**COMMONWEALTH OF PENNSYLVANIA** **MEMO**
**Department of Environmental Protection**
**Southwest Regional Office**

**TO** Air Quality Permit File PA-63-01011

**FROM** Laura S. Dickson, P.E./LSD
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Air Quality Program

**THROUGH** Mark R. Gorog, P.E./MRG
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**DATE** November 23, 2022

**RE** Review of Plan Approval Application –Natural Minor Facility
MarkWest Liberty Midstream & Resources, L.L.C.
Harmon Creek Gas Plant
Smith Township, Washington County
APS 1066962 Auth 1402339 PF 819388

## INTRODUCTION:

On June 29, 2022, the Department received a plan approval application from MarkWest Liberty Midstream & Resources, L.L.C. (MarkWest) regarding the proposed project located at the Harmon Creek Gas Processing Plant (Harmon Creek) within Smith Township, Washington County. Currently, the facility is operating under GP5-63-01011B (AG5-63-00011A) which was authorized for use on June 29, 2022. On July 8, 2022, the Department deemed the application to be administratively incomplete because an aerial view of the facility was not submitted within the application. Response to this deficiency was received on July 11, 2022. The administratively incompleteness letter also included two technical deficiencies with a response request of 30 days. Response to the technical deficiencies were received on July 13 and 14, 2022. The application was deemed to be administratively complete on July 21, 2022, after the $7,500 fee was received. On September 1, 2022, the Department requested a more detailed BAT analysis which was received on October 17, 2022. Additional technical information, and/or revised emission estimates were received, via email, on October 19, 2022, October 31, 2022, November 1, 2022, November 3, 2022, November 4, 2022, November 10, 2022, and November 17, 2022.

## BACKGROUND:

MarkWest is the owner and operator the existing gas processing plant. The permitting history for this facility is as follows:

On January 17, 2018, GP5-63-01011A was authorized to construct and operate:

- Two (2) 200 MMscf/d Cryogenic Processing Plants
- One (1) De-Ethanization fractionation plant
- One (1) 8,134 MMBtu/hr plant flare
- Ten (10) 5,000 hp electric driven reciprocating compressors (rod packing emissions)
- Fugitive emissions from component leaks

On January 17, 2018, GP1-63-01011A was authorized to construct and operate:

- Two (2) 10.25 MMBu/hr natural gas-fired Tulsa Heaters cryo mol sieve regen heaters
- Two (2) 41.22 MMBtu/hr natural gas-fired Scelerin Heaters de-ethanzation HMO heaters
- One (1) 10.37 MMBtu/hr natural gas-fired Tulsa Heaters stabilization HMO heater

On December 10, 2020, the Department received a general permit re-authorization with modification application for the facility GP5-63-01011B (AG5-63-00011A). During the review of this application, it was determined that an 18-month lapse in construction had occurred for the sources listed below. Because of the lapse in construction and updated Best Available Technology, a Plan Approval application was required for the following sources that had not been constructed:

- Harmon Creek 2 - 200 MMscf/d Cryogenic Processing Plant
- One (1) Cryo Mol Sieve Regen Heater (H-2711)
- Three (3) 5,000 HP electric driver reciprocating compressors (rod packing emissions)

On June 29, 2022, GP5-63-01011A and GP1-63-01011A were superseded by GP5-63-01011B (AG5-63-00011A) which authorized the continued operation of the following previously authorized and installed equipment:

- One (1) Cryogenic Processing Plant – Increased Capacity from 200 mmscfd to 230 mmscfd
- One (1) De-Ethanization Fractionation Plant
- Cryo Plant 1 Regen Heater (Source ID 031): Increased Capacity from 10.25 MMBtu/hr to 11.84 MMBtu/hr
- Cryo Plant 1 De-Ethanizer HMO Heater (Source ID 033): Increased Capacity from 41.22 MMBtu/hr to 48.15 MMBtu/hr
- Cryo Plant 2 De-Ethanizer HMO Heater (Source ID 034): Increased Capacity from 41.22 MMBtu/hr to 48.15 MMBtu/hr
- Stabilization HMO Heater (Source ID 036): Increased Capacity from 10.37 MMBtu/hr to 11.99 MMBtu/hr
- Process Flare (Source ID C601): 8,134 MMBtu/hr; 126.52 MMscf/yr
- Fugitives Emissions (Source ID 701) (Including truck loading and measurement devices)
- Four (4) Pig Launchers controlled by the plant flare (Source ID 801)
- One (1) Pig Receiver controlled by the plant flare (Source ID 801)
- Seven (7) electric driven reciprocating compressors ranging from 75-5,000 hp (rod packing emissions) (Source ID 601)
- Methanol Tanks (Source ID 301) – Existing Source
- 4,200 Amine storage tank (Source ID 301) – Insignificant Existing Source

The facility also operates the following exempted sources the emissions from which are accounted for in the facility-wide potential to emit and will be part of any future facility-wide operating permit:

- Generac SD015 (Source ID 102): 49 bhp
- Generac SD150 (Source ID 102): 279 bhp
- De-Ethanizer Regen Heater (Source ID 035): 6.60 MMBtu/hr
- Amine Unit and Closed Drain Tank (routed to flare)
- Measurement Devices

**SOURCES AND CONTROLS:**

The purpose of this Plan Approval is to install, modify, and operate the following air contamination sources:

- One (1) 260 mmscfd natural gas processing plant (Source ID 404);
- Cryo Plant 2 regenerative heater[1] (Source ID 037): Maximum heat input of 17.84 MMBtu/hr; Equipped with flue gas recirculation (Source ID C037).
- One (1) 500-gallon methanol storage tank (Source ID 302);
- Three (3) 5,000 hp electric-driven compressors (rod-packing venting) (Source ID 103);
- Modify Fugitives (Source ID 701)
- Truck Loadout (Source ID 702) – GP5-63-01011B inserted truck loadout under Fugitives. With this Plan Approval, truck loadout now has its own Source ID.
- Four (4) Measurement Devices (Source ID 703) - GP5-63-01011B inserted measurement devices under Fugitives. With this Plan Approval, measurement devices have been given a Source ID.
- Emergency/Uncontrolled Venting/Blowdowns (Source ID 602) – This source was not a proposed source within the application. However, it will be included as a source in this plan approval. Planned shutdowns are vented to the existing flare.
- The existing flare will control fugitive emissions emitted from proposed pressure relief devices where technical feasible. It will also control maintenance blowdowns and pressure safety valves from Harmon Creek Cryo II. Because of this, the flare will be included within the Plan Approval.

The application also indicated a possible de minimis increase from the existing pigging sources. MarkWest stated, "*Pigging frequency is expected to increase. However, the frequency is not anticipated to be greater than that included in the modification application submitted on 12/10/2020. Therefore, potential emission estimates will remain unchanged. Pigging emissions will be controlled by the plant flare."* Within the potential to emit (PTE) estimates, the frequency of events and emissions are identical to those presented within the 12/10/2020 modification application (GP5-63-01011B). Because the frequency of events and emissions are identical to what was previously approved, the Department does not consider this to be a de minimis increase and will not include pigging within this Plan Approval as it

[1] The regenerative heater is direct-fired; however, it produces indirect heat during the process as it is contains a shell and tube system and meets the 25 Pa. Code Section 121.1 definition of a combustion unit. Residue pipeline quality gas is routed through the shell and tube system to be heated. Gas is then transferred to molecular sieve units where heated gas is in direct contact with packing media.

appears that no modifications are proposed. Pigging will remain under GP5-63-01011B and will be included in any future facility-wide operating permit.

Sources currently operating under GP5-63-01011B (AG5-63-00011A), that are not part of the proposed process, will not be reviewed or conditioned within this application; however, emission estimates will be included to accurately capture the facility-wide estimates. Existing fugitive emissions and the existing flare will be included within this plan approval since both are part of the proposed sources. All currently permitted sources operating under GP5-63-01011B (AG5-63-00011A), and all proposed sources within this application will be rolled into one Operating Permit at the appropriate time.

**Fee:**

MarkWest provided the Department with $7,500 for the application which includes the $2,500 fee and review of two NSPS standards ($2,500/standard).

**Municipal Notification**:

The applicant has submitted proof of submittal of municipal notifications to the County and the Municipality per 25 Pa. Code 127.43a. Both notifications were received by the County and Municipality on June 29, 2022.

**BEST AVAILABLE TECHNOLOGY:**

All new sources must meet BAT per 25 Pa. Code § 127.1.

Per 25 Pa. Code §121.1, Best available technology is defined as "Equipment, devices, methods, or techniques as determined by the Department which will prevent, reduce or control emissions of air contaminants to the maximum degree possible and which are available or may be made available." 25 Pa Code §127.1 states, "New sources shall control the emission of air pollutants to the maximum extent, consistent with the best available technology as determined by the Department as of the date of issuance of the plan approval for the new source." Per 25 Pa Code §121.1 New source is defined as, "New source-A stationary air contamination source which: (i) Was constructed and commenced operation on or after July 1, 1972. (ii) Was modified, irrespective of a change in the amount or kind of air contaminants emitted, so that the fixed capital cost of new components exceeds 50% of the fixed capital cost that would be required to construct a comparable entirely new source; fixed capital costs means the capital needed to provide the depreciable components.", The applicant's methodology is considered acceptable to show that emissions of a new source will be the minimum attainable through BAT in this case.

| Source ID | Emission Source(s) | Air Contamination Control Devices | Control Device Make/Model | BAT? |
|---|---|---|---|---|
| -- | Process Flare | C601 | John Zink EEF Series Open Flare | MarkWest has performed a BAT analysis of the existing flare to determine if it meets BAT within this Plan Approval. As requested, MarkWest evaluated the replacement of the existing open flare is an enclosed flare as well as operating multiple enclosed flares alongside the existing open flare. The current flare is rated to control VOC and HAPs at 98% efficiency.<br><br>Regarding replacing the existing flare with an open flare, MarkWest estimates a 98% control efficiency for an enclosed flare; however, due to higher purge and pilot gas rates to safely operate the enclosed flare, MarkWest estimates a 0.01 tpy increase of VOC, 2.04 tpy increase of CO, 0.45 tpy of NOx, 0.05 tpy of PM, 772 tpy of $CO_2$, and 4.9 tpy of $CH_4$. Due to the increased emissions, MarkWest concluded that installing an enclosed flare would not be feasible.<br><br>The Department requested MarkWest to evaluate an enclosed flare that would have a 99% control efficiency. Per MarkWest's research, VOC would decrease by 2.01 tpy, but NOx and CO would increase by 0.45 tpy and 2.04 tpy, respectively due to pilot and purge gas throughput.<br><br>Finally, MarkWest evaluated the possibility of installing multiple smaller enclosed control devices. MarkWest concluded that due to the large footprint of an enclosed flare, more land would have to be acquired resulting in more earth disturbance. Each of those enclosed flare would require piping which would increase fugitive component counts and emissions. Finally, each flare would include purge and pilot gas which would increase emissions at the facility. MarkWest concludes that the existing open flare meets BAT. Because the alternatives provided would increase emissions compared to the existing flare, the Department has determined that the existing flare meets BAT for this modified facility based upon case specific facts as currently constructed and proposed. |
| 037 | 17.84 MMBtu/hr Natural Gas Regen Heater (low-NOx burner and FGR are part of the heater) | - | - | The proposed heater is a combustion unit. GP-1 is a General Permit to authorize operation of combustion units. The Department has recently updated the GP-1, as of October 22, with up-to-date BAT decision for combustion units. The Department determined that NOx and CO are the contaminants of importance regarding combustion units. If a combustion unit uses fuel, other than natural gas, then SOx is also of importance. However, SOx has been determined to be of minor significance when natural gas is the fuel, as is this heater. This is because natural gas does not contain significant levels of SOx .<br><br>The Department has determined during the review of the GP-1 revision that 9 ppmvd @ 3% $O_2$ for NOx is BAT for combustion units such as the proposed heater. The GP-1 BAT was based on similar determinations identified from the Bay Area Air Quality Management District (AQMD) and San Joaquin Valley Unified AQMD. It was also based on an evaluation performed on two combustion units with maximum heat inputs of 12.8 and 92.4 MMBtu/hr. The Southwest Region reviewed these sources, and in both cases, 9 ppm was achieved by utilizing ultra-low NOx burners, good combustion practices, and flue gas recirculation. Finally, the Department also reached out to multiple vendors who indicated that 9 ppm was technically feasible. Because the GP-1 is the most recently approved BAT determination by the Department related to combustion units, the proposed heater must meet this BAT level. MarkWest provided guarantees from the manufacturer that the heater will meet this level by adding an FGR to their proposed heater.<br><br>The Department also determined during review of the GP-1 revision that 130 ppmvd @ 3% $O_2$ for CO is BAT for combustion units such as the proposed heater. The GP-1 BAT was based on NSPS and NESHAP where No. 2 fuel oil fired boilers at |

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| | | | | a major HAP facility are required to meet 130 ppm. The proposed heater has a guarantee of 49 ppmvd @ 3% $O_2$ which is more stringent that the GP-1 standard.<br><br>The heater meets BAT. |

| Source ID | Emission Source(s) | Air Contamination Control Devices | Control Device Make/Model | BAT? |
|---|---|---|---|---|
| 302 | 500-Gallon Methanol Storage Tank | - | - | The capacity of the proposed methanol tank is 500 gallons. Combined with the existing 500-gallon methanol tank, the applicant estimates 0.4 tpy of VOC from the uncontrolled sources. The applicant estimates no more than five gallons of methanol usage annually, but estimated emissions were based on 50 gallons of methanol to be conservative. The Department estimates 0.2 tpy of VOC from the proposed tank. Good operating practices is a part of BAT for this source. BAT for this insignificant source will be further explored during the comment and response period and will be included within the comment and response memo. |
| 103 | 5,000 hp Electric-driven compressors and associated rod-packing venting | - | - | No results, related to rod packing, were returned within the EPA RACT/BACT/LAER database. According to MarkWest, the proposed compressors will be equipped with low-emission packing.<br><br>MarkWest asserted that carbon adsorption canisters could cause possible safety risks. The rod packing vent downstream design pressure is 1440 psi. MarkWest concluded that, with obstruction of a vent line, a dangerous overpressure of the carbon canister could result from back pressure.<br>MarkWest has also evaluated routing the rod packing to the existing closed drain system which is controlled by the existing flare and concluded that it is not possible due to the rod packing vents pressure being 1440 psi while the closed drain system is only 1 psi.<br><br>The Department requires all air pollution devices to be operated with good operating practices. In addition, rod packing is subject to Subpart OOOOa which requires rod packing replacement every 26,000 hours or every 36 months. This is also consistent with GP-5 Section D BAT requirements. The Department has determined that good operating practices, compliance with OOOOa, and meeting the GP-5 BAT requirements meets current BAT with regards to rod packing. |
| 702 | Truck Loadout | - | - | The VOC emissions from truck loadout will increase from 0.71 tpy to 0.78 tpy. The applicant will continue to perform submerged loading and route emissions to the existing flare. Control of this source in this manner remains BAT. |
| 703 | Measurement Devices | - | - | MarkWest has evaluated routing the eight (8) proposed measurement devices vents to the existing closed drain which is controlled by the existing flare. MarkWest notes that this could cause potential flowback issues which would contaminate the GC equipment. MarkWest also estimated that installation cost would be roughly $1.6M to control the 0.26 tpy VOC and has concluded that this control method is not economically feasible.<br><br>MarkWest has also evaluated installing VRUs for each vent. MarkWest estimates one VRU to cost roughly $1-2M which equates to roughly $218,000/ton of VOC controlled and concluded that this control option is not economically feasible .<br><br>The Department requires all air contamination sources be operated with good operating practices and has determined that good operating practices is BAT for the proposed measurement devices. |

| Source ID | Emission Source(s) | Air Contamination Control Devices | Control Device Make/Model | BAT? |
|---|---|---|---|---|
| 701 | Fugitives | - | - | For fugitive emissions, Protocol for Equipment Leak Emission Estimates, EPA 453/R-95-017, November 1995 was utilized for emission factors. In addition, MarkWest implements the TCEQ 28VHP LDAR program with reductions found in APDG 6422v2, Revised 06/2018. The LDAR program implemented requires quarterly monitoring of components and welded or flanged connections. TCEQ estimated the reductions based on the average difference between Table 2.4 and Table 2.5 in the EPA 453/R-95-017, November 1995 document. The 28VHP Program includes boilerplate conditions that an operator must follow in order to claim the 28VHP reduction factors. This includes construction of both new and reworked piping, valves, pump systems, and compressor systems conforming to applicable codes and for piping connections to be welded or flanged. Per construction documentation provided by MarkWest, the proposed sources will be constructed in accordance with AWS D1.1 which specifies welding code. By following code, and by welding and flanging piping to certain standards (with the exception of screwed connections for piping less than 2 inch diameter), the Department acknowledges the 28VHP program for the Harmon Creek facility. By welding instead of screwing a connection together, the weld theoretically removes the connections and forms one pipe.<br><br>In addition, MarkWest will be required to follow the BAT definition of a Leak, per GP-5 (2700-PM-BAQ0267), while conducting quarterly LDAR monitoring. "A leak is defined as any release of gaseous hydrocarbons that is detected by Auditory, Visual, or Olfactory (AVO) inspection; an optical gas imaging (OGI) camera calibrated according to 40 CFR § 60.18 and a detection sensitivity level of 60 grams/hour; a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21 that detects a concentration of 500 ppm calibrated as methane or greater; or other leak detection methods approved by the Department's Division of Source Testing and Monitoring. However, a release from any equipment or component designed by the manufacturer to protect the equipment, controller, or personnel or to prevent groundwater contamination, gas migration, or an emergency situation is not considered a leak." MarkWest also proposes to perform daily AVO inspections, weekly pump monitoring, and monthly Method 21 inspections, all of which are more stringent than GP-5 BAT standards. Similar to 25 Pa. Code §121.1, Lowest Achievable Emission Rate (LAER) is defined as "The most stringent emission limitation which is contained in the implementation plan of a state for the class or category of source unless the owner or operator of the proposed source demonstrates that the limitations are not achievable." In this similar situation of BAT, the 28VHP program, along with the leak definition, above, the LDAR program proposed by MarkWest is stringent and may be accepted for this application. |

## REGULATORY ANALYSIS:

### Standards for Contaminants

Pursuant to 25 Pa. Code §127.12b(a) and to ensure proper operations of the sources at the facility, the plan approval will be conditioned to require daily facility-wide inspections for the presence of visible stack emissions, fugitive emissions, or potentially objectionable odors at the property line. These observations are to ensure continued compliance with the fugitive emission prohibition under 25 Pa. Code §§123.1 or 123.2 and malodor prohibition under 25 Pa. Code §123.31. Observations shall be conducted during daylight hours and shall be conducted while sources are in operation. If visible stack emissions, fugitive emissions, or potentially objectionable odors are apparent, corrective action must be taken. Records of each inspection shall be maintained in a log and, at a minimum, include the date, time, and name of the observer, along with any corrective action taken.

