COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date:	May 2, 2025	Effective Date:	October 22, 2026
Revision Date:	October 22, 2026	Expiration Date:	April 28, 2027
Revision Type:	Extension		

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

The regulatory or statutory authority for each plan approval condition is set forth in brackets. All terms and conditions in this permit are federally enforceable unless otherwise designated as "State-Only" requirements.

Plan Approval No. 63-01011B

Federal Tax Id - Plant Code: 30-0528059-26

Owner Information

Name: MARKWEST LIBERTY MIDSTREAM & RESOURCES LLC
Mailing Address: 4600 JBARRY CT STE 500
CANONSBURG, PA 15317-5854

Plant Information

Plant: MARKWEST LIBERTY MIDSTREAM & RESOURCES/HARMON CREEK GAS PLT
Location: 63 Washington County 63953 Smith Township
SIC Code:

Responsible Official

Name: ROBERT W SHOUGH
Title: OPERATIONS DIRECTOR
Phone: (304) 840 - 5681 Email: rwshough@marathonpetroleum.com

Plan Approval Contact Person

Name: NATHAN WHELDON
Title: SR. MNGR - AIR PROGRAMS
Phone: (303) 542 - 0686 Email: NMWheldon@marathonpetroleum.com

[Signature] _____
MARK R. GOROG, P.E., ENVIRONMENTAL PROGRAM MANAGER, SOUTHWEST REGION

Plan Approval Description

This Plan Approval authorizes the construction and temporary operation of the herein identified air contamination sources and air cleaning devices associated with the proposed DeEthanizer II and 330 MMscfd Harmon Creek Cryo III project.

On October 22, 2026, the Department authorized the modification of the plan approval to allow for the start of the temporary operation period.

