.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining or natural gas production.

Manufacturer has the meaning given in section 216(1) of the Clean Air Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1048.801.

Model year means the calendar year in which an engine is manufactured (see "date of manufacture"), except as follows:

- (1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see "date of manufacture"), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.
- (2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see "date of manufacture").

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.





Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Pipeline-quality natural gas means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipelinequality natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units per standard cubic foot.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to June 12, 2006, with passive emission control technology for NOX (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to either; a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Stationary internal combustion engine test cell/stand means an engine test cell/stand, as defined in 40 CFR part 63, subpart PPPPP, that tests stationary ICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Subpart means 40 CFR part 60, subpart JJJJ.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

Volatile organic compounds means volatile organic compounds as defined in 40 CFR 51.100(s).

Voluntary certification program means an optional engine certification program that manufacturers of stationary SI internal combustion engines with a maximum engine power greater than 19 KW (25 HP) that do not use gasoline and are not rich burn engines that use LPG can choose to participate in to certify their engines to the emission standards in §60.4231(d) or (e), as applicable.

[73 FR 3591, Jan. 18, 2008, as amended at 73 FR 59177, Oct. 8, 2008; 76 FR 37974, June 28, 2011; 78 FR 6698, Jan. 30, 2013]







Group Name: GP5 REQUIREMENTS

Group Description: Requirements of GP5 25-1034A for Source 106A&B

Sources included in this group

ID Name

106A INLET COMPRESSOR ENGINE UC1

106B INLET COMPRESSOR ENGINE UC2

#### I. RESTRICTIONS.

# **Emission Restriction(s).**

# # 001 [25 Pa. Code §127.12b]

### Plan approval terms and conditions.

[GP5-25-1034A Section B Condition #2a]

Emission Standards for New Stationary Engines:

For Natural Gas fired Lean-Burn engines rated greater than 500 HP, the following emission restrictions apply:

NOx - 0.50 gm/bhp-hr

CO - 47 ppmvd @ 15% O2 or 93% reduction

NMNEHC as propane (excluding HCHO) - 0.25 gm/bhp-hr

HCHO - 0.05 gm/bhp-hr

The above limits are more stringent than the emission restrictions of 40 CFR 60 Subpart JJJJ which have been streamlined from this permit.

### [GP5-25-1034A Section B Condition #3]

The emission limitations specified in Section B, Conditions 1 and 2 of this General Permit shall apply at all times except during periods of start-up and shut-down provided that the duration of start-up and shut down does not exceed 30 minutes per occurrence. The owner or operator shall operate the engine in a manner consistent with good air pollution control practices for minimizing emissions at all times, including periods of startup and shutdown. The emissions from start-up and shut-down shall be included in the 12-month rolling sum of emissions. The owner or operator of the engine shall comply with all applicable start-up and shut-down requirements in accordance with 40 CFR Part 60, Subpart JJJJ, and 40 CFR Part 63, Subpart ZZZZ.

#### # 002 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

[GP5-25-1034A Section B Condition #2c]

In accordance with 25 Pa. Code §§ 127.1 and 127.12(a)(5), visible emissions from the engine shall not exceed either of the following limitations:

- (i) Equal to or greater than 10 percent for a period or periods aggregating more than three (3) minutes in any one (1)-hour; and
- (ii) Equal to or greater than 30 percent at any time.

#### # 003 [25 Pa. Code §127.12b]

#### Plan approval terms and conditions.

[GP5-25-1034A Condition #9c]

- (c) The emissions from all sources and associated air pollution control equipment located at a natural gas compression and/or processing facility and other sources determined by DEP to be a single source shall not equal or exceed any of the following on a 12-month rolling sum basis:
  - (i) Nitrogen oxides (NOx) 100 tons.





- (ii) Carbon monoxide (CO) 100 tons.
- (iii) Sulfur oxides (SOx) 100 tons.
- (iv) Particulate matter with an aerodynamic diameter less than 10 microns (PM10) 100 tons.
- (v) Particulate matter with an aerodynamic diameter less than 2.5 microns (PM2.5) 100 tons.
- (vi) Volatile organic compounds (VOCs) 50 tons.
- (vii) Any individual hazardous air pollutant (HAP) 10 tons.
- (viii) Total hazardous air pollutants (HAPs) 25 tons.