**25 Pa. Code §121.7 –** applies to the facility. This regulation has been included as a plan approval condition. Harmon Creek may comply with this requirement via this application as well as by complying with the final plan approval conditions.

Per **25 Pa. Code §123.1 –** applies to the facility. No person may permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than those identified in §123.1(1-7, and 9). Further, in accordance with **§123.2—Fugitive Particulate Matter**, a person may not at any time permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in §123.1(a)(1-9) if the emissions are visible at the point the emissions pass outside the property. §123.1 and §123.2 conditions are incorporated in the Plan Approval.

**25 Pa. Code §123.11 -** applies to the proposed 17.84 MMBtu/hr regen Heater. Per 25 Pa. Code §121.1, a *combustion unit* is defined as a "stationary equipment used to burn fuel primarily for the purpose of producing power or heat by indirect heat transfer". The heater is not permitted to emit, into the outdoor atmosphere, particulate matter in excess of 0.4 pound per million Btu of heat input.

**25 Pa. Code §123.13** - applies to all sources with the exception of combustion units. Per 25 Pa. Code §121.1, *process* is defined as "A method, reaction or operation in which materials are handled or whereby materials undergo physical change—that is, the size, shape, appearance, temperature, state or other physical property of the material is altered—or chemical change—that is, a substance with different chemical composition or properties is formed or created. The term includes all of the equipment, operations and facilities necessary for the completion of the transformation of the materials to produce a physical or chemical change. There may be several processes in series or parallel necessary to the manufacture of a product." This Section specifies that No person may permit the emission into the outdoor atmosphere of particulate matter from a process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following: (i) .04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

**25 Pa. Code §123.21** applies to the facility. Per this Section, *"(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*."

**25 Pa. Code §123.31 –** applies to the facility. Per §123.31(b), *"[a] person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source, in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated*." Per §121.1, malodor is defined as *"[a]n odor which causes annoyance or discomfort to the public and which the Department determines to be objectionable to the public*." The facility will be required to perform daily odor surveys during air contamination source operation.

**25 Pa. Code §127.1-** applies to the facility. Per this Section, *"New sources shall control the emission of air pollutants to the maximum extent, consistent with the best available technology as determined by the Department as of the date of issuance of the plan approval for the new source*." MarkWest is proposing air contamination sources that meet the definition of a New Source per 25 Pa. Code §121.1.

**25 Pa. Code §127.11** – applies to the facility. Per this Section, "*Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), a person may not cause or permit the construction or modification of an air contamination source, the reactivation of an air contamination source after the source has been out of operation or production for 1 year or more, or the installation of an air cleaning device on an air contamination source, unless the construction, modification, reactivation or installation has been approved by the Department*." The proposed sources and modified flare meet the 25 Pa. Code §121.1 definition of air contamination source and air cleaning device, respectively. §121.1.

**25 Pa. Code §123.43** – applies to the facility. Per this Section, "*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 devices approved by the Department."*

**25 Pa. Code §129.14 -** applies to the facility. Because the facility is not located in an air basin, with certain exceptions, some open burning is allowed under the air quality regulations but may not be under the Waste Management regulations.

**25 Pa. Code Chapter 135 -** applies to the facility. Per 25 Pa. Code §135.1, "*The purpose of this chapter is to provide a means of obtaining data required to evaluate the effectiveness of regulations, identify available or potential emission offsets and maintain an accurate inventory of air contaminant emissions for air quality assessment and planning activities*." The Plan Approval will include reporting and record keeping requirements for this facility.

**25 Pa. Code §139** – applies to this facility because some performance testing is required.

**Federal Regulatory Analysis:**

**New Source Performance Standards (NSPS) from 40 CFR 60 Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units** applies to "steam generating units". The proposed regenerative heater is a process heater which is exempted from this Subpart. Therefore, this Subpart does not apply to the proposed sources.

**New Source Performance Standards (NSPS) from 40 CFR 60 Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984** does *not* apply to the proposed sources. Per 40 CFR 60.110b(a), "the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (19,813 gallons) that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984". The Plan Approval does not propose any storage vessels with a capacity greater than or equal to 19,813 gallons; therefore, this subpart does not apply.

**NSPS from 40 CFR Part 60 Subpart KKK —Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plants for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011** does *not* apply to the proposed sources because construction will be after August 23, 2011.

**NSPS from 40 CFR Part 60 Subpart LLL - Standards of Performance for SO2 Emissions From Onshore Natural Gas Processing for Which Construction, Reconstruction, or Modification Commenced After January 20, 1984, and on or Before August 23, 2011** applies to affected facilities that commenced construction or modification after January 20, 1984, and on or before August 23, 2011. Harmon Creek was initially constructed after August 23, 2011, so this Subpart does not apply.

**NSPS from 40 CFR Part 60 Subpart JJJJ – Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE)** applies to manufacturers, owners, and operators of stationary spark ignition engines as specified in §60.4230 (a)(1) through (a)(6). The proposed compressors are not subject to this subpart due to being electrically driven with electricity supplied from the grid.

**NSPS from 40 CFR Part 60 Subpart OOOO—Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution for which Construction, Modification or Reconstruction Commenced after August 23, 2011, and on or before September 18, 2015** will not apply to the proposed sources because they will be constructed after September 18, 2015.

**40 CFR Part 60 Subpart OOOOa—*Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced After September 18, 2015*** became effective on August 2, 2016, and established emission standards and compliance schedules for the control of greenhouse gases (GHG), volatile organic compounds (VOC) and sulfur dioxide ($SO_2$) emissions from affected onshore affected facilities listed in §60.5365(a –j) in the crude oil and natural gas source category that commence construction, modification, or reconstruction after September 18, 2015. For the purposes of 40 CFR Part 60, *construction* means the "fabrication, erection, or installation of an affected facility." Per §60.5370a(a), owners and operators of affected facilities must be in compliance with the standards of Subpart OOOOa no later than August 2, 2016, or upon startup, whichever is later. According to §60.5370a(b), at all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator [the Department] which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of source(s). 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. Applicability of Subpart OOOOa to any potentially affected proposed sources at Harmon Creek discussed below.

*Reciprocating Compressors*

By definition in §60.5430a, a *reciprocating compressor* is "a piece of equipment that increases the pressure of a process gas by positive displacement, employing linear movement of the driveshaft." Per §60.5365(c), each *reciprocating compressor* affected facility is a single reciprocating compressor. The proposed reciprocating compressors are Subpart OOOOa-affected facilities.

*Pneumatic Controllers*

There are no proposed natural gas driven pneumatic controllers indicated within this application.

*Storage Tanks/Storage Vessels*

There are no proposed storage vessels that have potential to meet or exceed 6 tpy of VOC of emissions.

*Pneumatic Pumps*

There are no proposed natural gas driven pneumatic pumps indicated within this application.

Per §60.5430a*, a sweetening unit is defined as:*

There are no proposed sweetening units indicated within this application.

*Fugitive Emission Components*

Subpart OOOOa will apply to the all fugitive emission components. Per 40 CFR §60.5365a(f), the group of all equipment within a process unit is considered an affected facility. Per 40 CFR §60.5430a, "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…"

The proposed project will include equipment to extract natural gas liquids from field gas (cryogenic plants and de-ethanizer), therefore the site will be considered a gas processing plant subject to the leak detection and repair (LDAR) requirements of this subpart.

MarkWest will be required to monitor and repair all fugitive emissions from proposed components. NSPS Subpart OOOOa adopts several of the provisions from NSPS Subpart VVa with additional exemptions and requirements. Subpart VVa establishes leak definitions and monitoring frequencies for equipment, monitoring procedures in accordance with Method 21 or sensory monitoring, repair requirements for leaking equipment, and resurvey of equipment to ensure successful repair. Associated recordkeeping and reporting using EPA's Compliance and Emissions Data Reporting Interface also applies." Subpart VVA conditions will be included in this Plan Approval.

**National Emission Standards for Hazardous Air Pollutants (NESHAPS) from 40 CFR Part 63 Subpart HH - Oil and Natural Gas Production Facilities** does not apply to the proposed sources. Per 40 CFR 670(b)(2), for area sources, this subpart only applies to the owners and operators of TEG dehydration units. There are no existing or proposed TEG dehydration units at the facility.

**NESHAPS from 40 CFR Part 63 Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines (RICE)** does not apply to the proposed sources. The proposed compressors are not subject to this subpart due to being electrically driven with electricity supplied from the grid.

**NESHAPS from 40 CFR Part 63 Subpart JJJJJJ – Industrial, Commercial, and Institutional Boilers Area Sources** applies to certain boilers. The proposed regenerative heater does not meet the definition of a boiler and is not subject to this Subpart.

**40 CFR Part 98 - Mandatory Greenhouse Gas Reporting** – This part was promulgated on October 30, 2009. In accordance with 40 CFR § 98.2(a), the Greenhouse Gas (GHG) reporting requirements and related monitoring, recordkeeping, and reporting requirements of this part apply to the owners and operators of any

facility that is located in the United States and that meets the requirements of either paragraph 40 CFR 98 § 98.2 (a)(a), (a)(2), or (a)(3) of this section. However, public comments to the Greenhouse Gas Mandatory Reporting rule (GHG MRR) questioned the requirements of this rule to meet current definitions of "applicable requirement" at 40 CFR §§ 70.2 and 71.2. The commentators requested that USEPA confirm their interpretation of the regulations. The EPA provided the following response: "As currently written, the definition of applicable requirement" in 40 CFR §§ 70.2 and 71.2. The commentators requested that USEPA confirm their interpretation of the regulations. The EPA provided the following response: "As currently written, the definition of "applicable requirement" in 40 CFR §§ 70.2 and 71.2 does not include a monitoring rule such as today's action, which is promulgated under CAA sections 114(a)(1) and 208." The preamble of the final version of the GHG MRR, located at 74 Fed Reg 209, pp. 56287-56288, states that the GHG MRR is not considered an "applicable requirement" under the Title V Operating Permit program. Therefore, this Subpart, while it may be an obligation for Harmon Creek, is not considered an applicable requirement. However, because Harmon Creek has the potential to emit greater than 25,000 metric tons of $CO_2e$ per year, the Department is requiring MarkWest to report emissions of GHG for informational purposes and this requirement has been included in this plan approval.

**Prevention of Significant Deterioration Review:** On May 31, 1980, the Department adopted Prevention of Significant Deterioration ("PSD") requirements promulgated by the United States Environmental Protection Agency ("U.S. EPA") under the Clean Air Act. These requirements have been adopted in their entirety and incorporated by reference in 25 Pa. Code Chapter 127 Subchapter D. Per 40 CFR 52.21(a)(2)(i), "The requirements of [40 CFR Part 52.21, Prevention of Significant Deterioration of Air Quality] apply to the construction of any new major stationary source… or any project at an existing major stationary source in an area designated as attainment or unclassifiable under sections 107(d)(1)(A)(ii) or (iii) of the Act." Attainment or unclassifiable designations (listed under 40 CFR §81.339 for Pennsylvania) are established in reference to the National Ambient Air Quality Standards ("NAAQS") under 40 CFR Part 50. Affected existing sources must be evaluated to determine whether or not the physical change results in a "modification" (defined in 25 Pa. Code §121.1 and 40 CFR 60.2) or "major modification" (defined in 40 CFR 52.21(b)(2)) which would subject the sources to PSD requirements.

Because the facility is not a major source, PSD is not applicable.

**Non-Attainment New Source Review (NA-NSR):** On May 19, 2007, the Department adopted revised New Source Review regulations in 25 Pa. Code Chapter 127 Subchapter E. Per 25 Pa. Code §127.201(a), "a person may not cause or permit the construction or modification of an air contamination facility in a nonattainment area… unless the Department… has determined that the requirements of this subchapter have been met." 25 Pa. Code §127.201(c) states that "the NSR requirements of this subchapter also apply to a facility located in an attainment area for ozone and within an ozone transport region that emits or has the potential to emit at least 50 tpy of VOC or 100 tpy of NOx.

Because the facility is not a major source, NA-NSR is not applicable.

**RACT II:** Per 25 Pa. Code §129.96, which is applicability for RACT Requirements for Major Sources of NOx and VOCs, "The NOx requirements of this section and §§ 129.97 – 129.100 apply Statewide to the owner and operator of a major NOx emitting facility and the VOC requirements of this section and §§ 129.97 – 129.100 apply Statewide to the owner and operator of a major VOC emitting facility".

Because the facility is not a major source, RACT II is not applicable.

**RACT III:** The Environmental Quality Board is proposing to amend 25 Pa. Code Chapters 121 and 129 to include RACT III requirements and emission limitations. The proposed amendments will apply to certain major stationary sources of VOCs and NOx.

Because the facility is not a major source, RACT III does not applicable.

**Emissions and Controls:**

Facility-wide potential to emit calculations were carried out by the applicant for the proposed and modified sources. Routine blowdowns are routed to the existing flare and tracked by the flow meter on the flare.

The flare is rated at 8,134 MMBtu/hr. With this application, the annual flare capacity will not increase but will remain at the existing 126.52 MMscf/yr (100 MMscf/yr from hydrocarbon combustion and 26.52 MMscf/yr from pilot + purge). The annual flare capacity includes emissions from pigging, truck loadout, some process safety valves, pressure relief valves, and planned maintenance blowdowns. Emissions from the flare are based on inlet gas, AP-42 Section 13.5, 40 CFR Part 98, Subpart C, and AP-42 Section 1.4. The Plan Approval will include quarterly updated gas analyses, which will ensure accurate and up to date actual emissions.

The Department corrected methane emission estimates from the flare based on the following equations. For flaring methane, it's assumed that 2% of uncombusted methane is directly emitted and 98% of methane is converted to carbon dioxide. For the 2% of methane that is uncombusted, the weight percent of the gas stream was considered.

$$[(650\ lbs/hr\ mass\ loading\ to\ flare)(75.08\%\ CH4)/100](0.02) + [(136\ lbs/hr\ mass\ loading\ to\ pilot)(87.54\%\ CH4)/100](0.02) = 12.14\ lbs/hr\ CH4 = 53.16\ tpy\ CH4\ uncombusted$$

A molecular weight ratio is utilized for the 98% of methane converted to carbon dioxide. Carbon dioxide has a molecular weight of 44 amu, while methane has a molecular weight of 16 amu. This results in a 1 $CH_4$ : 2.75 $CO_2$ ratio.

$$(650\ lbs/hr\ \ mass\ loading\ to\ flare)[(75.08\%\ CH4)/(100)(0.98)\ ] + (136\frac{lbs}{hr}\ mass\ loading\ topilot)[(87.54\%\ CH4)/(100)(0.98)] = 619.24\ lbs/hr\ CH4\ =\ 2{,}712.26\ TPY\ CH4\ (98\%\ CH4\ to\ be\ converted)$$

$$\left(619.24\frac{lbs}{hr}CH4\right)(2.75) = 1{,}702.90\ lbs/hr\ CO2e = 7{,}458.70\ TPY\ CO2e$$

The carbon dioxide equivalent that is prevented from being emitted to the atmosphere by converting methane into carbon dioxide can be calculated by subtracting the $CO_2e$ methane from the global warming potential of the 98% of methane that would have otherwise vented to the atmosphere.[2] From this, we get the following:

$$(619.24\ lbs/hr\ CH4)(25\ GWP)\ =\ 15{,}480.91\ lbs/hr\ CO2e\ =\ 67{,}806.38\ TPY\ CO2e\ (Uncontrolled\ Converted\ CH4 -> CO2, as\ CO2e)$$

$$67{,}806.38\ tpy\ uncontrolled\ CH4\ as\ CO2e - 7{,}458.70(98\%\ converted\ CH4\ as\ CO2e) = 60{,}347.68\ TPY\ CO2e\ prevented\ from\ being\ emitted\ to\ the\ atmosphere$$

[2] Global warming potential (GWP) from 40 CFR Part 98, Subpart A, Table A-1.