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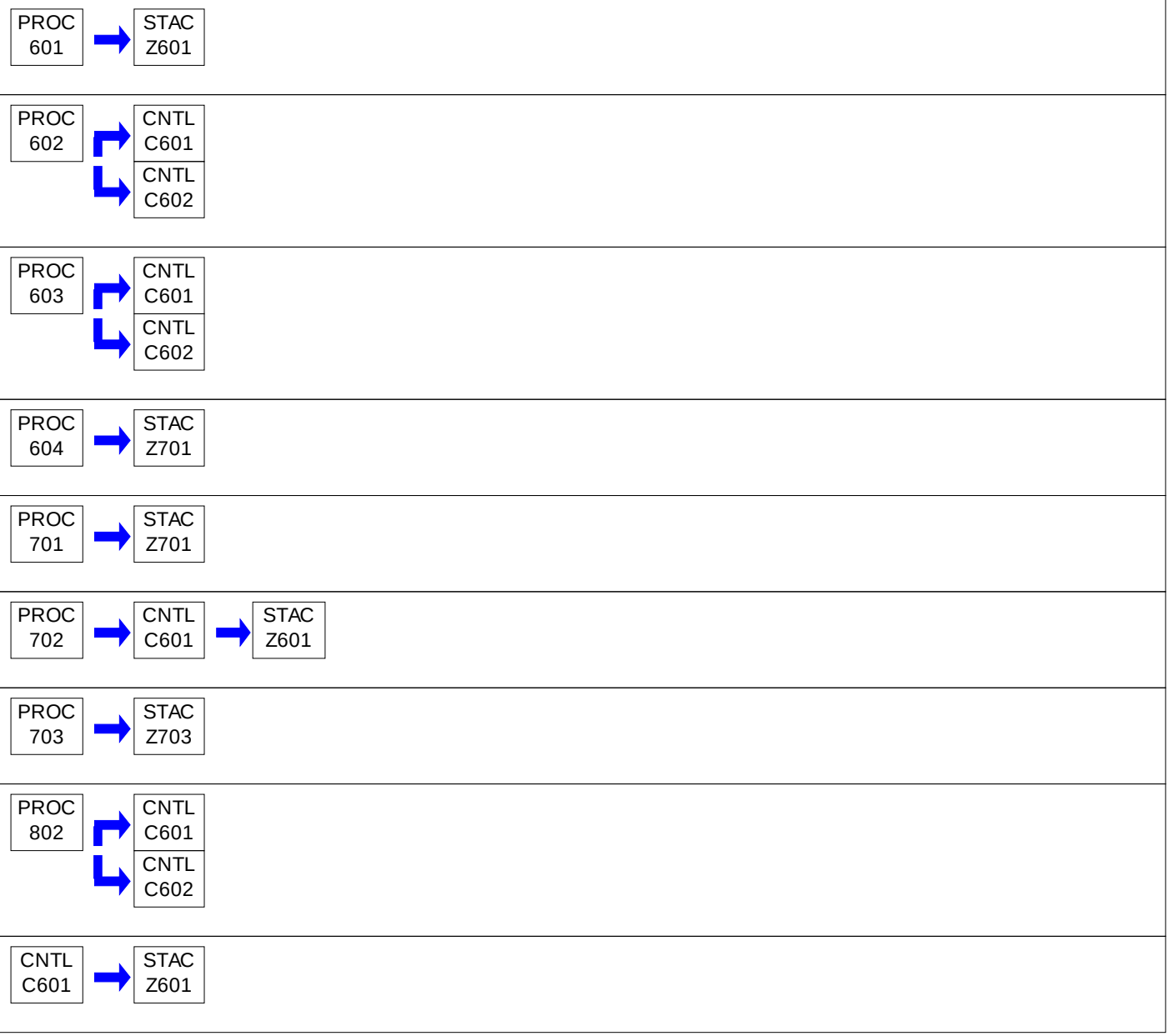
SECTION A. Plan Approval Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
038	21.75 MMBTU/HR CRYO PLANT 3 REGEN HEATER W/FGR	N/A	Natural Gas
039	73.85 MMBTU/HR DE-ETHANIZER 2 HMO HEATER 1 W/FGR	N/A	Natural Gas
040	73.85 MMBTU/HR DE-ETHANIZER 2 HMO HEATER 2 W/FGR	N/A	Natural Gas
303	500-GALLON METHANOL TANK	N/A	
405	330 MMSCFD CRYO PLANT 3		
406	DE-ETHANIZER 2		
601	VENTING/BLOWDOWNS	N/A	
602	CRYO 3 / DE-ETH 2 BLOWDOWNS AND VENTING		
603	CRYO 3 / DE-ETH 2 CENTRIFUGAL COMPRESSOR DRY SEAL VENTS	N/A	Natural Gas
604	RESIDUE CENTRIFUGAL COMPRESSOR DRY SEAL VENTS	N/A	Natural Gas
605	CO2 RECIP COMPRESSOR ROD PACKING	N/A	Natural Gas
701	FUGITIVES	N/A	
702	TRUCK LOADOUT	N/A	Natural Gas
703	MEASUREMENT DEVICES	N/A	Natural Gas
802	HIGH PRESSURE PIG RECEIVER (HC3)	N/A	Natural Gas
C037	FLUE GAS RECIRCULATION (FGR)		
C601	PLANT FLARE	N/A	
C602	CRYO 3 / DE-ETH 2 VENTING VRU		
S038	CRYO PLANT 3 REGEN HEATER W/FGR STACK		
S039	DE-ETHANIZER 2 HMO HEATER 1 W/FGR STACK		
S040	DE-ETHANIZER 2 HMO HEATER 2 W/FGR STACK		
S303	500-GALLON METHANOL TANK VENT STACK		
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PERMIT MAPS



PERMIT MAPS


PROC 601
STAC Z601
PROC 602
CNTL C601
CNTL C602
PROC 603
CNTL C601
CNTL C602
PROC 604
STAC Z701
PROC 701
STAC Z701
PROC 702
CNTL C601
STAC Z601
PROC 703
STAC Z703
PROC 802
CNTL C601
CNTL C602
CNTL C601
STAC Z601

SECTION B. General Plan Approval Requirements

#001 [25 Pa. Code § 121.1]

Definitions

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

#002 [25 Pa. Code § 127.12b (a) (b)]

Future Adoption of Requirements

The issuance of this plan approval does not prevent the future adoption by the Department of any rules, regulations or standards, or the issuance of orders necessary to comply with the requirements of the Federal Clean Air Act or the Pennsylvania Air Pollution Control Act, or to achieve or maintain ambient air quality standards. The issuance of this plan approval shall not be construed to limit the Department's enforcement authority.

#003 [25 Pa. Code § 127.12b]

Plan Approval Temporary Operation

This plan approval authorizes temporary operation of the source(s) covered by this plan approval provided the following conditions are met.

(a) When construction, installation, modification, or reactivation is being conducted, the permittee shall provide written notice to the Department of the completion of the activity approved by this plan approval and the permittee's intent to commence operation at least five (5) working days prior to the completion of said activity. The notice shall state when the activity will be completed and when the permittee expects to commence operation. When the activity involves multiple sources on different time schedules, notice is required for the commencement of operation of each source.