#### II. TESTING REQUIREMENTS.

### # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[GP5-25-1034A Condition #22]

The owner or operator of any source subject to performance testing requirements in this General Permit shall comply with the following:

- (a) Within one hundred eighty (180) calendar days after the initial startup of the engine or turbine, the owner or operator shall demonstrate compliance with the applicable emission limits and furnish the Department a written report of the result of such performance test.
- (b) At least thirty (30) calendar days prior to commencing an emission testing program to demonstrate compliance required by this General Permit, a Test Protocol shall be submitted to the Department's Division of Source Testing and Monitoring and the appropriate DEP Regional Office 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. The emissions testing shall not commence prior to receipt of a protocol acceptance letter from the Department.
- (c) At least fifteen (15) calendar days prior to commencing an emission testing program to demonstrate compliance required by this General Permit, written notification of the date and time of testing shall be provided to the Department's appropriate Regional Office. Notification, in writing, shall also be sent to the Department's Bureau of Air Quality, Division of Source Testing and Monitoring, so that an observer may be present. The Department is under no obligation to accept the results of any testing performed without adequate advance written notice to the Department of such testing.
- (d) Within fifteen (15) calendar days after completion of the on-site testing portion of an emission test program to demonstrate compliance required by this General Permit, if a complete test report has not yet been submitted, an electronic notification shall be sent to the Department's Bureau of Air Quality, Division of Source Testing and Monitoring and the appropriate Regional Office indicating the completion date of the on-site testing.
- (e) A complete test report shall be submitted to the Department's Bureau of Air Quality, Division of Source Testing and Monitoring and the appropriate Regional Office no later than sixty (60) calendar days after completion of the on-site testing portion of an emission test program required by this General Permit.
- (f) The complete test report shall include a summary of the emission results at the beginning of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:
- (i) A statement that the owner or operator has reviewed the report from the emissions testing company and agrees with the findings;
  - (ii) Permit number(s) and condition(s) that are the basis for the evaluation;
  - (iii) A summary of results with respect to each applicable permit condition; and







- (iv) A statement of compliance or non-compliance with each applicable permit condition.
- (g) All submittals with the exception of periodic monitoring data shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.
- (h) All testing with the exception of periodic monitoring shall be performed in accordance with any applicable federal regulations (such as New Source Performance Standards), 25 Pa. Code, Chapter 139, and the current revision of the Department's Source Testing Manual or an alternative test method as approved by the Department. The owner or operator of the facility shall use the following federal reference methods or alternative test methods approved, in writing, by the Department to demonstrate compliance:
- 40 CFR Part 60, Appendix A, Method 5 and EPA Test Method 202 shall be used to determine the Total Particulate Matter emissions.
- 40 CFR Part 60, Appendix A, Method 7E shall be used to determine the nitrogen oxide (NOx) emissions.
- 40 CFR Part 60, Appendix A, Method 10 shall be used to determine the carbon monoxide (CO) emissions.
- 40 CFR Part 60 Methods 25A and 18 or 40 CFR Part 60 Method 25A and 40 CFR Part 63 Method 320 shall be used to determine the Non-Methane Non- Ethane Hydrocarbon (NMNEHC) emissions.
- 40 CFR Part 63 Appendix A, Method 320 or Method 323 shall be used to determine the Formaldehyde (HCHO) emissions.
- (i) Reports, protocols and test completion notification with the exception of periodic monitoring data shall be submitted through PSIMS\*Online available through www.depgreenport.state.pa.us/ecomm/Login.jsp. If internet submittal is not feasible, copies of the submittal shall be sent to the appropriate Pennsylvania Department of Environmental Protection Regional Office and to the attention of the Department's Bureau of Air Quality, Division of Source Testing and Monitoring, 400 Market Street, 12th Floor Rachel Carson State Office Building, Harrisburg, PA 17105-8468, with deadlines verified through document postmarks.
- (j) The owner or operator shall ensure that all applicable federal reporting requirements are followed, including timelines more stringent than those contained herein. In the event of an inconsistency or any conflicting requirements between federal and state laws and regulation, the owner or operator shall comply with the most stringent provision, term, condition, method or rule.
- (k) If, at any time, the Department has notified the owner or operator that the air contaminant emissions from the source operating under this General Permit are, or may be, in excess of any applicable air contaminant emission limitation, the owner or operator shall conduct source tests deemed necessary by the Department to determine the actual air contaminant emission rate. The testing shall be conducted in accordance with the applicable provisions of 25 Pa. Code, Chapter 139 (relating to sampling and testing) as well as in accordance with any additional requirements or conditions established by the Department at the time the owner or operator is notified, in writing, of the need to conduct testing.