Lastly, the total carbon dioxide equivalent that is emitted on an annual basis from the flare is the summation of the total carbon dioxide, the global warming potential of the $N_2O$, the global warming potential of the 2% of uncombusted methane, and the carbon dioxide equivalent of the 98% of methane that is converted to carbon dioxide. This yields the following:

$$2{,}119.50\frac{\text{lbs}}{\text{hr}}\text{CO2} + \left(0.004\frac{\text{lbs}}{\text{hr}}\text{N2O}\right) * (298) + \left(12.14\frac{\text{lbs}}{\text{hr}}\text{CH4}\right)(25\ \text{GWP}) + 1{,}702.90\frac{\text{lbs}}{\text{hr}}\text{CO2e} = 4{,}127.01\frac{\text{lbs}}{\text{hr}}\text{CO2e}$$
$$= 18{,}076.32\ \text{TPY CO2e from the flare}$$

Emission estimates from the proposed regenerative heater is based on manufacturer's guarantees as well as AP-42 Section 1.4 and 40 CFR 98, Subpart C.

Emissions from the methanol tank were produced via Promax modeling and assumed conservative throughputs 10 times higher than expected methanol throughputs. Per the June 3, 2021, inlet gas analysis, no methanol was detected. Emissions from truck loadout operations were based on AP-42 Section 5.2. Fugitive emissions were based on Table 2-4. Oil & Gas Production Operations Average Emission Factors, Protocol for Equipment Leak Emission Estimates, EPA 453/R-95-017, November 1995. Reduction efficiencies for fugitive components were based on the TCEQ (APDG 6422v2, Revised 06/2018) 28VHP Program. Rod packing emissions were based on monitoring data where available. Emissions from the measurement devices were based on vent rates and the inlet gas analysis.

## Facility-wide Potential to Emit

| Source | NOx | | CO | | VOC | | SOx | | $PM_{10}$ | | $PM_{2.5}$ | | Total HAP | | $CO_2e$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy | lb/hr | tpy | tpy |
| Cryo Plant 1 Regen Heater (Source ID 031) | 0.47 | 2.07 | 0.47 | 2.07 | 0.22 | 0.99 | 0.01 | 0.03 | 0.15 | 0.67 | 0.15 | 0.67 | 0.02 | 0.10 | 6857 |
| Cryo Plant 2 Regen Heater (Source ID 037) | 0.20 | 0.86 | 0.71 | 3.13 | 0.34 | 1.49 | 0.01 | 0.05 | 0.23 | 1.02 | 0.23 | 1.02 | 0.03 | 0.15 | 10335 |
| Cryo Plant 1 De-Ethanizer HMO Heater (Source ID 033) | 1.93 | 8.44 | 1.93 | 8.44 | 0.91 | 4.01 | 0.03 | 0.12 | 0.63 | 2.74 | 0.63 | 2.74 | 0.09 | 0.39 | 27893 |
| Cryo Plant 2 De-Ethanizer HMO Heater (Source ID 034) | 1.93 | 8.44 | 1.93 | 8.44 | 0.91 | 4.01 | 0.03 | 0.12 | 0.63 | 2.74 | 0.63 | 2.74 | 0.09 | 0.39 | 27893 |
| Stabilization HMO Heater (Source ID 036) | 0.48 | 2.10 | 0.48 | 2.10 | 0.23 | 1.00 | 0.01 | 0.03 | 0.16 | 0.68 | 0.16 | 0.68 | 0.02 | 0.10 | 6946 |
| De-Ethanizer Regen Heater (Source ID 035) | 0.26 | 1.16 | 0.26 | 1.16 | 0.13 | 0.55 | 0.00 | 0.02 | 0.09 | 0.38 | 0.09 | 0.38 | 0.01 | 0.05 | 3824 |
| Process Flare (Source ID C601) | 1.23 | 5.39 | 5.61 | 24.56 | 3.07 | 13.46 | 0.01 | 0.04 | 0.11 | 0.50 | 0.11 | 0.50 | 0.24 | 1.06 | 18,077 |
| Generac SD015 (Source ID 102) | 0.26 | 0.07 | 0.14 | 0.04 | 0.08 | 0.02 | 0.10 | 0.03 | 0.02 | 0.01 | 0.02 | 0.01 | 0.00 | 0.00 | 15 |
| Generac SD150 (Source ID 102) | 1.31 | 0.33 | 0.55 | 0.14 | 0.41 | 0.10 | 0.10 | 0.03 | 0.04 | 0.01 | 0.04 | 0.01 | 0.01 | 0.00 | 76 |
| Fugitives Emissions (Source ID 701) | -- | -- | -- | -- | -- | 10.72 | -- | -- | -- | -- | -- | -- | -- | 0.50 | 306 |
| Pigging (Source ID 801) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Rod Packing (Source ID 601) | -- | -- | -- | -- | 0.27 | 1.18 | -- | -- | -- | -- | -- | -- | 0.00 | 0.01 | 6321 |
| Truck Loading (Source ID 702) | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Methanol Tanks (Source ID 301 and 302) | -- | -- | -- | -- | 0.08 | 0.35 | -- | -- | -- | -- | -- | -- | 0.08 | 0.35 | -- |
| Measurement Devices (Source ID 703) | -- | -- | -- | -- | 0.24 | 1.04 | -- | -- | -- | -- | -- | -- | 0.02 | 0.08 | 83 |
| **Total** | 8.07 | 28.86 | 12.09 | 50.08 | 6.89 | 38.92 | 0.30 | 0.47 | 2.06 | 8.75 | 2.06 | 8.75 | 0.61 | 3.18 | 108,626 |

1. Emissions are based on 8,760 hours of operation.
2. The Department corrected $PM_{10}$ emission estimates for Sources 031-035 to be based on manufacturer's guarantees.
3. The Department corrected $CO_2e$ estimates for Source ID 601.
4. The Department revised the $CH_4$ emission estimates, from C601, to reflect the gas analysis in lieu of utilizing 40 CFR Part 98, Subpart C. Tables C-1 and C-2. By utilizing the gas analysis for $CH_4$, it is a more conservative estimate.
5. Highest single HAP is n-Hexane with facility-wide potential of 1.20 tpy.
6. Values may be slightly different due to rounding.

**Gas Analysis**

The gas analysis utilized in this application was sampled from the Harmon Creek Inlet Gas Line on June 3, 2021, and includes a 10% factor to be conservative. A sample was also performed on June 21, 2022; however, this sample was not utilized due to a lower VOC content than the June 3, 2021, analysis. The June 3, 2021, analysis is more conservative than the June 21, 2022, analysis.

**Site-Specific Gas Analysis**

| | 06/03/2021 Analysis | |
|---|---|---|
| Component | Mol. % | Wt. % |
| Nitrogen | 0.44 | 0.57 |
| Carbon Dioxide | 0.12 | 0.24 |
| Methane | 75.08 | 75.08 |
| Ethane | 15.76 | 21.96 |
| Propane | 5.12 | 10.46 |
| IsoButane | 0.53 | 1.43 |
| n-Butane | 1.40 | 3.77 |
| IsoPentane | 0.32 | 1.07 |
| n-Pentane | 0.45 | 1.50 |
| nhexane | 0.43 | 1.72 |
| Nheptane | 0.32 | 1.48 |
| n-Octane | 0.01 | 0.05 |
| Benzene | 0.04 | 0.14 |
| Total | 100 | 100 |
| VOC (Total) | 8.57 | 23.62 |
| HAP (Total) | 0.47 | 1.86 |

1. The weight percent of methane from the analysis is 55.82; however, emission estimates assumed a 75.08 Methane weight-percent which is conservative.
2. VOC content was increased by a 10% factor to be conservative in the facility emission calculations.

**Source/Facility Determination:**

Whether emissions from Harmon Creek and emissions from any other exploration, extraction, production, gathering, processing, or transmission activities should be considered a single source have been examined to determine the applicability of permitting requirements established by the Non-Attainment New Source Review (NA-NSR), Prevention of Significant Deterioration (PSD), and Title V permitting programs of the Clean Air Act (CAA).

On June 3, 2016, EPA finalized revisions to regulations applicable to permitting of stationary sources of air pollution under NSR and Title V[3]. This final rule clarified the meaning of the term *adjacent* used to determine the scope of a *stationary source* for purposes of NA-NSR and PSD, and the scope of the term *major source* in the title V operating permit program in the onshore oil and natural gas sector. According to the revised meaning of the term *adjacent*, EPA considers equipment/activities adjacent if they are on the same site, or on sites that share equipment and are within a quarter mile (¼-mile) of each other. Sources located beyond ¼-mile are not considered adjacent. Further, equipment/activities located within a ¼-mile that are not sharing equipment are also not considered adjacent.

On June 9, 2018, the Department published a notice in the Pennsylvania Bulletin rescinding its *Guidance for Performing Single Stationary Source Determinations for Oil and Gas Industries* (270-0810-006; October 6, 2012) due to the issuance of the above EPA regulatory revisions. EPA's revised meaning of the term adjacent is less stringent than the Department's rescinded guidance which also considered properties located beyond ¼-mile on a case-by-case basis.

Per eMapPA, there are sixteen (16) unconventional wells and two (2) conventional wells permitted under Range Resources Appalachia, LLC. MarkWest asserts August 18, 2022, that MarkWest will not share equipment or personal between Harmon Creek or the Range Resources Appalachia, LLC facility. Because the nearby facility is operated by Ranges Resources Appalachia, LLC, it does not qualify as single-source and as such aggregation is not necessary.

**Recommendations and Facility Summary:**

This plan approval is proposing to install or modify the following equipment to construct Harmon Creek II.

- One (1) 260 mmscfd natural gas processing plant (Source ID 404);
- Cryo Plant 2 regenerative heater[4] (Source ID 037): Maximum heat input of 17.84 MMBtu/hr; Equipped with flue gas recirculation (Source ID C037).
- One (1) 500-gallon methanol storage tank (Source ID 302);
- Three (3) 5,000 hp electric-driven compressors (rod-packing venting) (Source ID 103);
- Modify Fugitives (Source ID 701)
- Truck Loadout (Source ID 702) – GP5-63-01011B inserted truck loadout under Fugitives. With this Plan Approval, truck loadout now has its own Source ID.
- Four (4) Measurement Devices (Source ID 703) - GP5-63-01011B inserted measurement devices under Fugitives. With this Plan Approval, measurement devices have been given a Source ID.
- Emergency/Uncontrolled Venting/Blowdowns (Source ID 602) – This source was not a proposed source within the application. However, it will be included as a source in this plan approval. Planned shutdowns are vented to the existing flare.
- The existing flare will control fugitive emissions emitted from proposed pressure relief devices where technical feasible. It will also control maintenance blowdowns and pressure safety valves

[3] 81 FR 35622.

[4] The regenerative heater is direct-fired; however, it produces indirect heat during the process as it is contains a shell and tube system and meets the 25 Pa. Code Section 121.1 definition of a combustion unit. Residue pipeline quality gas is routed through the shell and tube system to be heated. Gas is then transferred to molecular sieve units where heated gas is in direct contact with packing media.

from Harmon Creek Cryo II. Because of this, the flare will be included within the Plan Approval.

The proposed project needs to meet BAT requirements. I recommend that plan approval (PA-63-01011) to be approved for 180 days. The proposed plan approval shall be subject to all conditions listed below. Once all Plan Approval conditions are met, I recommend for facility-wide air contamination sources and air cleaning devices to be regulated under a State Only Operating Permit. This includes all air contamination sources and air cleaning devices operating under this Plan Approval and all air contamination sources and air cleaning devices operating under GP5-63-01011B (AG5-63-00011A).

**Special Conditions:**

Please see the following conditions pertaining to this project.

| Condition Type | Source | Condition | Basis of Condition |
|---|---|---|---|
| Emission Restriction | Section C – Facility Wide | No person may permit air pollution as that term is defined in the act. | 25 Pa. Code § 121.7 |
| Emission Restriction | Section C – Facility Wide | Facility-wide emissions from all sources shall not equal or exceed the following on a 12-month rolling basis:<br>29.0 TPY NOx;<br>51.0 TPY CO;<br>39.0 TPY VOC;<br>1.0 TPY SOx;<br>9.0 TPY $PM_{10}$;<br>9.0 TPY $PM_{2.5}$;<br>4.0 TPY Total HAPs;<br>109,000 TPY $CO_2e$ | 25 Pa. Code § 127.12b |
| Emission Restriction | Section C – Facility Wide | (a) No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:<br>(1) Construction or demolition of buildings or structures.<br>(2) Grading, paving and maintenance of roads and streets.<br>(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.<br>(4) Clearing of land.<br>(5) Stockpiling of materials.<br>(6) Open burning operations.<br>(7) Blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting.<br>(8) n/a<br>(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:<br>(i) the emissions are of minor significance with respect to causing air pollution; and<br>(ii) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.<br>(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.<br>(c) [See Work Practice Standards.]<br>(d) The requirements contained in subsection (a) and 123.2 do not apply to fugitive emissions arising from the production of agricultural commodities in their unmanufactured state on the premises of the farm operation. | 25 Pa. Code § 123.1 |
| Emission Restriction | Section C – Facility Wide | A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in §123.1(a)(1)—(9) (relating to prohibition of certain fugitive emissions) if the emissions are visible at the point the emissions pass outside the person's property. | 25 Pa. Code § 123.2 |
| Emission Restriction | Section C – Facility Wide | (a) This section applies to sources except those subject to other provisions of this article, with respect to the control of sulfur compound emissions.<br>(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. | 25 Pa. Code § 123.21 |