(b) Pursuant to 25 Pa. Code § 127.12b (d), temporary operation of the source(s) is authorized to facilitate the shakedown of sources and air cleaning devices, to permit operations pending the issuance of a permit under 25 Pa. Code Chapter 127, Subchapter F (relating to operating permits) or Subchapter G (relating to Title V operating permits) or to permit the evaluation of the air contaminant aspects of the source.

(c) This plan approval authorizes a temporary operation period not to exceed 180 days from the date of commencement of operation, provided the Department receives notice from the permittee pursuant to paragraph (a), above.

(d) The permittee may request an extension of the 180-day shakedown period if further evaluation of the air contamination aspects of the source(s) is necessary. The request for an extension shall be submitted, in writing, to the Department at least 30 days prior to the end of the initial 180-day shakedown period and shall provide a description of the compliance status of the source, a detailed schedule for establishing compliance, and the reasons compliance has not been established. This temporary operation period will be valid for a limited time and may be extended for additional limited periods, each not to exceed 180 days.

(e) The notice submitted by the permittee pursuant to subpart (a) above, prior to the expiration of the plan approval, shall modify the plan approval expiration date on Page 1 of this plan approval. The new plan approval expiration date shall be 180 days from the date of commencement of operation.

#004 [25 Pa. Code § 127.12(a) (10)]

Content of Applications

The permittee shall maintain and operate the sources and associated air cleaning devices in accordance with good engineering practice as described in the plan approval application submitted to the Department.

#005 [25 Pa. Code §§ 127.12(c) and (d) & 35 P.S. § 4013.2]

Public Records and Confidential Information

(a) The records, reports or information obtained by the Department or referred to at public hearings shall be available to the public, except as provided in paragraph (b) of this condition.

(b) Upon cause shown by the permittee that the records, reports or information, or a particular portion thereof, but not emission data, to which the Department has access under the act, if made public, would divulge production or sales figures or methods, processes or production unique to that person or would otherwise tend to affect adversely the

SECTION B. General Plan Approval Requirements

competitive position of that person by revealing trade secrets, including intellectual property rights, the Department will consider the record, report or information, or particular portion thereof confidential in the administration of the act. The Department will implement this section consistent with sections 112(d) and 114(c) of the Clean Air Act (42 U.S.C.A. § § 7412(d) and 7414(c)). Nothing in this section prevents disclosure of the report, record or information to Federal, State or local representatives as necessary for purposes of administration of Federal, State or local air pollution control laws, or when relevant in a proceeding under the act.

#006 [25 Pa. Code § 127.12b]

Plan Approval Terms and Conditions

[Additional authority for this condition is derived from 25 Pa. Code Section 127.13]

(a) This plan approval will be valid for a limited time, as specified by the expiration date contained on Page 1 of this plan approval. Except as provided in § § 127.11a and 127.215 (relating to reactivation of sources; and reactivation), at the end of the time, if the construction, modification, reactivation or installation has not been completed, a new plan approval application or an extension of the previous approval will be required.

(b) If construction has commenced, but cannot be completed before the expiration of this plan approval, an extension of the plan approval must be obtained to continue construction. To allow adequate time for departmental action, a request for the extension shall be postmarked at least thirty (30) days prior to the expiration date. The request for an extension shall include the following:

(i) A justification for the extension,
(ii) A schedule for the completion of the construction

If construction has not commenced before the expiration of this plan approval, then a new plan approval application must be submitted and approval obtained before construction can commence.

(c) If the construction, modification or installation is not commenced within 18 months of the issuance of this plan approval or if there is more than an 18-month lapse in construction, modification or installation, a new plan approval application that meets the requirements of 25 Pa. Code Chapter 127, Subchapter B (related to plan approval requirements), Subchapter D (related to prevention of significant deterioration of air quality), and Subchapter E (related to new source review) shall be submitted. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified.

#007 [25 Pa. Code § 127.32]

Transfer of Plan Approvals

(a) This plan approval may not be transferred from one person to another except when a change of ownership is demonstrated to the satisfaction of the Department and the Department approves the transfer of the plan approval in writing.

(b) Section 127.12a (relating to compliance review) applies to a request for transfer of a plan approval. A compliance review form shall accompany the request.

(c) This plan approval is valid only for the specific source and the specific location of the source as described in the application.