[25 Pa. Code §127.12b] # 005

Plan approval terms and conditions.

[GP5-25-1034A Section B Condition #4]

- (a) [Not applicable because engine is rated greater than 500 HP]
- (b) For a new or reconstructed engine which has a rated capacity greater than 500 brake horsepower, within one hundred eighty (180) days after initial start-up or re-authorization of this General Permit, the owner or operator shall perform source testing on each affected engine in accordance with applicable provisions of 25 Pa. Code Chapter 139 (relating to sampling and testing) on each affected engine for NOx, CO, HCHO, and NMHC or NMNEHC and furnish the Department a written report of the result of such performance test. Engine testing load conditions shall be representative to within 10 percent of 100% peak or the highest achievable load. The source testing shall be conducted in accordance with the requirements specified in Conditions 21 and 22 in Section A of this General Permit.
- (c) In addition to the source testing required by Condition 4(b) of Section B in this General Permit, every 2,500 hours of operation and no sooner than forty-five (45) calendar days from the previous test, the owner or operator shall perform







periodic monitoring for NOx and CO emissions to verify continued compliance upon each of the respective engines which has a rated capacity greater than 500 brake horsepower and subject to the BAT as specified in Section B, Conditions 1 and 2 of this General Permit. A Department-approved test that has been performed within 45 calendar days prior to the scheduled periodic monitoring may be used in lieu of the periodic monitoring for that time period. A portable gas analyzer may be used to satisfy the requirements of this condition utilizing three test runs of twenty (20) minutes for each test run. The Department may alter the frequency of portable analyzer tests based on the test results. The frequency of portable gas analyzer tests may be altered only with DEP's prior written approval. The portable gas analyzer shall be used and maintained according to the manufacturer's specifications and the procedures specified in ASTM D6522 or equivalent procedures, as approved by the Department.

(d) Within thirty (30) calendar days after the completion of periodic monitoring, the owner or operator shall submit the results to the appropriate DEP Regional Office. The Department reserves the right to require source tests in accordance with EPA reference methods should the data from the portable analyzer warrant such tests.

#### 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.

# 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[GP5-25-1034A Condition #14]

The owner or operator of the facility shall maintain records that clearly demonstrate to the Department that the facility is not a Title V facility. In addition, the owner or operator of the facility shall keep records to verify compliance with the facility-wide emission limitations. The records shall be maintained at a minimum on a monthly basis and the emissions shall be calculated on a 12-month rolling sum. The records shall be retained for a minimum of five (5) years and shall be made available to the Department, upon request. The Department reserves the right to request additional information necessary to determine compliance with this General Permit.

#### V. REPORTING REQUIREMENTS.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

[GP5-25-1034A Section B Condition #6]

- (a) The owner or operator of an engine shall also comply with the applicable notification, reporting, and recordkeeping requirements specified in 40 CFR § 60.4245.
- (b) Reports shall be submitted to DEP in accordance with the requirements and schedules outlined in this General Permit.
- (c) The records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request.

# 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[GP5-25-1034A Condition #9d]

- (d) The owner or operator of the facility shall annually submit to the Department a certification of compliance with the terms and conditions in the GP-5, for the previous year, including the emission limitations, standards or work practices. The Compliance Certification Form provided by DEP shall be signed by a Responsible Official (as defined in Pa. Code §121.1). The Compliance Certification Form submitted to the DEP shall contain a certification as to truth, accuracy, and completeness consistent with the requirements of 25 Pa. Code §127.402(d). The Compliance Certification Form must be postmarked or hand-delivered to the appropriate DEP Regional Office, no later than March 1st each year for the previous calendar year. The Compliance Certification Form shall include:
  - (i) The identification of each term or condition of the GP-5 that is the basis of the certification.