| Condition Type | Source | Condition | Basis of Condition |
|---|---|---|---|
| Emission Restriction | Section C – Facility Wide | 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 | 25 Pa. Code § 123.31 |
| Emission Restriction | Section C – Facility Wide | The Owner/Operator shall not permit the emission into the outdoor atmosphere of any visible air contaminants that equal or exceed 10% at any time. This condition shall not apply in any of the following instances:<br>(1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.<br>(2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.<br>(3) When the emission results from sources specified in §123.1 (a)(1)—(9) (relating to prohibition of certain fugitive emissions). | 25 Pa. Code § 127.12b |
| Testing Requirements | Section C – Facility Wide | If performance testing is required, such testing shall be conducted as follows [25 Pa. Code §127.12b and §139.11]:<br><br>(a) The permittee shall submit a pre-test protocol electronically to the Department for review at least 90 days prior to the performance of any EPA reference method stack test or portable analyzer test. The permittee may repeat portable analyzer testing without additional protocol approvals provided that the same method and equipment are used. All proposed performance test methods shall be identified in the pre-test protocol and approved by the Department prior to testing.<br><br>(b) The permittee shall notify the Regional Air Quality Manager at least 15 days prior to any performance test so that an observer may be present at the time of the test. Notification shall also be sent to the Division of Source Testing and Monitoring. Notification shall not be made without prior receipt of a protocol acceptance letter from the Department.<br><br>(c) 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.<br><br>(d) Pursuant to 25 Pa. Code §139.53(b) a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:<br><br>(1) A statement that the owner or operator has reviewed the report from the emissions testing body and agrees with the findings.<br>(2) Permit number(s) and condition(s) which are the basis for the evaluation.<br>(3) Summary of results with respect to each applicable permit condition.<br>(4) Statement of compliance or non-compliance with each applicable permit condition.<br><br>(e) Pursuant to 25 Pa. Code §139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.<br><br>(f) All testing shall be performed in accordance with the provisions of Chapter 139 of the Rules and Regulations of the Department of Environmental Protection.<br><br>(g) All submittals shall be sent electronically to ra-epstacktesting@pa.gov, with CC: to ra-epswstacktesting@pa.gov.<br><br>(h) 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. | 25 Pa. Code § 127.12b |
| Testing Requirements | Section C – Facility Wide | If, at any time, the Department has cause to believe that air contaminant emissions from the sources listed in this plan approval may be in excess of the limitations specified in, or established pursuant to this plan approval or the permittee's operating permit, the permittee may be required to conduct test methods and procedures deemed necessary by the Department to determine the actual emissions rate. Such testing shall be conducted in accordance with 25 Pa. Code Chapter 139, where applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the company that testing is required. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
|---|---|---|---|
| Monitoring Requirements | Section C – Facility Wide | Visible emissions may be measured using either of the following:<br><br>(1) A device approved by the Department and maintained to provide accurate opacity measurements.<br>(2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of devices approved by the Department. | 25 Pa. Code § 123.43 |
| Monitoring Requirements | Section C – Facility Wide | Inspection of the authorized sources shall be conducted at a minimum of once per operating day. The inspection shall be conducted for the presence of the following:<br><br>(a) Visible stack emissions;<br>(b) Fugitive emissions; and<br>(c) Potentially objectionable odors at the property line.<br><br>These observations are to ensure continued compliance with source-specific visible emission limitations, fugitive emissions prohibited under 25 Pa. Code §123.1 or §123.2, and malodors prohibited under 25 Pa. Code §123.31.<br><br>Observations for visible stack emissions shall be conducted during daylight hours, and all observations shall be conducted while sources are in operation.<br><br>If visible stack emissions, fugitive emissions, or potentially objectionable odors are apparent, the permittee shall take corrective action. If any visible emissions are apparent after the correction action, sources of emissions shall not start until the permittee can verify compliance with the opacity standards specified in the permit through methods prescribed in §123.43, such as EPA Method 9 readings taken by a certified visible emissions reader. | 25 Pa. Code § 127.12b |
| Monitoring Requirements | Section C – Facility Wide | The Owner/Operator shall conduct a fractional gas analysis performed on the inlet gas to the facility at a minimum of once per quarter of each calendar year. Each sample shall be collected no sooner than 30 days from the previous sample. | 25 Pa. Code § 127.12b |
| Record Keeping | Section C – Facility Wide | The permittee shall maintain the following comprehensive and accurate records:<br>(1) Facility-wide emissions for NOx, CO, $SO_2$, VOC, PM, $PM_{10}$, $PM_{2.5}$, any single HAP, total HAPs, and $CO_2e$ per consecutive 12-month rolling period.<br>(2) Results of facility-wide inspections including the date, time, name, and title of the observer, along with any corrective action taken as a result.<br>(3) Results of any visible emissions observations to demonstrate compliance with the 10% opacity limit.<br>(4) Copies of the manufacturers' specifications and recommended maintenance schedule (or site-specific developed maintenance schedule) for each air contamination source and air cleaning device.<br>(5) All maintenance performed on each air contamination source and air cleaning device.<br>(6) Records of a fractional gas analysis performed on the inlet gas to the facility at a minimum of once per quarter of each calendar year.<br>(7) Hours of operation, kept on both a monthly and previous 12-month basis, for each air contamination source and air cleaning device;<br>(8) Copies of the manufacturer's recommended maintenance schedule for all air contamination sources and air cleaning devices including, but not limited to, the regenerative heater and flare.<br>(9) Records of any maintenance conducted on each air contamination source and air cleaning device including, but not limited to, the regenerative heater and flare.<br>(10) Records of the date, time, duration, volume of natural gas released, and emissions from each blowdown and emergency shutdown at the facility. These records shall also indicate if the blowdowns and emergency shutdowns were directed to the flare or blown to the atmosphere.<br><br>[Material throughput and emission records shall be updated each month, using monthly records.] | 25 Pa. Code § 127.12b |
| Record Keeping | Section C – Facility Wide | All logs and required records shall be maintained either on site, electronically, or at an alternative location acceptable to the Department, for a minimum of five (5) years and shall be made available to the Department upon request. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
|---|---|---|---|
| Reporting Requirements | Section C – Facility Wide | In accordance with 25 Pa. Code § 135.3, the owner or operator of a facility shall submit to the Department via AES*Online or AES*XML at www.depgreenport.state.pa.us/ by March 1st of each year, a facility inventory report for the preceding calendar year for all sources regulated under this plan approval. The inventory report shall include all emissions information for all sources operated during the preceding calendar year. Emissions data including, but not limited, to the following shall be reported:<br><br>(i) NOx; (ii) CO; (iii) SOx; (iv) PM10; (v) PM2.5; (vi) VOC;<br>(vii) Speciated HAP including, but not limited to, benzene, ethyl benzene, formaldehyde, n-hexane, toluene, isomers and mixtures of xylenes, and 2,2,4-trimethylpentane; (viii) Total HAP; (ix) CO2e; (x) CH4; and (xi) N2O.<br><br>(c) A source owner or operator may request an extension of time from the Department for the filing of a source report, and the Department may grant the extension for reasonable cause. | 25 Pa. Code § 127.12b |
| Reporting Requirements | Section C – Facility Wide | (a) The owner or operator shall report each malfunction that occurs at this facility that poses an imminent and substantial danger to the public health and safety or the environment or which it should reasonably believe may result in citizen complaints to the Department. For purpose of this condition, a malfunction is defined as any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment or source to operate in a normal or usual manner that may result in an increase in the emission of air contaminants. Examples of malfunctions that may result in citizen complaints include, but are not limited to, large dust plumes, heavy smoke, or a spill or release that may result in an odor detectable outside the property of the person on whose land the source is being operated.<br>(b) When the malfunction poses an imminent and substantial danger to the public health and safety or the environment, the notification shall be submitted to the Department no later than one hour after the incident. All other malfunctions that must be reported under subsection (a) shall be reported to the Department no later than the next business day.<br>(c) The report shall describe the:<br><br>(i) Name and location of the facility;<br>(ii) Nature and cause of the malfunction or breakdown;<br>(iii) Time when the malfunction or breakdown was first observed;<br>(iv) Expected duration of excess emissions;<br>(v) Estimated rate of emissions;<br>(vi) corrective actions or preventative measures taken,<br>(vii) the 12-month rolling sum of emissions at the time of the malfunction event (including but not limited to: criteria pollutants, VOCs, benzene, methanol, formaldehyde, n-hexane, greenhouse gases, and total HAPs), including any emission increases that occurred as a result of the reportable malfunction event.<br><br>(d) The owner or operator shall notify the Department immediately when corrective measures have been accomplished.<br><br>(e) Subsequent to the malfunction, the owner/operator shall submit a full written report to the Department including the items identified in (c) and corrective measures taken on the malfunction within 15 days, if requested.<br><br>(f) The owner/operator shall submit reports on the operation and maintenance of the source to the Regional Air Program Manager at such intervals and in such form and detail as may be required by the Department. Information required in the reports may include, but is not limited to, process weight rates, firing rates, hours of operation, and maintenance schedules.<br><br>(g) Malfunctions shall be reported to the Department at the following address:<br>Pennsylvania Department of Environmental Protection<br>Southwest Regional Office<br>Air Quality Program<br>400 Waterfront Drive<br>Pittsburgh, PA 15222-4745<br>412-442-4000 | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Reporting Requirements | Section C – Facility Wide | The Facility is subject to New Source Performance Standards from 40 CFR Part 60 Subpart OOOOa. In accordance with 40 CFR §60.4, copies of all requests, reports, applications, submittals and other communications regarding affected sources shall be forwarded to both EPA and the Department at the addresses listed below unless otherwise noted.<br><br>Associate Director<br>United States Environmental Protection Agency<br>Region III, Air and Radiation Division<br>Permits Branch (3AD10)<br>Four Penn Center<br>1600 John F. Kennedy Boulevard<br>Philadelphia, Pennsylvania 19103-2852<br><br>PADEP<br>Air Quality Program<br>400 Waterfront Drive<br>Pittsburgh, PA 15222-4745 | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4 |
| Reporting Requirements | Section C – Facility Wide | The Owner/operator shall provide EPA with the notifications required by 40 CFR §60.7. Required notifications may include but are not necessarily limited to: date of commencement of construction (within 30 days after starting construction), actual start-up date (within 15 days after equipment start-up), physical or operational changes which may increase the emission rate of any air pollutant to which a standard applies (60 days or as soon as practicable before equipment start-up), and opacity observations (within 30 days). | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.7 |
| Work Practice Requirements | Section C – Facility Wide | The permittee shall construct, operate, and maintain all air contamination sources and air cleaning devices authorized under this Plan Approval in accordance with the manufacturer's specifications and recommended maintenance schedules, or site-specific specifications developed in accordance with good engineering practice and prior operating experience. Additionally, the owner/operator may not cause or permit the operation of an air contamination source in a manner inconsistent with good operating practices. | 25 Pa. Code § 127.12b |
| Work Practice Requirements | Section C – Facility Wide | (c) A person responsible for any source specified in subsections (a)(1) -- (7) or (9) shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:<br>(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.<br>(2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.<br>(3) Paving and maintenance of roadways.<br>(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. | 25 Pa. Code § 123.1 |
| Additional Requirements | Section C – Facility Wide | In instances of multiple applicable emission limitations, the most stringent emission limitation applies. | 25 Pa. Code § 127.12b |
| Additional Requirements | Section C – Facility Wide | Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with § § 135.3 and 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means. | 25 Pa. Code § 127.12b |
| Additional Requirements | Section C – Facility Wide | Each quarterly fractional gas analysis performed on the inlet gas to the facility shall be evaluated for impacts on the actual emissions from this facility. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional Requirements | Section C – Facility Wide | Air contamination sources and air cleaning devices authorized for construction and/or operation under this plan approval include the following:<br>• One (1) 260 mmscfd natural gas processing plant (Source ID 404);<br>• Cryo Plant 2 regenerative heater (Source ID 037): Maximum heat input of 17.84 MMBtu/hr; Equipped with flue gas recirculation (Source ID C037).<br>• One (1) 500-gallon methanol storage tank (Source ID 302);<br>• Three (3) 5,000 hp electric-driven compressors (rod-packing venting) (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Plant Flare (Source ID C601) | 25 Pa. Code § 127.12b |
| Additional Requirements | Section C – Facility Wide | Upon determination by the permittee that the source(s) covered by this Plan Approval are constructed and in compliance with all operative conditions of the Plan Approval, the permittee shall contact the Department to schedule the Initial Operating Permit Inspection. | 25 Pa. Code § 127.12b |
| Additional Requirements | Section C – Facility Wide | Upon completion of the Initial Operating Permit Inspection and determination by the Department that the permittee is in compliance with all conditions of the plan approval, the permittee shall submit an application for a State Only Operating Permit (SOOP) for the Facility within 120 days to incorporate the conditions of this plan approval. The SOOP shall include air contamination sources and air cleaning devices operating within this Plan Approval as well as air contamination sources and air cleaning devices operating under GP5-63-01011B (AG5-63-00011A). | 25 Pa. Code § 127.12b |
| Additional Requirements | Section C – Facility Wide | The permittee shall submit requests to extend the temporary operation periods under this Plan Approval at least 15 days prior to the expiration date of any authorized period of temporary operation. | 25 Pa. Code § 127.12b |
| Additional Requirements | Section C – Facility Wide | Compliance with mass emission limits established in this authorization may be demonstrated using engineering calculations based on fuel and raw material purchase records, laboratory analyses, manufacturers specifications, source test results, production and operating records, material balance methods, and/or other applicable methods, with written Department approval. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional Requirements | Section C – Facility Wide | (a) Air basins. No person may permit the open burning of material in an air basin.<br><br>(b) Outside of air basins. No person may permit the open burning of material in an area outside of air basins in a manner that:<br><br>(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.<br>(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.<br>(3) The emissions interfere with the reasonable enjoyment of life or property.<br>(4) The emissions cause damage to vegetation or property.<br>(5) The emissions are or may be deleterious to human or animal health.<br><br>(c) Exceptions. The requirements of subsections (a) and (b) do not apply where the open burning operations result from:<br><br>(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.<br>(2) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.<br>(3) A fire set for the prevention and control of disease or pests, when approved by the Department.<br>(4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.<br>(5) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure.<br>(6) A fire set solely for recreational or ceremonial purposes.<br>(7) A fire set solely for cooking food.<br><br>(d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:<br>(1) As used in this subsection the following terms shall have the following meanings:<br>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.<br>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.<br>(2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:<br>(i) Air curtain destructors shall be used when burning clearing and grubbing wastes.<br>(ii) Each proposed use of air curtain destructors shall be reviewed and approved by the Department in writing with respect to equipment arrangement, design and existing environmental conditions prior to commencement of burning. Proposals approved under this subparagraph need not obtain plan approval or operating permits under Chapter 127 (relating to construction, modification, reactivation and operation of sources).<br>(iii) Approval for use of an air curtain destructor at one site may be granted for a specified period not to exceed 3 months, but may be extended for additional limited periods upon further approval by the Department.<br>(iv) The Department reserves the right to rescind approval granted if a determination by the Department indicates that an air pollution problem exists.<br>(3) N/A<br>(4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in that chapter. | 25 Pa. Code § 129.14 |
| Additional Requirements | Section C – Facility Wide | Source reports shall contain sufficient information to enable the Department to complete its emission inventory. Source reports shall be made by the source owner or operator in a format specified by the Department. | 25 Pa. Code § 135.4 |

| Condition Type | Source | Condition | Basis of Condition |
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| Emission Restrictions | Regenerative Heater: Source ID 037 | Source ID 037 shall not exceed the following:<br>(1) 9 ppmdv NOx at 3% $O_2$<br>(2) 49 ppmdv CO at 3% $O_2$ | 25 Pa. Code § 127.12b |
| Emission Restrictions | Regenerative Heater: Source ID 037 | (a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:<br>(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.<br>(2) The rate determined by the following formula:<br>A = 3.6E-0.56<br>where:<br>A = Allowable emissions in pounds per million Btus of heat input, and<br>E = Heat input to the combustion unit in millions of Btus per hour,<br>when E is equal to or greater than 50 but less than 600.<br>(3) N/A<br>(b) N/A<br>[Source ID 037 has a guarantee of 0.13 pound per million Btu which satisfies this condition.] | 25 Pa. Code § 123.11 |
| Work Practice | Regenerative Heater: Source ID 037 | (a) Nonair basin areas. Combustion units in nonair basin areas must conform with the following:<br>(1) General provision. A person may not 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 a 1-hour period, except as provided in paragraph (4).<br>(2) N/A.<br>(b) - (h) N/A. | 25 Pa. Code § 123.22 |
| Work Practice | Regenerative Heater: Source ID 037 | (a) The Owner/Operator shall conduct an annual tune-up/inspection on Source ID 037. At a minimum the tune-up/inspection shall consist of the following:<br>(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary;<br>(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;<br>(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;<br>(4) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with the NOx requirement to which Source ID 037 is subject; | 25 Pa. Code § 127.12b |
| Work Practice | Regenerative Heater: Source ID 037 | (b) The Owner/Operator shall, every three years, or within an extended timeframe approved by the Department, measure the concentrations in the effluent stream of NOx and CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable analyzer as long as it is calibrated and operated according to the manufacturer's recommendations, the procedures specified in ASTM D 6522, and the following requirements:<br>(1) The portable analyzer shall undergo factory laboratory calibration and cleaning every three years.<br>(2) The portable analyzer shall have on-site calibration checks using certified calibration gases demonstrating the analyzer accuracy requirements specified in ASTM D 6522.<br>(3) In order to verify emissions, the Owner/Operator shall conduct three, twenty-minute test runs recording emissions data at least once each minute.<br>(4) Depending on concentrations observed, fresh air purges should be performed according to manufacturer's recommendations.<br>(5) Re-zeroing of the portable analyzer should be performed according to manufacturer's recommendations or at least before every test run. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Recordkeeping Requirements | Regenerative Heater: Source ID 037 | (1) The Owner/Operator shall maintain records of the work practice standards, for a minimum of five (5) years, which shall, at a minimum, include the following:<br>(2) Records of annual tune-ups/inspections;<br>(3) Fuel consumption records on a monthly basis;<br>(4) The concentrations of NOx and CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of Source ID 037;<br>(5) A description of any corrective actions taken as part of the tune-up;<br>(6) The date(s) the annual tune-up/inspection was conducted;<br>(7) The factory calibration certification sheets for the portable analyzer;<br>(8) The type and amount of fuel used over the 12 months prior to the tune-up;<br>(9) Daily fuel consumption (in units of mass and heat input), kept on both a monthly and previous 12-month basis.<br>(10) Records including a description of testing methods, results, regenerative heater operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for the regenerative heater. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Recordkeeping Requirements | Methanol Tank: Source ID 302 | The permittee shall maintain records of the total throughput through the methanol storage tanks on a 12-month rolling basis. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Monitoring Requirements | Truck Loadout: Source ID 702 | The Owner/Operator shall monitor volume of liquids loaded from Source ID 702 on a 12-month rolling basis. | 25 Pa. Code § 127.12b |
| Recordkeeping Requirements | Truck Loadout: Source ID 702 | The Owner/Operator shall maintain records of volume of liquids loaded from Source ID 702 on a 12-month rolling basis. | 25 Pa. Code § 127.12b |
| Work Practice | Truck Loadout: Source ID 702 | The Owner/Operator shall maintain records of truck condensate load-out throughput on a 12-month rolling basis. | 25 Pa. Code § 127.12b |
| Work Practice | Truck Loadout: Source ID 702 | Throughputs for the truck load-out shall not exceed 220,000 gallons of condensate during any consecutive 12-month period. | 25 Pa. Code § 127.12b |
| Work Practice | Truck Loadout: Source ID 702 | The flare shall be operated, at all times, during condensate truck loadout operations. | 25 Pa. Code § 127.12b |
| Work Practice | Truck Loadout: Source ID 702 | Truck loadout operations shall be dedicated normal service, filled by submerged loading. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Recordkeeping | Emergency/Uncontrolled Venting/Blowdowns: Source ID 602 | The Owner/Operator shall maintain records of the date, time, duration, volume of natural gas released, and emissions from each unplanned and uncontrolled blowdown and emergency shutdown at the facility. | 25 Pa. Code § 127.12b |
| Reporting | Emergency/Uncontrolled Venting/Blowdowns: Source ID 602 | MarkWest shall report each emergency shutdown (ESD) event that occurs at this facility in accordance with the malfunction reporting requirements of Section C of this operating permit. | 25 Pa. Code § 127.12b |
| Work Practice | Emergency/Uncontrolled Venting/Blowdowns: Source ID 602 | The Owner/Operator shall minimize blowdown gas generated as a result of equipment maintenance and emergency shutdowns to the extent practical. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Monitoring | Fugitives: Source ID 701 | For each fugitive emissions component constructed and authorized to operate at this facility, the following applies:<br>(i) No later than 30 days after an emission source commences operation, and at least monthly thereafter, the owner or operator of a facility shall conduct an AVO inspection. An AVO inspection of the connectors shall be performed, at a minimum, on a weekly basis.<br>(ii) No later than 60 days after initial startup, and at least quarterly thereafter, the owner or operator shall conduct an LDAR program using either an OGI camera, a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21, or other leak detection methods approved by the Division of Source Testing and Monitoring.<br>(iii) No later than 60 days after initial startup, and at least monthly thereafter, the owner or operator shall conduct an LDAR program, specifically on pumps, using either an OGI camera, a gas leak detector that meets the requirements of 40 CFR Part 60, Appendix A-7, Method 21, or other leak detection methods approved by the Division of Source Testing and Monitoring.<br>(A) The owner or operator may request, in writing, an extension of the LDAR inspection interval from the Air Program Manager of the appropriate DEP Regional Office.<br>(B) Any fugitive emissions components that are difficult-to-monitor or unsafe-to-monitor must be identified in the monitoring plan described in Condition 2(a) below.<br>(iii) The detection devices must be operated and maintained in accordance with manufacturer-recommended procedures, as required by the test method, or a Department-approved method.<br>(iv) A leak is defined as:<br>(A) Any positive indication, whether audible, visual, or odorous, determined during an AVO inspection;<br>(B) Any visible emissions detected by an OGI camera calibrated according to 40 CFR §60.18 and a detection sensitivity level of 60 grams/hour; or<br>(C) A concentration of 500 ppm calibrated as methane or greater detected by an instrument reading.<br>(v) For inspections using a gas leak detector in accordance with 40 CFR Part 60, Appendix A-7, Method 21, the owner or operator may choose to adjust the detection instrument readings to account for the background organic concentration level as determined according to the procedures in Section 8.3.2.<br>(vi) Any leak detected from a fugitive emission component shall be repaired by the owner or operator of the facility as expeditiously as practicable. A first attempt at repair must be attempted within 5 calendar days of detection, and repair must be completed no later than 15 calendar days after the leak is detected unless:<br>(A) The owner or operator must purchase parts, in which case the repair must be completed no later than 10 calendar days after the receipt of the purchased parts; or<br>(B) The repair or replacement is technically infeasible, would require a vent blowdown, a compressor station, processing plant or transmission station shutdown, or would be unsafe to repair during operation of the unit, in which case the repair or replacement must be completed during the next scheduled compressor station, processing plant or transmission station shutdown, after a planned vent blowdown or within 2 years, whichever is earlier.<br>(vii) Once a fugitive emission component has been repaired or replaced, the owner or operator must resurvey the component as soon as practicable, but no later than 30 calendar days after the leak is repaired.<br>(A) For repairs that cannot be made during the monitoring survey when the leak is initially found, either a digital photograph must be taken of the component or the component must be tagged for identification purposes.<br>(B) A leak is considered repaired if:<br>(1) There are no detectable emissions consistent with Section 8.3.2 of 40 CFR Part 60, Appendix A-7, Method 21;<br>(2) A leak concentration of less than 500 ppm as methane is detected when the gas leak detector probe inlet is placed at the surface of the component;<br>(3) There is no visible leak image when using an OGI camera calibrated at a detection sensitivity level of 60 grams/hour;<br>or<br>(4) There is no bubbling at the leak interface using a soap solution bubble test specified in Section 8.3.3 of 40 CFR Part 60, Appendix A-7, Method 21. | 25 Pa. Code § 127.12b |
| Recordkeeping | Fugitives: Source ID 701 | The permittee shall maintain the following comprehensive and accurate records:<br>(1) Records of any leak detected and associated repair activity through the leak detection and repair or maintenance program. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Recordkeeping | Fugitives: Source ID 701 | For fugitive emissions components, the owner or operator shall maintain the following records, including information on:<br>(a) The fugitive emissions monitoring plan in accordance with 40 CFR §60.5397a(b) through (d).<br>(b) Records of each monitoring survey which must include:<br>(i) The facility name and location;<br>(ii) The state-only operating permit number;<br>(iii) The date, start time, and end time of the survey;<br>(iv) The name of the operator(s) performing the survey;<br>(v) The monitoring instrument used;<br>(vi) The ambient temperature, sky conditions, and maximum wind speed at the time of the survey;<br>(vii) Any deviations from the monitoring plan or a statement that there were none; and<br>(viii) Documentation of each fugitive emission including:<br>(A) The identification of each component from which fugitive emissions were detected;<br>(B) The instrument reading of each fugitive emissions component that meets the leak definition in Condition 1(b)(iv)(C) of this section;<br>(C) The status of repair of each component including:<br>(1) The repair methods applied in each attempt to repair the component;<br>(2) The tagging or digital photographing of each component not repaired during the monitoring survey in which the fugitive emissions were discovered;<br>(3) The reasons a component was placed on delay of repair;<br>(4) The date of successful repair of the component; and<br>(5) The information on the instrumentation or method used to resurvey the component after repair, if it was not completed during the monitoring survey in which the fugitive emissions were discovered. | 25 Pa. Code § 127.12b |
| Recordkeeping | Fugitives: Source ID 701 | Records of each monitoring survey conducted during the reporting period shall be included for any annual report required by an applicable New Source Performance Standard (NSPS) or National Emissions Standard for Hazardous Air Pollutants (NESHAP).<br><br>The emissions from fugitive emissions components during the reporting period shall be included in the annual AES emissions inventory reports. | 25 Pa. Code § 127.12b |
| Recordkeeping | Fugitives: Source ID 701 | The Owner/Operator shall maintain the following records:<br><br>(1) Record of construction documentation that indicate new and reworked valves, piping, compressor systems, and pump systems conform to American Petroleum Institute (API), American National Standards institute (ANSI), American Society of Mechanical Engineers (ASME), or equivalent code<br>(2) Record of construction indicating that new underground drain piping shall been welded.<br>(3) Record of construction showing that piping connections are welded, flanged, or screwed (if two-inch diameter or smaller).<br>(4) A list of all difficult-to-monitor or unsafe-to-monitor components at the facility.<br>(5) A record of hydraulic testing, gas testing, or gas analyzer results on new or reworked piping connections. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Fugitives: Source ID 701 | Acceptable leak detection methods include any of the following:<br>a. Optical gas imaging instrument. Use an optical gas imaging instrument for equipment leak detection in accordance with 40 CFR Part 60, Subpart A, §60.18 of the Alternative work practice for monitoring equipment leaks, §60.18(i)(1)(i);<br>§60.18(i)(2)(i) except that the monitoring frequency shall be annual using the detection sensitivity level of 60 grams per hour as stated in 40 CFR Part 60, Subpart A, Table 1: Detection Sensitivity Levels; § 60.18(i)(2)(ii) and (iii) except the gas chosen shall be methane, and §60.18(i)(2)(iv) and (v); §60.18(i)(3); §60.18(i)(4)(i) and (v); including the requirements for daily instrument checks and distances, and excluding requirements for video records. Any emissions detected by the optical gas imaging instrument is a leak unless screened with Method 21 (40 CFR part 60, appendix A-7) monitoring, in which case 10,000 ppm or greater is designated a leak. In addition, you must operate the optical gas imaging instrument to image the<br>source types required by this subpart in accordance with the instrument manufacturer's operating parameters. Unless using methods in paragraph (b) of this condition, an optical gas imaging instrument must be used for all source types that are inaccessible and cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.<br>b. Method 21. Use the equipment leak detection methods in 40 CFR part 60, appendix A-7, Method 21. If using Method 21 monitoring, if an instrument reading of 10,000 ppm or greater is measured, a leak is detected. Inaccessible emissions sources, as defined in 40 CFR Part 60, are not exempt from this subpart. Owners or operators must use alternative leak detection devices as described in paragraph (a) or (b) of this condition to monitor inaccessible equipment leaks or vented emissions.<br>c. Infrared laser beam illuminated instrument. Use an infrared laser beam illuminated instrument for equipment leak detection. Any emissions detected by the infrared laser beam illuminated instrument is a leak unless screened with Method 21 monitoring, in which case 10,000 ppm or greater is designated a leak. In addition, you must operate the infrared laser beam illuminated instrument to detect the source types required by this subpart in accordance with the instrument manufacturer's operating parameters.<br>d. Acoustic leak detection device. Use the acoustic leak detection device to detect through-valve leakage. When using the acoustic leak detection device to quantify the through-valve leakage, you must use the instrument manufacturer's calculation methods to quantify the through-valve leak. When using the acoustic leak detection device, if a leak of 3.1 scf per hour or greater is calculated, a leak is detected. In addition, you must operate the acoustic leak detection device to monitor the source valves required by 40 CFR Part 60 Subpart W in accordance with the instrument manufacturer's operating parameters. Acoustic stethoscope type devices designed to detect through valve leakage when put in contact with the valve body and that provide an audible leak signal but do not calculate a leak rate can be used to identify non-leakers with subsequent measurement required to calculate the rate if through-valve leakage is identified. Leaks are reported if a leak rate of 3.1 scf per hour or greater is measured. | 25 Pa. Code § 127.12b |
| Additional | Fugitives: Source ID 701 | New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.<br><br>Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;<br><br>(1) a cap, blind flange, plug, or second valve must be installed on the line or valve;<br>or<br>(2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once within the 72 hour period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve. | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Fugitives: Source ID 701 | Hydraulic testing or gas testing of new and reworked piping connections, at no lower than operating pressure, shall be completed before components are returned to service. Alternatively, the components may be monitored for leaks by utilizing an approved gas analyzer within fifteen (15) days of return to services. To obtain leak-free operation, necessary adjustments shall be made. | 25 Pa. Code § 127.12b |
| Additional | Fugitives: Source ID 701 | Each open-ended line and open-ended valve shall be equipped with an appropriately sized blind flange, cap, plug, or a second valve to seal the line. Both valves shall be closed except during sampling procedures. This condition does not apply if when open-ended line or open-ended valve is out of service and properly follows lockout and tagout procedures. | 25 Pa. Code § 127.12b |
| Additional | Fugitives: Source ID 701 | For annual emissions reporting purposes, cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the EPA correlation approach. | 25 Pa. Code § 127.12b |
| Additional | Fugitives: Source ID 701 | Within ten (10) days of when the most recent leaking component is added to the delay of repair list, the cumulative daily emission calculations, which include every component listed on the delay of repair list shall be updated. If the equation, below, occurs, the Owner/Operator shall notify the department within fifteen (15) days of this determination. Depending on the severity or number of tagged leaks, early shutdown, or other appropriate responses may result:<br><br>(Cumulative daily emission rate of all components on the delay of repair list)*(days until the next scheduled unit shutdown) ≥ (total emissions from a unit shutdown) | 25 Pa. Code § 127.12b |

| Condition Type | Source | Condition | Basis of Condition |
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| Emission Restrictions | Process Flare: Source ID C601 | Emissions of VOC from the flare stack shall not exceed 14.0 tons during any consecutive 12-month period, updated monthly. | 25 Pa. Code § 127.12b |
| Work Practice | Process Flare: Source ID C601 | The Owner/Operator shall operate the flare in accordance with manufacturer specifications and the manufacturer's recommended operating parameters to minimize emission of air pollutants. | 25 Pa. Code § 127.12b |
| Monitoring Requirements | Process Flare: Source ID C601 | The Owner/Operator shall monitor:<br>(1) Daily fuel consumption (in units of mass and heat input).<br>(2) Daily gas throughput and heat content. | 25 Pa. Code § 127.12b |
| Record Keeping | Process Flare: Source ID C601 | The permittee shall maintain the following comprehensive and accurate records:<br>(3) Daily fuel consumption (in units of mass and heat input), kept on both a monthly and previous 12-month basis;<br>(4) Daily gas throughput and heat content, kept on both a monthly and previous 12-month basis. | 25 Pa. Code § 127.12b |
| Additional Requirements | Process Flare: Source ID C601 | (a) Introduction.<br><br>(1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.<br><br>(2) N/A<br><br>(b) Flares. Paragraphs (c) through (f) apply to flares.<br><br>(c) (1) Flares shall be designed for and operated with no visible emissions as determined by the methods specified in paragraph (f), except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.<br><br>(2) Flares shall be operated with a flame present at all times, as determined by the methods specified in paragraph (f). | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18 |

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| Additional Requirements<br><br>Continued | Process Flare: Source ID C601<br><br>Continued | (3) An owner/operator has the choice of adhering to either the heat content specifications in paragraph (c)(3)(ii) of this section and the maximum tip velocity specifications in paragraph (c)(4) of this section, or adhering to the requirements in paragraph (c)(3)(i) of this section.<br><br>(i) (A) Flares shall be used that have a diameter of 3 inches or greater, are nonassisted, have a hydrogen content of 8.0 percent (by volume), or greater, and are designed for and operated with an exit velocity less than 37.2 m/sec (122 ft/sec) and less than the velocity, Vmax, as determined by the following equation:<br><br>Vmax = (XH2−K1)* K2<br><br>Where:<br><br>Vmax = Maximum permitted velocity, m/sec.<br><br>K1 = Constant, 6.0 volume-percent hydrogen.<br><br>K2 = Constant, 3.9(m/sec)/volume-percent hydrogen.<br><br>XH2 = The volume-percent of hydrogen, on a wet basis, as calculated by using the American Society for Testing and Materials (ASTM) Method D1946-77. (Incorporated by reference as specified in § 60.17).<br><br>(B) The actual exit velocity of a flare shall be determined by the method specified in paragraph (f)(4) of this section.<br><br>(ii) Flares shall be used only with the net heating value of the gas being combusted being 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam-assisted or air-assisted; or with the net heating value of the gas being combusted being 7.45 MJ/scm (200 Btu/scf) or greater if the flare is nonassisted. The net heating value of the gas being combusted shall be determined by the methods specified in paragraph (f)(3) of this section.<br><br>(4) (i) Steam-assisted and nonassisted flares shall be designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4) of this section, less than 18.3 m/sec (60 ft/sec), except as provided in paragraphs (c)(4) (ii) and (iii) of this section.<br><br>(ii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), equal to or greater than 18.3 m/sec (60 ft/sec) but less than 122 m/sec (400 ft/sec) are allowed if the net heating value of the gas being combusted is greater than 37.3 MJ/scm (1,000 Btu/scf).<br><br>(iii) Steam-assisted and nonassisted flares designed for and operated with an exit velocity, as determined by the methods specified in paragraph (f)(4), less than the velocity, Vmax, as determined by the method specified in paragraph (f)(5), and less than 122 m/sec (400 ft/sec) are allowed.<br><br>(5) Air-assisted flares shall be designed and operated with an exit velocity less than the velocity, Vmax, as determined by the method specified in paragraph (f)(6).<br><br>(6) Flares used to comply with this section shall be steam-assisted, air-assisted, or nonassisted.<br><br>(d) Owners or operators of flares used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs. Applicable subparts will provide provisions stating how owners or operators of flares shall monitor these control devices.<br><br>(e) Flares used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.<br><br>(f) (1) Method 22 of appendix A to this part shall be used to determine the compliance of flares with the visible emission provisions of this subpart. The observation period is 2 hours and shall be used according to Method 22. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18<br><br>Continued |

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| Additional Requirements<br><br>Continued | Process Flare: Source ID C601<br><br>Continued | (2) The presence of a flare pilot flame shall be monitored using a thermocouple or any other equivalent device to detect the presence of a flame.<br><br>(3) The net heating value of the gas being combusted in a flare shall be calculated using the following equation:<br><br>HT = K * Sum (For i=1 to i=n) Ci * Hi<br><br>where:<br><br>HT = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of offgas is based on combustion at 25 °C and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 °C;<br><br>K = (1.740 * 10^-7) (1/ppm) (g mole/scm) (MJ/kcal)<br>where the standard temperature for (g mole/scm) is 20 Degrees C<br><br>Ci = Concentration of sample component i in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77 or 90 (Reapproved 1994) (Incorporated by reference as specified in § 60.17); and<br><br>Hi = Net heat of combustion of sample component i, kcal/g mole at 25 °C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in § 60.17) if published values are not available or cannot be calculated.<br><br>(4) The actual exit velocity of a flare shall be determined by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.<br><br>(5) The maximum permitted velocity, Vmax, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.<br><br>Log10 (Vmax) = (HT + 28.8)/31.7<br><br>Vmax = Maximum permitted velocity, M/sec<br><br>28.8 = Constant<br><br>31.7 = Constant<br><br>HT = The net heating value as determined in paragraph (f)(3).<br><br>(6) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation.<br><br>Vmax = 8.706 + 0.7084 (HT)<br><br>Vmax = Maximum permitted velocity, m/sec<br><br>8.706 = Constant<br><br>0.7084 = Constant<br><br>HT = The net heating value as determined in paragraph (f)(3).<br><br>(g) - (i) N/A.<br>[51 FR 2701, Jan. 21, 1986, as amended at 63 FR 24444, May 4, 1998; 65 FR 61752, Oct. 17, 2000; 73 FR 78209, Dec. 22, 2008] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18<br><br>Continued |

| Condition Type | Source | Condition | Basis of Condition |
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| Emission Restriction | Section E<br><br>Group ID: G01<br><br>Non-Combustion Emission Sources<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• Fugitives (Source ID 701)<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | Particulate matter emissions into the outdoor atmosphere from any process shall not exceed 0.04 gr/dscf as specified in 25 Pa. Code § 123.13(c)(1)(i). | 25 Pa. Code § 123.13 |
| Emission Restriction | | (a) N/A.<br>(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. | 25 Pa. Code § 123.21 |