- (ii) The compliance status.
- (iii) The methods used for determining the compliance status of the source, currently and over the reporting period.

#### # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[GP5-25-1034A Condition #11e]

- (e) Malfunctions. The owner or operator shall notify the Department by telephone within twenty-four (24) hours of the discovery of any malfunction at a natural gas compression and/or processing facility operating pursuant to this General Permit, or any malfunction of pollution control equipment associated with a facility, which results in, or may possibly be resulting in, the emission of air contaminants in excess of any applicable limitation specified herein. Following the telephone notification, a written notice shall also be submitted to DEP as specified below.
- (i) If the owner or operator is unable to provide notification by telephone to the appropriate Regional Office within twenty-four (24) hours of discovery of a malfunction due to a weekend or holiday, the notification shall be made to the Department by no later than 4 p.m. on the first business day for the Department following the weekend or holiday.
- (ii) Any malfunction that poses an imminent danger to the public health, safety, welfare, or environment shall be reported by telephone to the Department and the County Emergency Management Agency immediately after the discovery of an incident. The owner or operator shall submit a written report of instances of such malfunctions to the Department within three (3) business days of the telephone report.
- (iii) Unless otherwise required by this General Permit, other malfunctions shall be reported to the Department, in writing, within five (5) business days of malfunction discovery.

#### VI. WORK PRACTICE REQUIREMENTS.

#### # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[GP5-25-1034A Section B Condition #5]

- (a) In accordance with 25 Pa. Code §§ 127.1 and 127.12(a)(5), the owner or operator of a new or reconstructed natural gasfired engine shall install, maintain, and operate each engine and associated air pollution control equipment in accordance with manufacturer's specifications.
- (b) The owner or operator shall maintain comprehensive accurate records of number of hours per month that each engine operated using a non-resettable hour meter, the amount of each fuel type that is used per month in each engine, the date the GP-5 authorization was issued, the date construction began, the date of initial startup, the date testing is required, parameters required to be tested, and the date testing was performed for each engine.

#### # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[GP5-25-1034A Condition #9b]

- (b) All sources and associated air pollution control equipment located at a natural gas compression and/or processing facility shall be:
- (i) Operated in such a manner as to not cause air pollution, as that term is defined in 25 Pa. Code § 121.1 (relating to definitions);
- (ii) Operated and maintained in accordance with the manufacturer's specifications, procedures, recommended maintenance schedule, and the specifications in the Application for Authorization to Use GP-5, or an alternate procedure approved by the Department that achieves equal or greater emission reductions;
- (iii) Operated and maintained in such a manner that no owner or operator may permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source such that the malodors are detectable outside the property of the owner or operator on whose land the facility is being operated in accordance with 25 Pa. Code § 123.31 (relating to odor emissions); and







(iv) Operated and maintained in accordance with the fugitive emission requirements of 25 Pa. Code § 123.1 (relating to prohibition of certain fugitive emissions) and 25 Pa. Code § 123.2 (relating to fugitive particulate matter).

### VII. ADDITIONAL REQUIREMENTS.

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





# **SECTION F.** Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.







# **SECTION G.** Emission Restriction Summary.

Source id	Source Description
101	PROPANE REFRIGERATION COMPRESSOR

<b>Emission Limit</b>			Pollutant
0.230	GRAMS/HP-Hr		CO
0.090	GRAMS/HP-Hr		Formaldehyde
1.000	GRAMS/HP-Hr		NOX
500.000	PPMV	dry basis	SOX
0.020	gr/DRY FT3	filterable	TSP
0.330	GRAMS/HP-Hr		VOC

# 103 HEAT MEDIUM HEATER

<b>Emission Limit</b>			Pollutant
4.000	Lbs/MMBTU	over any 1-hr period	SOX
0.400	Lbs/MMBTU		TSP

# 107 ENG-1 AJAX DPC-2803-LE 600 BHP

	<b>Emission Limit</b>		Pollutant
	2.000	GRAMS/HP-Hr	CO
	2.000	GRAMS/HP-Hr	NOX
	2.000	GRAMS/HP-Hr	VOC
1			