| Condition Type | Source | Condition | Basis of Condition |
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| Recordkeeping | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | (a) You must comply with the requirements of paragraph (b) of this section in addition to the requirements of § 60.486a.<br><br>(b) The following recordkeeping requirements apply to pressure relief devices subject to the requirements of § 60.5401a(b)(1).<br><br>(1) When each leak is detected as specified in § 60.5401a(b)(2), a weatherproof and readily visible identification, marked with the equipment identification number, must be attached to the leaking equipment. The identification on the pressure relief device may be removed after it has been repaired.<br><br>(2) When each leak is detected as specified in § 60.5401a(b)(2), the information specified in paragraphs (b)(2)(i) through (x) of this section must be recorded in a log and shall be kept for 2 years in a readily accessible location:<br><br>(i) The instrument and operator identification numbers and the equipment identification number.<br><br>(ii) The date the leak was detected and the dates of each attempt to repair the leak.<br><br>(iii) Repair methods applied in each attempt to repair the leak.<br><br>(iv) “Above 500 ppm” if the maximum instrument reading measured by the methods specified in § 60.5400a(d) after each repair attempt is 500 ppm or greater.<br><br>(v) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.<br><br>(vi) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.<br><br>(vii) The expected date of successful repair of the leak if a leak is not repaired within 15 days.<br><br>(viii) Dates of process unit shutdowns that occur while the equipment is unrepaired.<br><br>(ix) The date of successful repair of the leak.<br><br>(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. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5421a |

| Condition Type | Source | Condition | Basis of Condition |
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| Reporting | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | (a) Notifications. You must submit the notifications according to paragraphs (a)(1) and (2) of this section if you own or operate one or more of the affected facilities specified in § 60.5365a that was constructed, modified, or reconstructed during the reporting period.<br><br>(1) If you own or operate an affected facility that is the group of all equipment within a process unit at an onshore natural gas processing plant, or a sweetening unit, you must submit the notifications required in §§ 60.7(a)(1), (3), and (4) and 60.15(d). If you own or operate a well, centrifugal compressor, reciprocating compressor, pneumatic controller, pneumatic pump, storage vessel, collection of fugitive emissions components at a well site, or collection of fugitive emissions components at a compressor station, you are not required to submit the notifications required in §§ 60.7(a)(1), (3), and (4) and 60.15(d).<br><br>(2) N/A<br><br>(b) Reporting requirements. You must submit annual reports containing the information specified in paragraphs (b)(1) through (8) and (12) of this section and performance test reports as specified in paragraph (b)(9) or (10) of this section, if applicable. You must submit annual reports following the procedure specified in paragraph (b)(11) of this section. The initial annual report is due no later than 90 days after the end of the initial compliance period as determined according to § 60.5410a. Subsequent annual reports are due no later than same date each year as the initial annual report. If you own or operate more than one affected facility, you may submit one report for multiple affected facilities provided the report contains all of the information required as specified in paragraphs (b)(1) through (8) and (12) of this section. Annual reports may coincide with title V reports as long as all the required elements of the annual report are included. You may arrange with the Administrator a common schedule on which reports required by this part may be submitted as long as the schedule does not extend the reporting period.<br><br>(1) The general information specified in paragraphs (b)(1)(i) through (iv) of this section is required for all reports.<br><br>(i) The company name, facility site name associated with the affected facility, U.S. Well ID or U.S. Well ID associated with the affected facility, if applicable, and address of the affected facility. If an address is not available for the site, include a description of the site location and provide the latitude and longitude coordinates of the site in decimal degrees to an accuracy and precision of five (5) decimals of a degree using the North American Datum of 1983.<br><br>(ii) An identification of each affected facility being included in the annual report.<br><br>(iii) Beginning and ending dates of the reporting period.<br><br>(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.<br><br>(2) – (3) N/A<br><br>(4) For each reciprocating compressor affected facility, the information specified in paragraphs (b)(4)(i) through (iii) of this section.<br><br>(i) The cumulative number of hours of operation or the number of months since initial startup, since August 2, 2016, or since the previous reciprocating compressor rod packing replacement, whichever is latest. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.<br><br>(ii) If applicable, for each deviation that occurred during the reporting period and recorded as specified in paragraph (c)(3)(iii) of this section, the date and time the deviation began, duration of the deviation and a description of the deviation.<br><br>(iii) If required to comply with § 60.5385a(a)(3), the information in paragraphs (b)(4)(iii)(A) through (C) of this section. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420a |

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| Reporting<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | (A) Dates of each inspection required under § 60.5416a(a) and (b);<br><br>(B) Each defect or leak identified during each inspection, and date of repair or date of anticipated repair if repair is delayed; and<br><br>(C) Date and time of each bypass alarm or each instance the key is checked out if you are subject to the bypass requirements of § 60.5416a(a)(4).<br><br>(5) – (8) N/A<br><br>(9) Within 60 days after the date of completing each performance test (see § 60.8) required by this subpart, except testing conducted by the manufacturer as specified in § 60.5413a(d), you must submit the results of the performance test following the procedure specified in either paragraph (b)(9)(i) or (ii) of this section.<br><br>(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), except as outlined in this paragraph (b)(9)(i). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as confidential business information (CBI). Anything submitted using CEDRI cannot later be claimed CBI. Performance test data must be submitted in a file format generated through the use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage media to the EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (b)(9)(i). All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.<br><br>(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in § 60.4.<br><br>(10) N/A<br><br>(11) You must submit reports to the EPA via CEDRI, except as outlined in this paragraph (b)(11). (CEDRI can be accessed through the EPA's CDX (https://cdx.epa.gov/).) The EPA will make all the information submitted through CEDRI available to the public without further notice to you. Do not use CEDRI to submit information you claim as CBI. Anything submitted using CEDRI cannot later be claimed CBI. You must use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/cedri/). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in § 60.4. Once the form has been available in CEDRI for at least 90 calendar days, you must begin submitting all subsequent reports via CEDRI. The reports must be submitted by the deadlines specified in this subpart, regardless of the method in which the reports are submitted. Although we do not expect persons to assert a claim of CBI, if you wish to assert a CBI claim, submit a complete report generated using the appropriate form in CEDRI or an alternate electronic file consistent with the XML schema listed on the EPA's CEDRI website, including information claimed to be CBI, on a compact disc, flash drive, or other commonly used electronic storage medium to the EPA. The electronic medium shall be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Fuels and Incineration Group, | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420a<br><br>Continued |

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| Reporting<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted shall be submitted to the EPA via CEDRI. All CBI claims must be asserted at the time of submission. Furthermore, under CAA section 114(c), emissions data is not entitled to confidential treatment, and the EPA is required to make emissions data available to the public. Thus, emissions data will not be protected as CBI and will be made publicly available.<br><br>(12) N/A<br><br>(13) If you are required to electronically submit a report through CEDRI in the EPA's CDX, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, you must meet the requirements outlined in paragraphs (b)(13)(i) through (vii) of this section.<br><br>(i) You must have been or will be precluded from accessing CEDRI and submitting a required report within the time prescribed due to an outage of either the EPA's CEDRI or CDX systems.<br><br>(ii) The outage must have occurred within the period of time beginning 5 business days prior to the date that the submission is due.<br><br>(iii) The outage may be planned or unplanned.<br><br>(iv) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting.<br><br>(v) You must provide to the Administrator a written description identifying:<br><br>(A) The date(s) and time(s) when CDX or CEDRI was accessed and the system was unavailable;<br><br>(B) A rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage;<br><br>(C) Measures taken or to be taken to minimize the delay in reporting; and<br><br>(D) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.<br><br>(vi) The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.<br><br>(vii) In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved.<br><br>(14) If you are required to electronically submit a report through CEDRI in the EPA's CDX, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, you must meet the requirements outlined in paragraphs (b)(14)(i) through (v) of this section.<br><br>(i) You may submit a claim if a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420a<br><br>Continued |

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| Reporting<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | (ii) You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting.<br><br>(iii) You must provide to the Administrator:<br><br>(A) A written description of the force majeure event;<br><br>(B) A rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event;<br><br>(C) Measures taken or to be taken to minimize the delay in reporting; and<br><br>(D) The date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported.<br><br>(iv) The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.<br><br>(v) In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs.<br><br>(c) Recordkeeping requirements. You must maintain the records identified as specified in § 60.7(f) and in paragraphs (c)(1) through (18) of this section. All records required by this subpart must be maintained either onsite or at the nearest local field office for at least 5 years. Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format.<br><br>(1) – (2) N/A<br><br>(3) For each reciprocating compressor affected facility, you must maintain the records in paragraphs (c)(3)(i) through (iii) of this section.<br><br>(i) Records of the cumulative number of hours of operation or number of months since initial startup, since August 2, 2016, or since the previous replacement of the reciprocating compressor rod packing, whichever is latest. Alternatively, a statement that emissions from the rod packing are being routed to a process through a closed vent system under negative pressure.<br><br>(ii) Records of the date and time of each reciprocating compressor rod packing replacement, or date of installation of a rod packing emissions collection system and closed vent system as specified in § 60.5385a(a)(3).<br><br>(iii) Records of deviations in cases where the reciprocating compressor was not operated in compliance with the requirements specified in § 60.5385a, including the date and time the deviation began, duration of the deviation, and a description of the deviation.<br><br>(4) – (17) N/A<br><br>(18) A copy of each performance test submitted under paragraph (b)(9) of this section.<br><br>[85 FR 57449, Sept. 15, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5420a<br><br>Continued |

| Condition Type | Source | Condition | Basis of Condition |
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| Reporting | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | (a) You must comply with the requirements of paragraphs (b) and (c) of this section in addition to the requirements of § 60.487a(a), (b)(1) through (3) and (5), and (c)(2)(i) through (iv) and (vii) through (viii). You must submit semiannual reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/).) Use the appropriate electronic report in CEDRI for this subpart or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the CEDRI website (https://www3.epa.gov/ttn/chief/cedri/). If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the Administrator at the appropriate address listed in § 60.4. Once the form has been available in CEDRI for at least 90 days, you must begin submitting all subsequent reports via CEDRI. The report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted.<br><br>(b) An owner or operator must include the following information in the initial semiannual report in addition to the information required in § 60.487a(b)(1) through (3) and (5): Number of pressure relief devices subject to the requirements of § 60.5401a(b) except for those pressure relief devices designated for no detectable emissions under the provisions of § 60.482-4a(a) and those pressure relief devices complying with § 60.482-4a(c).<br><br>(c) An owner or operator must include the information specified in paragraphs (c)(1) and (2) of this section in all semiannual reports in addition to the information required in § 60.487a(c)(2)(i) through (iv) and (vii) through (viii):<br><br>(1) Number of pressure relief devices for which leaks were detected as required in § 60.5401a(b)(2); and<br><br>(2) Number of pressure relief devices for which leaks were not repaired as required in § 60.5401a(b)(3).<br><br>[81 FR 35898, June 3, 2016, as amended at 85 FR 57457, Sept. 15, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5422a |

| Condition Type | Source | Condition | Basis of Condition |
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| Work Practice | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | This section applies to the group of all equipment, except compressors, within a process unit located at an onshore natural gas processing plant.<br><br>(a) You must comply with the requirements of §§ 60.482-1a(a), (b), (d), and (e), 60.482-2a, and 60.482-4a through 60.482-11a, except as provided in § 60.5401a, as soon as practicable but no later than 180 days after the initial startup of the process unit.<br><br>(b) You may elect to comply with the requirements of §§ 60.483-1a and 60.483-2a, as an alternative.<br><br>(c) You may apply to the Administrator for permission to use an alternative means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to that achieved by the controls required in this subpart according to the requirements of § 60.5402a.<br><br>(d) You must comply with the provisions of § 60.485a except as provided in paragraph (f) of this section.<br><br>(e) You must comply with the provisions of §§ 60.486a and 60.487a except as provided in §§ 60.5401a, 60.5421a, and 60.5422a.<br><br>(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.<br><br>[81 FR 35898, June 3, 2016, as amended at 85 FR 57071, Sept. 14, 2020; 85 FR 57445, Sept. 15, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5400a |

| Condition Type | Source | Condition | Basis of Condition |
|---|---|---|---|
| Work Practice | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | (a) You may comply with the following exceptions to the provisions of § 60.5400a(a) and (b).<br><br>(b) (1) Each pressure relief device in gas/vapor service may be monitored quarterly and within 5 days after each pressure release to detect leaks by the methods specified in § 60.485a(b) except as provided in §§ 60.5400a(c) and in paragraph (b)(4) of this section, and 60.482-4a(a) through (c) of subpart VVa of this part.<br>(2) If an instrument reading of 500 ppm or greater is measured, a leak is detected.<br>(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.<br>(ii) A first attempt at repair must be made no later than 5 calendar days after each leak is detected.<br>(4) (i) Any pressure relief device that is located in a nonfractionating plant that is monitored only by non-plant personnel may be monitored after a pressure release the next time the monitoring personnel are onsite, instead of within 5 days as specified in paragraph (b)(1) of this section and § 60.482-4a(b)(1).<br>(ii) No pressure relief device described in paragraph (b)(4)(i) of this section may be allowed to operate for more than 30 days after a pressure release without monitoring.<br>(c) Sampling connection systems are exempt from the requirements of § 60.482-5a.<br>(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.<br>(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 monitoring requirements of §§ 60.482-2a(a)(1), 60.482-7a(a), and 60.482-11a(a) and paragraph (b)(1) of this section.<br>(f) An owner or operator may use the following provisions instead of § 60.485a(e):<br>(1) Equipment is in heavy liquid service if the weight percent evaporated is 10 percent or less at 150 °Celsius (302 °Fahrenheit) as determined by ASTM Method D86-96 (incorporated by reference as specified in § 60.17).<br>(2) Equipment is in light liquid service if the weight percent evaporated is greater than 10 percent at 150 °Celsius (302 °Fahrenheit) as determined by ASTM Method D86-96 (incorporated by reference as specified in § 60.17).<br>(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). For each scale, divide the arithmetic difference of the most recent calibration and the post-test calibration response by the corresponding calibration gas 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 most recent calibration response, 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 most recent calibration response, 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.<br><br>[77 FR 49542, Aug. 16, 2012, as amended at 85 FR 57445, Sept. 15, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5401a |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | (a) This subpart establishes emission standards and compliance schedules for the control of volatile organic compounds (VOC) and sulfur dioxide (SO2) emissions from affected facilities in the crude oil and natural gas production source category that commence construction, modification, or reconstruction after September 18, 2015. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5360a |
| Additional | | The following is from 40 CFR § 60.5365 - "Am I subject to this subpart?":<br>You are subject to the applicable provisions of this subpart if you are the owner or operator of one or more of the onshore affected facilities listed in paragraphs (a) through (j) of this section, that is located within the Crude Oil and Natural Gas Production source category, as defined in § 60.5430a, for which you commence construction, modification, or reconstruction after September 18, 2015.<br>(a) – (b) N/A<br>(c) Each reciprocating compressor affected facility, which is a single reciprocating compressor. A reciprocating compressor located at a well site, or an adjacent well site and servicing more than one well site, is not an affected facility under this subpart.<br>(d) – (e) N/A<br>(f) The group of all equipment within a process unit at an onshore natural gas processing plant is an affected facility.<br>(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.<br>(2) Equipment associated with a compressor station, dehydration unit, sweetening unit, underground storage vessel, field gas gathering system, or liquefied natural gas unit is covered by §§ 60.5400a, 60.5401a, 60.5402a, 60.5421a, and 60.5422a if it is located at an onshore natural gas processing plant. Equipment not located at the onshore natural gas processing plant site is exempt from the provisions of §§ 60.5400a, 60.5401a, 60.5402a, 60.5421a, and 60.5422a.<br>(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 VVa, GGG, or GGGa of this part.<br>(g) – (j) N/A<br>[81 FR 35898, June 3, 2016, as amended at 85 FR 57070, Sept. 14, 2020; 85 FR 57438, Sept. 15, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5365a |
| Additional | | (a) You must be in compliance with the standards of this subpart no later than August 2, 2016 or upon startup, whichever is later.<br><br>(b) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. The provisions for exemption from compliance during periods of startup, shutdown and malfunctions provided for in 40 CFR 60.8(c) do not apply to this subpart.<br><br>(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. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5370a |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | You must reduce VOC emissions by complying with the standards in paragraphs (a) through (d) of this section for each reciprocating compressor affected facility.<br><br>(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.<br><br>(1) On or before the compressor has operated for 26,000 hours. The number of hours of operation must be continuously monitored beginning upon initial startup of your reciprocating compressor affected facility, August 2, 2016, or the date of the most recent reciprocating compressor rod packing replacement, whichever is latest.<br><br>(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.<br><br>(3) Collect the VOC emissions from the rod packing using a rod packing emissions collection system that operates under negative pressure and route the rod packing emissions to a process through a closed vent system that meets the requirements of § 60.5411a(a) and (d).<br><br>(b) You must demonstrate initial compliance with standards that apply to reciprocating compressor affected facilities as required by § 60.5410a(c).<br><br>(c) You must demonstrate continuous compliance with standards that apply to reciprocating compressor affected facilities as required by § 60.5415a(c).<br><br>(d) You must perform the reporting as required by § 60.5420a(b)(1) and (4) and the recordkeeping as required by § 60.5420a(c)(3), (6) through (9), and (17), as applicable.<br><br>[81 FR 35898, June 3, 2016, as amended at 85 FR 57070, Sept. 14, 2020; 85 FR 57439, Sept. 15, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5385a |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | (a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in VOC emissions at least equivalent to the reduction in VOC emissions achieved under any design, equipment, work practice or operational standard, the Administrator will publish, in the Federal Register, a notice permitting the use of that alternative means for the purpose of compliance with that standard. The notice may condition permission on requirements related to the operation and maintenance of the alternative means.<br><br>(b) Any notice under paragraph (a) of this section must be published only after notice and an opportunity for a public hearing.<br><br>(c) The Administrator will consider applications under this section from either owners or operators of affected facilities, or manufacturers of control equipment.<br><br>(d) An application submitted under paragraph (c) of this section must meet the following criteria:<br><br>(1) The applicant must collect, verify and submit test data, covering a period of at least 12 months, necessary to support the finding in paragraph (a) of this section.<br><br>(2) The application must include operation, maintenance, and other provisions necessary to assure reduction in VOC emissions at least equivalent to the reduction in VOC emissions achieved under the design, equipment, work practice or operational standard in paragraph (a) of this section by including the information specified in paragraphs (d)(2)(i) through (x) of this section.<br><br>(i) A description of the technology or process.<br><br>(ii) The monitoring instrument and measurement technology or process.<br><br>(iii) A description of performance based procedures (i.e. method) and data quality indicators for precision and bias; the method detection limit of the technology or process.<br><br>(iv) The action criteria and level at which a fugitive emission exists.<br><br>(v) Any initial and ongoing quality assurance/quality control measures.<br><br>(vi) Timeframes for conducting ongoing quality assurance/quality control.<br><br>(vii) Field data verifying viability and detection capabilities of the technology or process.<br><br>(viii) Frequency of measurements.<br><br>(ix) Minimum data availability.<br><br>(x) Any restrictions for using the technology or process.<br><br>(3) The application must include initial and continuous compliance procedures including recordkeeping and reporting.<br><br>[81 FR 35898, June 3, 2016, as amended at 85 FR 57071, Sept. 14, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5402a |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | You must determine initial compliance with the standards for each affected facility using the requirements in paragraphs (a) through (k) of this section. Except as otherwise provided in this section, the initial compliance period begins on August 2, 2016, or upon initial startup, whichever is later, and ends no later than 1 year after the initial startup date for your affected facility or no later than 1 year after August 2, 2016. The initial compliance period may be less than 1 full year.<br><br>(a) – (b) N/A<br><br>(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.<br><br>(1) If complying with § 60.5385a(a)(1) or (2), during the initial compliance period, you must continuously monitor the number of hours of operation or track the number of months since initial startup, since August 2, 2016, or since the last rod packing replacement, whichever is latest.<br><br>(2) If complying with § 60.5385a(a)(3), you must operate the rod packing emissions collection system under negative pressure and route emissions to a process through a closed vent system that meets the requirements of § 60.5411a(a) and (d).<br><br>(3) You must submit the initial annual report for your reciprocating compressor as required in § 60.5420a(b)(1) and (4).<br><br>(4) You must maintain the records as specified in § 60.5420a(c)(3) for each reciprocating compressor affected facility.<br><br>(d) – (e) N/A<br><br>(f) For affected facilities at onshore natural gas processing plants, initial compliance with the VOC standards is demonstrated if you are in compliance with the requirements of § 60.5400a.<br><br>(g) – (k) N/A<br><br>[81 FR 35898, June 3, 2016, as amended at 82 FR 25733, June 5, 2017; 85 FR 57071, Sept. 14, 2020; 85 FR 57445, Sept. 15, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5410a |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | (a) – (b) N/A<br><br>(c) For each reciprocating compressor affected facility complying with § 60.5385a(a)(1) or (2), you must demonstrate continuous compliance according to paragraphs (c)(1) through (3) of this section. For each reciprocating compressor affected facility complying with § 60.5385a(a)(3), you must demonstrate continuous compliance according to paragraph (c)(4) of this section.<br><br>(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, since August 2, 2016, or since the date of the most recent reciprocating compressor rod packing replacement, whichever is latest.<br><br>(2) You must submit the annual reports as required in § 60.5420a(b)(1) and (4) and maintain records as required in § 60.5420a(c)(3).<br><br>(3) You must replace the reciprocating compressor rod packing on or before the total number of hours of operation reaches 26,000 hours or the number of months since the most recent rod packing replacement reaches 36 months.<br><br>(4) You must operate the rod packing emissions collection system under negative pressure and continuously comply with the cover and closed vent requirements in § 60.5416a(a) and (b).<br><br>(d) – (e) N/A<br><br>(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 § 60.5400a.<br><br>(g) - (j) N/A<br><br>[81 FR 35898, June 3, 2016, as amended at 82 FR 25733, June 5, 2017; 85 FR 57071, Sept. 14, 2020; 85 FR 57447, Sept. 15, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5415a |
| Additional | | Table 3 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5425a |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>• Plant Flare – Source ID C601) | 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.<br><br>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.<br><br>Alaskan North Slope means the approximately 69,000 square-mile area extending from the Brooks Range to the Arctic Ocean.<br><br>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.<br><br>Artificial lift equipment means mechanical pumps including, but not limited to, rod pumps and electric submersible pumps used to flowback fluids from a well.<br><br>Bleed rate means the rate in standard cubic feet per hour at which natural gas is continuously vented (bleeds) from a pneumatic controller.<br><br>Capital expenditure means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that:<br><br>(1) Exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation: $P = R \times A$, where:<br><br>(i) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation: $A = Y \times (B \div 100)$;<br><br>(ii) The percent Y is determined from the following equation: Y = (CPI of date of construction/most recently available CPI of date of project), where the “CPI-U, U.S. city average, all items” must be used for each CPI value; and<br><br>(iii) The applicable basic annual asset guideline repair allowance, B, is 4.5.<br><br>(2) [Reserved]<br><br>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.<br><br>Certifying official means one of the following:<br><br>(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 with an affected facility subject to this subpart and either:<br><br>(i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding $25 million (in second quarter 1980 dollars); or | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a |