### **Site Emission Restriction Summary**

Emission Limit	Pollutant
EIIIISSION LIIIII	FOIIUIAIII







#### SECTION H. Miscellaneous.

- a) The Capacity/Hour numbers listed on Page 4 and provided in Section D of this permit for individual sources are for informational purposes only and are not to be considered enforceable limits. Enforceable emission limits are listed in the Restriction section for each source. They are also summarized for informational purposes only in Section F.
- b) Source ID: Department assigned ID number for the source Source Name: Department assigned name for the source Capacity: The maximum capacity for the source (not a limit) Fuel/Material: The fuel/material assigned to SCC for the source

Schematics:

FML: Fuel material location Comb: Combustion source

Proc: Process CD: Control device EP: Emission point

Pollutant:

CO: Carbon Monoxide

Formaldehyde: Formaldehyde

NOx: Nitrogen Oxides SOx: Sulfur Oxides

TSP: Total Suspended Particulate VOC: Volatile Organic Compounds

- c) For the purpose of this permit, Source 101 (Propane Refrigeration Compressor) consists of the following:
- 1. Ajax 278 bhp 2-cycle, lean burn natural gas engine model DPC-2202LE (manufactured in 2013) with oxidation catalyst manufactured by Cameron Process & Compression [model 144-18B29-XXX(2202)]
- d) For the purpose of this permit, Source 104 [Storage Tanks] consists of the following:
- 1. Propane Storage Tank (V-2800) pressurized 30,000 gallon ASTM horizontal cylindrical storage tank with emergency vent
- 2. Mixed Butane Storage Tank (V-2810) pressurized 30,000 gallon ASTM horizontal cylindrical storage tank with emergency vent
- 3. Natural Gasoline Storage Tank (V-2820) pressurized 30,000 gallon ASTM horizontal cylindrical storage tank with emergency vent
- 4. Raw Product Storage Tank (V-2830) pressurized 30,000 gallon ASTM horizontal cylindrical storage tank with emergency vent
- e) For the purpose of this permit, Sources 106A and 106B are two Lean Burn Two Stoke Natural Gas Engines, Ajax model DPC-2804LE rated 728 bhp at 440 rpm identified by the facility as UC1 and UC2. The manufacturer date for each of these engines is May 23, 2013. Each engine is equipped with an oxidation catalyst manufactured by Cameron Process & Compression model z6321 9754.
- (f) For the purpose of this permit, Source 107 (Engine 1) is an Ajax DPC-2803-LE installed March 31, 2006. The unit is rated at 600 BHP and is a 2-stroke lean burn engine. The engine was manufactured before March 2006. This source was authorized by GP5-25-892A which was issued by the Department November 16, 2011.
- (g) Source 401(dehy) was installed in 1979. The source is manufactured by Sivalls, model 9-tray. The dehydrator throughput is 10 mmscf/day and is equipped with a 250,000 btu reboiler. The dehy was authorized by GP5-25-892A on November 16, 2011.
- (h) Source 301 (tanks / vessels) consists of the following:
  - 1. Tanks 01 and 02 capacity of 1,000 gallons each for pipeline fluids.
  - 2. Tank 03 capacity of 1,000 gallons for pipeline fluids.
  - 3. Tank 04 capacity of 1,000 gallons for new oil.
  - 4. Tank 05 capacity of 1,000 gallons for used oil.
  - 5. Tank 06 capacity of 1,000 gallons for coolant.
  - 6. Tank 07 capacity of 2,000 gallons for Triethylene Glycol (TEG)
  - 7. Tank 08 capacity of 4,000 gallons for TEG.





#### SECTION H. Miscellaneous.

These tanks were authorized by GP5-25-892A on November 16, 2011. Tanks 01 and 02 were in service in 1994. Tanks 03, 04, 05, 06, and 07 were in service 1979. Tank 08 was in service 1984.

(h) GP5-25-892A issued November 16, 2011 and GP5-25-1034A issued July 17, 2013 authorized fugitive component leaks as follows as identified in the semi-annual report ending 12/31/2015:

- 1.600 valves
- 2.39 relief valves
- 3.13 pumps
- 4.4 compressors
- 5. 1621 connections (threaded and flanged)
- (i) This permit was issued April 20, 2016.



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