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| | | (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;<br><br>(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;<br><br>(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<br><br>(4) For affected facilities:<br><br>(i) The designated representative in so far as actions, standards, requirements, or prohibitions under title IV of the CAA or the regulations promulgated thereunder are concerned; or<br><br>(ii) The designated representative for any other purposes under this part.<br><br>Coil tubing cleanout means the process where an operator runs a string of coil tubing to the packed proppant within a well and jets the well to dislodge the proppant and provide sufficient lift energy to flow it to the surface. Coil tubing cleanout includes mechanical methods to remove solids and/or debris from a wellbore. | |
| Additional<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | 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.<br><br>Completion combustion device means any ignition device, installed horizontally or vertically, used in exploration and production operations to combust otherwise vented emissions from completions. Completion combustion devices include pit flares.<br><br>Compressor station means any permanent combination of one or more compressors that move natural gas at increased pressure through gathering pipelines. This includes, but is not limited to, gathering and boosting stations. The combination of one or more compressors located at a well site, or located at an onshore natural gas processing plant, is not a compressor station for purposes of § 60.5397a.<br><br>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.<br><br>Continuous bleed means a continuous flow of pneumatic supply natural gas to a pneumatic controller.<br><br>Crude Oil and Natural Gas Production source category means:<br><br>(1) Crude oil production, which includes the well and extends to the point of custody transfer to the crude oil transmission pipeline or any other forms of transportation; and<br><br>(2) Natural gas production and processing, which includes the well and extends to, but does not include, the point of custody transfer to the natural gas transmission and storage segment.<br><br>Custody meter means the meter where natural gas or hydrocarbon liquids are measured for sales, transfers, and/or royalty determination.<br><br>Custody meter assembly means an assembly of fugitive emissions components, including the custody meter, valves, flanges, and connectors necessary for the proper operation of the custody meter. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | Custody transfer means the transfer of crude oil or natural gas after processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation.<br><br>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).<br><br>Delineation well means a well drilled in order to determine the boundary of a field or producing reservoir.<br><br>Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:<br><br>(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;<br><br>(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<br><br>(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.<br><br>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.<br><br>Field gas means feedstock gas entering the natural gas processing plant.<br><br>Field gas gathering means the system used transport field gas from a field to the main pipeline in the area.<br><br>First attempt at repair means, for the purposes of fugitive emissions components, an action taken for the purpose of stopping or reducing fugitive emissions to the atmosphere. First attempts at repair include, but are not limited to, the following practices where practicable and appropriate: Tightening bonnet bolts; replacing bonnet bolts; tightening packing gland nuts; or injecting lubricant into lubricated packing.<br><br>Flare means a thermal oxidation system using an open (without enclosure) flame. Completion combustion devices as defined in this section are not considered flares.<br><br>Flow line means a pipeline used to transport oil and/or gas to a processing facility or a mainline pipeline.<br><br>Flowback means the process of allowing fluids and entrained solids to flow from a 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 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. Screenouts, coil tubing cleanouts, and plug drill-outs are not considered part of the flowback process.<br><br>Fugitive emissions component means any component that has the potential to emit fugitive emissions of VOC at a well site or compressor station, including valves, connectors, pressure relief devices, open-ended lines, flanges, covers and closed vent systems not subject to § 60.5411 or § 60.5411a, thief hatches or other openings on a controlled storage vessel not subject to § 60.5395 or § | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | 60.5395a, compressors, instruments, and meters. Devices that vent as part of normal operations, such as natural gas-driven pneumatic controllers or natural gas-driven pumps, are not fugitive emissions components, insofar as the natural gas discharged from the device's vent is not considered a fugitive emission. Emissions originating from other than the device's vent, such as the thief hatch on a controlled storage vessel, would be considered fugitive emissions.<br><br>Gas to oil ratio (GOR) means the ratio of the volume of gas at standard temperature and pressure that is produced from a volume of oil when depressurized to standard temperature and pressure.<br><br>Hydraulic fracturing 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.<br><br>Hydraulic refracturing means conducting a subsequent hydraulic fracturing operation at a well that has previously undergone a hydraulic fracturing operation.<br><br>In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in § 60.485a(e) or § 60.5401a(f)(2).<br><br>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.<br><br>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.<br><br>Intermediate hydrocarbon liquid means any naturally occurring, unrefined petroleum liquid.<br><br>Intermittent/snap-action pneumatic controller means a pneumatic controller that is designed to vent non-continuously.<br><br>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.<br><br>Liquid collection system means tankage and/or lines at a well site to contain liquids from one or more wells or to convey liquids to another site.<br><br>Local distribution company (LDC) custody transfer station means a metering station where the LDC receives a natural gas supply from an upstream supplier, which may be an interstate transmission pipeline or a local natural gas producer, for delivery to customers through the LDC's intrastate transmission or distribution lines.<br><br>Low pressure well means a well that satisfies at least one of the following conditions:<br><br>(1) The static pressure at the wellhead following fracturing but prior to the onset of flowback is less than the flow line pressure;<br><br>(2) The pressure of flowback fluid immediately before it enters the flow line, as determined under § 60.5432a, is less than the flow line pressure; or<br><br>(3) Flowback of the fracture fluids will not occur without the use of artificial lift equipment.<br><br>Major production and processing equipment means reciprocating or centrifugal compressors, glycol dehydrators, heater/treaters, separators, and storage vessels collecting crude oil, condensate, intermediate hydrocarbon liquids, or produced water, for the purpose of determining whether a well site is a wellhead only well site. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | Maximum average daily throughput means the following:<br><br>(1) For storage vessels that commenced construction, reconstruction, or modification after September 18, 2015, and on and before November 16, 2020, maximum average daily throughput means the earliest calculation of daily average throughput during the 30-day PTE evaluation period employing generally accepted methods.<br><br>(2) For storage vessels that commenced construction, reconstruction, or modification after November 16, 2020, maximum average daily throughput means the earliest calculation of daily average throughput, determined as described in paragraph (3) or (4) of this definition, to an individual storage vessel over the days that production is routed to that storage vessel during the 30-day PTE evaluation period employing generally accepted methods specified in § 60.5365a(e)(1).<br><br>(3) If throughput to the individual storage vessel is measured on a daily basis (e.g., via level gauge automation or daily manual gauging), the maximum average daily throughput is the average of all daily throughputs for days on which throughput was routed to that storage vessel during the 30-day evaluation period; or<br><br>(4) If throughput to the individual storage vessel is not measured on a daily basis (e.g., via manual gauging at the start and end of loadouts), the maximum average daily throughput is the highest, of the average daily throughputs, determined for any production period to that storage vessel during the 30-day evaluation period, as determined by averaging total throughput to that storage vessel over each production period. A production period begins when production begins to be routed to a storage vessel and ends either when throughput is routed away from that storage vessel or when a loadout occurs from that storage vessel, whichever happens first. Regardless of the determination methodology, operators must not include days during which throughput is not routed to an individual storage vessel when calculating maximum average daily throughput for that storage vessel.<br><br>Natural gas-driven diaphragm pump means a positive displacement pump powered by pressurized natural gas that uses the reciprocating action of flexible diaphragms in conjunction with check valves to pump a fluid. A pump in which a fluid is displaced by a piston driven by a diaphragm is not considered a diaphragm pump for purposes of this subpart. A lean glycol circulation pump that relies on energy exchange with the rich glycol from the contactor is not considered a diaphragm pump.<br><br>Natural gas-driven pneumatic controller means a pneumatic controller powered by pressurized natural gas.<br><br>Natural gas liquids<br>means the hydrocarbons, such as ethane, propane, butane, and pentane that are extracted from field gas.<br><br>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.<br><br>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).<br><br>Natural gas transmission and storage segment means the transport or storage of natural gas prior to delivery to a "local distribution company custody transfer station" (as defined in this section) or to a final end user (if there is no local distribution company custody transfer station). For the purposes of this subpart, natural gas enters the natural gas transmission and storage segment after the natural gas processing plant, when present. If no natural gas processing plant is present, natural gas enters the natural gas transmission and storage segment after the point of "custody transfer" (as defined in this section). A compressor station that transports natural gas prior to the point of "custody transfer" or to a natural gas processing plant (if present) is not considered a part of the natural gas transmission and storage segment. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | Nonfractionating plant means any gas plant that does not fractionate mixed natural gas liquids into natural gas products.<br><br>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.<br><br>Onshore means all facilities except those that are located in the territorial seas or on the outer continental shelf.<br><br>Plug drill-out means the removal of a plug (or plugs) that was used to isolate different sections of the well.<br><br>Pneumatic controller means an automated instrument used for maintaining a process condition such as liquid level, pressure, delta-pressure and temperature.<br><br>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.<br><br>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.<br><br>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.<br><br>Qualified Professional Engineer means an individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the specific technical certifications required under this subpart. Professional engineers making these certifications must be currently licensed in at least one state in which the certifying official is located.<br><br>Reciprocating compressor means a piece of equipment that increases the pressure of a process gas by positive displacement, employing linear movement of the driveshaft.<br><br>Reciprocating compressor rod packing means a series of flexible rings in machined metal cups that fit around the reciprocating compressor piston rod to create a seal limiting the amount of compressed natural gas that escapes to the atmosphere, or other mechanism that provides the same function.<br><br>Recovered gas means gas recovered through the separation process during flowback.<br><br>Recovered liquids means any crude oil, condensate or produced water recovered through the separation process during flowback.<br><br>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 gas flow line or collection system, re-injected into the well or another well, used as an onsite fuel source, or used for other useful purpose that a purchased fuel or raw material would serve, with no direct release to the atmosphere.<br><br>Reduced sulfur compounds means H2S, carbonyl sulfide (COS), and carbon disulfide (CS2).<br><br>Removed from service means that a storage vessel affected facility has been physically isolated and disconnected from the process for a purpose other than maintenance in accordance with § 60.5395a(c)(1). | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | Repaired means, for the purposes of fugitive emissions components, that fugitive emissions components are adjusted, replaced, or otherwise altered, in order to eliminate fugitive emissions as defined in § 60.5397a and resurveyed as specified in § 60.5397a(h)(4) and it is verified that emissions from the fugitive emissions components are below the applicable fugitive emissions definition.<br><br>Returned to service means that a storage vessel affected facility that was removed from service has been:<br><br>(1) Reconnected to the original source of liquids or has been used to replace any storage vessel affected facility; or<br><br>(2) Installed in any location covered by this subpart and introduced with crude oil, condensate, intermediate hydrocarbon liquids or produced water.<br><br>Routed to a process or route to a process means the emissions are conveyed via a closed vent system to any enclosed portion of a process that is operational where the emissions are predominantly recycled and/or consumed in the same manner as a material that fulfills the same function in the process and/or transformed by chemical reaction into materials that are not regulated materials and/or incorporated into a product; and/or recovered.<br><br>Salable quality gas means natural gas that meets the flow line or collection system operator specifications, regardless of whether such gas is sold.<br><br>Screenout means an attempt to clear proppant from the wellbore to dislodge the proppant out of the well.<br><br>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.<br><br>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, except as otherwise provided in this definition. For the purposes of the fugitive monitoring requirements of § 60.5397a, startup of production means the beginning of the continuous recovery of salable quality gas and separation and recovery of any crude oil, condensate, or produced water.<br><br>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 § 60.5395a(c)(1) until such time as such tank or other vessel has been returned to service. For the purposes of this subpart, the following are not considered storage vessels:<br><br>(1) Vessels that are skid-mounted or permanently attached to something that is mobile (such as trucks, railcars, barges or ships), and are intended to be located at a site for less than 180 consecutive days. If you do not keep or are not able to produce records, as required by § 60.5420a(c)(5)(iv), showing that the vessel has been located at a site for less than 180 consecutive days, the vessel described herein is considered to be a storage vessel from the date the original vessel was first located at the site. This exclusion does not apply to a well completion vessel as described above.<br><br>(2) Process vessels such as surge control vessels, bottoms receivers or knockout vessels.<br><br>(3) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere.<br><br>Sulfur production rate means the rate of liquid sulfur accumulation from the sulfur recovery unit. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a<br><br>Continued |

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| | | Sulfur recovery unit means a process device that recovers element sulfur from acid gas.<br><br>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.<br><br>Sweetening unit means a process device that removes hydrogen sulfide and/or carbon dioxide from the sour natural gas stream.<br><br>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-6 of this part.<br><br>Total SO2equivalents 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)).<br><br>UIC Class I oilfield disposal well means a well with a UIC Class I permit that meets the definition in 40 CFR 144.6(a)(2) and receives eligible fluids from oil and natural gas exploration and production operations.<br><br>UIC Class II oilfield disposal well means a well with a UIC Class II permit where wastewater resulting from oil and natural gas production operations is injected into underground porous rock formations not productive of oil or gas, and sealed above and below by unbroken, impermeable strata. | |
| Additional<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | Underground storage vessel means a storage vessel stored below ground.<br><br>Well means a hole drilled for the purpose of producing oil or natural gas, or a well into which fluids are injected.<br><br>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.<br><br>Well completion operation means any well completion with hydraulic fracturing or refracturing occurring at a well affected facility.<br><br>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.<br><br>Well site means one or more surface sites that are constructed for the drilling and subsequent operation of any oil well, natural gas well, or injection well. For purposes of the fugitive emissions standards at § 60.5397a, well site also means a separate tank battery surface site collecting crude oil, condensate, intermediate hydrocarbon liquids, or produced water from wells not located at the well site (e.g., centralized tank batteries). Also, for the purposes of the fugitive emissions standards at § 60.5397a, a well site does not include:<br><br>(1) UIC Class II oilfield disposal wells and disposal facilities;<br><br>(2) UIC Class I oilfield disposal wells; and<br><br>(3) The flange immediately upstream of the custody meter assembly and equipment, including fugitive emissions components, located downstream of this flange. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G02<br><br>Sources Subject to Subpart OOOOa<br><br>Continued | 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.<br><br>Wellhead only well site means, for the purposes of the fugitive emissions standards at § 60.5397a, a well site that contains one or more wellheads and no major production and processing equipment.<br><br>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.<br><br>[81 FR 35898, June 3, 2016, as amended at 85 FR 57072, Sept. 14, 2020; 85 FR 57458, Sept. 15, 2020] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.5430a<br><br>Continued |

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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (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.<br><br>(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.<br><br>(c) (1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of §§ 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, and 60.482-10a as provided in § 60.484a.<br><br>(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of § 60.482-2a, § 60.482-3a, § 60.482-5a, § 60.482-6a, § 60.482-7a, § 60.482-8a, or § 60.482-10a, an owner or operator shall comply with the requirements of that determination.<br><br>(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).<br><br>(e) – (g) N/A<br><br>[Subpart VVa does not directly apply to sources. Rather, various other subparts in 40 CFR call for Subpart VVa, or specific requirements within it, to be applicable to the source. Subpart VVa is composed of 40 CFR § § 60.480a through 60.489a. In this permit, 40 CFR Part 60, Subpart OOOOa (Applicable requirements for this Subpart are contained in Section E, Source Group G01) call for specific Sections and Subsections of Subpart VVa. Also of the specific Sections and Subsections of Subpart VVa called by Subpart OOOOa are contained in this Source Group G02. Therefore, it is not necessarily true that all requirements in Source Group G02 are applicable to the all of the emission processes comprising G02.] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a |

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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (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.<br><br>(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).<br><br>(b) (1) The instrument reading that defines a leak is specified in paragraphs (b)(1)(i) and (ii) of this section.<br><br>(i) 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers;<br><br>(ii) 2,000 ppm or greater for all other pumps.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(i) Tightening the packing gland nuts;<br><br>(ii) Ensuring that the seal flush is operating at design pressure and temperature.<br><br>(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.<br><br>(1) Each dual mechanical seal system is:<br><br>(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or<br><br>(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of § 60.482-10a; or<br><br>(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2a |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Continued | (2) The barrier fluid system is in heavy liquid service or is not in VOC service.<br><br>(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.<br><br>(4) (i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.<br><br>(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.<br><br>(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.<br><br>(B) Designate the visual indications of liquids dripping as a leak.<br><br>(5) (i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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:<br><br>(1) Has no externally actuated shaft penetrating the pump housing;<br><br>(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<br><br>(3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.<br><br>(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of § 60.482-10a, it is exempt from paragraphs (a) through (e) of this section.<br><br>(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: | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Continued | (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<br><br>(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.<br><br>(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.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2a<br><br>Continued |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in § 60.482-1a(c) and paragraphs (h), (i), and (j) of this section.<br>(b) Each compressor seal system as required in paragraph (a) of this section shall be:<br><br>(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or<br><br>(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of § 60.482-10a; or<br><br>(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.<br>(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.<br>(d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.<br>(e) (1) Each sensor as required in paragraph (d) of this section shall be checked daily or shall be equipped with an audible alarm.<br><br>(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.<br><br>(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2) of this section, a leak is detected.<br><br>(g) (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.<br><br>(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.<br><br>(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of § 60.482-10a, except as provided in paragraph (i) of this section.<br><br>(i) Any compressor 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) through (h) of this section if the compressor:<br><br>(1) 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<br><br>(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.<br><br>(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of § 60.14 or § 60.15 is exempt from paragraphs (a) through (e) and (h) of this section, provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of this section.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3a |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (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).<br><br>(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.<br><br>(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).<br><br>(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in § 60.482-10a is exempted from the requirements of paragraphs (a) and (b) of this section.<br><br>(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.<br><br>(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.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4a |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in § 60.482-1a(c) and paragraph (c) of this section.<br><br>(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section.<br><br>(1) Gases displaced during filling of the sample container are not required to be collected or captured.<br><br>(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.<br><br>(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.<br><br>(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either paragraph (b)(4)(i), (ii), (iii), or (iv) of this section.<br><br>(i) Return the purged process fluid directly to the process line.<br><br>(ii) Collect and recycle the purged process fluid to a process.<br><br>(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of § 60.482-10a.<br><br>(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:<br><br>(A) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;<br><br>(B) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266;<br><br>(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261;<br><br>(D) A waste management unit subject to and operated in compliance with the treatment requirements of 40 CFR 61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 CFR 61.343 through 40 CFR 61.347; or<br><br>(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 CFR part 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR part 261.<br><br>(c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-5a |

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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6a |

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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (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.<br><br>(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.<br><br>(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.<br><br>(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.<br><br>(b) If an instrument reading of 500 ppm or greater is measured, a leak is detected.<br><br>(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.<br><br>(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.<br><br>(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.<br><br>(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.<br><br>(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.<br><br>(e) First attempts at repair include, but are not limited to, the following best practices where practicable:<br><br>(1) Tightening of bonnet bolts;<br><br>(2) Replacement of bonnet bolts;<br><br>(3) Tightening of packing gland nuts;<br><br>(4) Injection of lubricant into lubricated packing.<br><br>(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:<br><br>(1) Has no external actuating mechanism in contact with the process fluid,<br><br>(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in § 60.485a(c), and | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7a |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Continued | (3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.<br><br>(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:<br><br>(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<br><br>(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.<br><br>(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:<br><br>(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.<br><br>(2) The process unit within which the valve is located either:<br><br>(i) Becomes an affected facility through § 60.14 or § 60.15 and was constructed on or before January 5, 1981; or<br><br>(ii) Has less than 3.0 percent of its total number of valves designated as difficult-to-monitor by the owner or operator.<br><br>(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7a<br><br>Continued |

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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service, the owner or operator shall follow either one of the following procedures:<br><br>(1) The owner or operator shall monitor the equipment within 5 days by the method specified in § 60.485a(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.<br><br>(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.<br><br>(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.<br><br>(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.<br><br>(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.<br><br>(d) First attempts at repair include, but are not limited to, the best practices described under §§ 60.482-2a(c)(2) and 60.482-7a(e).<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8a |
| Additional | | 40 CFR § 60.482-9a Standards: Delay of repair, is included in this permit by reference.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9a |
| Additional | | 40 CFR § 60.482-10a Standards: Closed vent systems and control devices, is included in this permit by reference.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10a |
| Additional | | 40 CFR § 60.482-11a Connectors in gas/vapor service and in light liquid service, is included in this permit by reference.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-11a |

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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.<br><br>(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:<br><br>(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in § 60.487a(d).<br><br>(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.<br><br>(3) If a valve leak is detected, it shall be repaired in accordance with § 60.482-7a(d) and (e).<br><br>(c) Performance tests shall be conducted in the following manner:<br><br>(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in § 60.485a(b).<br><br>(2) If an instrument reading of 500 ppm or greater is measured, a leak is detected.<br><br>(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.<br><br>(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent, determined as described in § 60.485a(h).<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.483-1a |

| Condition Type | Source | Condition | Basis of Condition |
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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (a) (1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.<br><br>(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in § 60.487(d)a.<br><br>(b) (1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in § 60.482-7a.<br><br>(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.<br><br>(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.<br><br>(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in § 60.482-7a but can again elect to use this section.<br><br>(5) The percent of valves leaking shall be determined as described in § 60.485a(h).<br><br>(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.<br><br>(7) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for a process unit following one of the alternative standards in this section must be monitored in accordance with § 60.482-7a(a)(2)(i) or (ii) before the provisions of this section can be applied to that valve.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.483-2a |

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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (a) Each owner or operator subject to the provisions of this subpart may apply to the Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart.<br>(b) Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:<br>(1) Each owner or operator applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.<br>(2) The Administrator will compare test data for demonstrating equivalence of the means of emission limitation to test data for the equipment, design, and operational requirements.<br>(3) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.<br>(c) Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:<br><br>(1) Each owner or operator applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.<br><br>(2) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.<br><br>(3) For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.<br><br>(4) Each owner or operator applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.<br><br>(5) The Administrator will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4) of this section.<br><br>(6) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.<br>(d) An owner or operator may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.<br>(e) (1) After a request for determination of equivalence is received, the Administrator will publish a notice in the Federal Register and provide the opportunity for public hearing if the Administrator judges that the request may be approved.<br><br>(2) After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the Federal Register.<br><br>(3) Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the CAA.<br>(f) (1) Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.<br>(2) The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of this section.<br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.484a |

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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (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).<br><br>(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:<br><br>(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:<br><br>(i) Zero air (less than 10 ppm of hydrocarbon in air); and<br><br>(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.<br><br>(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.<br><br>(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:<br><br>(1) The requirements of paragraph (b) shall apply.<br><br>(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.<br><br>(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:<br><br>(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference - see § 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485a |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Continued | (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.<br><br>(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.<br><br>(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:<br><br>(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.<br><br>(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.<br><br>(3) The fluid is a liquid at operating conditions.<br><br>(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 or the gas being combusted in the flare.<br><br>(g) The owner or operator shall determine compliance with the standards of flares as follows:<br><br>(1) Method 22 of appendix A-7 of this part shall be used to determine visible emissions.<br><br>(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.<br><br>(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:<br><br>Vmax = K1 + K2HT<br><br>Where:<br><br>Vmax = Maximum permitted velocity, m/sec (ft/sec).<br><br>HT = Net heating value of the gas being combusted, MJ/scm (Btu/scf).<br><br>K1 = 8.706 m/sec (metric units) = 28.56 ft/sec (English units).<br><br>K2 = 0.7084 m4/(MJ-sec) (metric units) = 0.087 ft4/(Btu-sec) (English units).<br><br>(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:<br><br>Hi = K * Sum{ (from i=1, to i=n) Ci * H<br><br>Where:<br><br>K = Conversion constant, 1.740 × 10−7 (g-mole)(MJ)/(ppm-scm-kcal) (metric units) = 4.674 × 10−6 [(g-mole)(Btu)/(ppm-scf-kcal)] (English units). | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Continued | Ci = Concentration of sample component "i," ppm<br><br>Hi = net heat of combustion of sample component "i" at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole.<br><br>(5) Method 18 of appendix A-6 of this part or ASTM D6420-99 (2004) (where the target compound(s) are those listed in Section 1.1 of ASTM D6420-99, and the target concentration is between 150 parts per billion by volume and 100 ppmv) and ASTM D2504-67, 77, or 88 (Reapproved 1993) (incorporated by reference-see § 60.17) shall be used to determine the concentration of sample component "i."<br><br>(6) ASTM D2382-76 or 88 or D4809-95 (incorporated by reference-see § 60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.<br><br>(7) Method 2, 2A, 2C, or 2D of appendix A-7 of this part, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.<br><br>(h) The owner or operator shall determine compliance with § 60.483-1a or § 60.483-2a as follows:<br><br>(1) The percent of valves leaking shall be determined using the following equation:<br><br>%VL = (VL / VT) * 100<br><br>Where:<br><br>%VL = Percent leaking valves.<br><br>VL = Number of valves found leaking.<br><br>VT = The sum of the total number of valves monitored.<br><br>(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.<br><br>(3) The number of valves leaking shall include valves for which repair has been delayed.<br><br>(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.<br><br>(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.<br><br>(6) The total number of valves monitored does not include a valve monitored to verify repair.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485a<br><br>Continued |

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| Additional | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | (a) (1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.<br><br>(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.<br><br>(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.<br><br>(i) Monitoring instrument identification.<br><br>(ii) Operator identification.<br><br>(iii) Equipment identification.<br><br>(iv) Date of monitoring.<br><br>(v) Instrument reading.<br><br>(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:<br><br>(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.<br><br>(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.<br><br>(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.<br><br>(4) The identification on equipment, except on a valve or connector, may be removed after it has been repaired.<br><br>(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:<br><br>(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.<br><br>(2) The date the leak was detected and the dates of each attempt to repair the leak.<br><br>(3) Repair methods applied in each attempt to repair the leak.<br><br>(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.<br><br>(5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486a |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Continued | (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.<br><br>(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.<br><br>(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.<br><br>(9) The date of successful repair of the leak.<br><br>(d) The following information pertaining to the design requirements for closed vent systems and control devices described in § 60.482-10a shall be recorded and kept in a readily accessible location:<br><br>(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.<br><br>(2) The dates and descriptions of any changes in the design specifications.<br><br>(3) A description of the parameter or parameters monitored, as required in § 60.482-10a(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.<br><br>(4) Periods when the closed vent systems and control devices required in §§ 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a are not operated as designed, including periods when a flare pilot light does not have a flame.<br><br>(5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§ 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a.<br><br>(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:<br><br>(1) A list of identification numbers for equipment subject to the requirements of this subpart.<br><br>(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).<br><br>(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.<br><br>(3) A list of equipment identification numbers for pressure relief devices required to comply with § 60.482-4a.<br><br>(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).<br><br>(ii) The background level measured during each compliance test.<br><br>(iii) The maximum instrument reading measured at the equipment during each compliance test.<br><br>(5) A list of identification numbers for equipment in vacuum service. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Continued | (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.<br><br>(7) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service.<br><br>(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).<br><br>(i) Date of calibration and initials of operator performing the calibration.<br><br>(ii) Calibration gas cylinder identification, certification date, and certified concentration.<br><br>(iii) Instrument scale(s) used.<br><br>(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.<br><br>(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).<br><br>(vi) If an owner or operator makes their own calibration gas, a description of the procedure used.<br><br>(9) The connector monitoring schedule for each process unit as specified in § 60.482-11a(b)(3)(v).<br><br>(10) Records of each release from a pressure relief device subject to § 60.482-4a.<br><br>(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:<br><br>(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.<br><br>(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.<br><br>(g) The following information shall be recorded for valves complying with § 60.483-2a:<br><br>(1) A schedule of monitoring.<br><br>(2) The percent of valves found leaking during each monitoring period.<br><br>(h) The following information shall be recorded in a log that is kept in a readily accessible location:<br><br>(1) Design criterion required in §§ 60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and<br><br>(2) Any changes to this criterion and the reasons for the changes. | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Continued | (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):<br><br>(1) An analysis demonstrating the design capacity of the affected facility,<br><br>(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<br><br>(3) An analysis demonstrating that equipment is not in VOC service.<br><br>(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.<br><br>(k) The provisions of § 60.7(b) and (d) do not apply to affected facilities subject to this subpart.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486a<br><br>Continued |

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| Additional<br><br>Continued | Section E<br><br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br><br>Continued | (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.<br><br>(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.<br><br>(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.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487a<br><br>Continued |
| Additional | Section E<br>Group ID: G03<br><br>Sources Subject with Potential Requirements under Subpart VVa<br>Sources:<br>• 260 mmscfd natural gas processing plant (Source ID 404)<br>• 17.84 MMBtu/hr regenerative heater<br>• 500-gallon methanol storage tank (Source ID 302)<br>• Three (3) 5,000 hp electric-driven compressors (Source ID 103);<br>• Fugitives (Source ID 701)<br>• Truck Loadout (Source ID 702)<br>• Measurement Devices (Source ID 703)<br>• Emergency/Uncontrolled Venting/Blowdowns (Source ID 602)<br>Plant Flare – Source ID C601) | Process units that produce, as intermediates or final products, chemicals listed in § 60.489 are covered under this subpart. The applicability date for process units producing one or more of these chemicals is November 8, 2006.<br><br>[This requirement is not necessarily applicable to all sources comprising Source Group G02 - Sources Which have Potentially Applicable Requirements in 40 CFR Part 60, Subpart VVa. See comment under the Condition containing 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a] | 40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.489a |