#008 [25 Pa. Code § 127.12(a)(4) & 35 P.S. § 4008 & § 114 of the CAA]

Inspection and Entry

(a) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(b) The permittee shall also allow the Department to have access at reasonable times to said sources and associated air cleaning devices with such measuring and recording equipment, including equipment recording visual observations, as the Department deems necessary and proper for performing its duties and for the effective enforcement of the Air Pollution Control Act and regulations adopted under the act.

SECTION B. General Plan Approval Requirements

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

#009 [25 Pa. Code 127.13a]

Plan Approval Changes for Cause

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

(a) The permittee constructs or operates the source subject to the plan approval in violation of the act, the Clean Air Act, the regulations promulgated under the act or the Clean Air Act, a plan approval or permit or in a manner that causes air pollution.

(b) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(c) The permittee fails to submit a report required by this plan approval.

(d) The Environmental Protection Agency determines that this plan approval is not in compliance with the Clean Air Act or the regulations thereunder.

#010 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

(a) The permittee, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this plan approval, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#011 [25 Pa. Code § 127.12c]

Submissions

Reports, test data, monitoring data, notifications shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the plan approval transmittal letter or otherwise notified)

#012 [25 Pa. Code § 127.12(a)(9) & 40 CFR Part 68]

Risk Management

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the facility. The permittee shall submit the RMP to the Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by the Environmental Protection Agency no later than the latest of the following:

SECTION B. General Plan Approval Requirements

(i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
(ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or the Environmental Protection Agency concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this plan approval condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

#013 [25 Pa. Code § 121.7]

Prohibition of Air Pollution

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. §§ 4001-4015).

#014 [25 Pa. Code § 127.25]

Compliance Requirement

A person may not cause or permit the operation of a source subject to § 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.

SECTION C. Site Level Plan Approval Requirements

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §121.7]

Prohibition of air pollution.

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

 # 002 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

(1) Construction or demolition of buildings or structures.

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

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

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

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

(8) n/a

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

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

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

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

(c) [See Work Practice Standards.]

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

 # 003 [25 Pa. Code §123.2]

Fugitive particulate matter

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

 # 004 [25 Pa. Code §123.21]

General

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

(b) No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO2, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

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 # 005 [25 Pa. Code §123.31]

Limitations

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

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Facility-wide emissions from all sources shall not equal or exceed the following on a 12-month rolling basis:

37.25 TPY NOx;
77.29 TPY CO;
48.33 TPY VOC;
1.0 TPY SOx;
15.30 TPY PM10;
15.30 TPY PM2.5;
3.48 TPY Total HAPs;
2.56 TPY n-Hexane
217,849 TPY CO2e

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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:

(1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
(2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
(3) When the emission results from sources specified in §123.1 (a)(1)—(9) (relating to prohibition of certain fugitive emissions).

II. TESTING REQUIREMENTS.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

If performance testing is required, such testing shall be conducted as follows [25 Pa. Code §127.12b and §139.11]:

(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.

(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.

(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.

(d) Pursuant to 25 Pa. Code §139.53(b) a complete test report shall include a summary of the emission results on the first page of the report indicating if each pollutant measured is within permitted limits and a statement of compliance or non-compliance with all applicable permit conditions. The summary results will include, at a minimum, the following information:

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

SECTION C. Site Level Plan Approval Requirements

findings.
(2) Permit number(s) and condition(s) which are the basis for the evaluation.
(3) Summary of results with respect to each applicable permit condition.
(4) Statement of compliance or non-compliance with each applicable permit condition.

(e) Pursuant to 25 Pa. Code §139.3, all submittals shall meet all applicable requirements specified in the most current version of the Department's Source Testing Manual.

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

(g) All submittals shall be sent electronically to ra-epstacktesting@pa.gov, with CC: to ra-epswstacktesting@pa.gov.

(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.

 # 009 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

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.

III. MONITORING REQUIREMENTS.

 # 010 [25 Pa. Code §123.43]
Measuring techniques

Visible emissions may be measured using either of the following:

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

 # 011 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

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:

(a) Visible stack emissions;
(b) Fugitive emissions; and
(c) Potentially objectionable odors at the property line.

These observations are to ensure continued compliance with source-specific visible emission limitations, fugitive emissions prohibited under 25 Pa. Code §123.1 or §123.2, and malodors prohibited under 25 Pa. Code §123.31.

Observations for visible stack emissions shall be conducted during daylight hours, and all observations shall be conducted while sources are in operation.

If 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

SECTION C. Site Level Plan Approval Requirements

§123.43, such as EPA Method 9 readings taken by a certified visible emissions reader.

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 013 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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.

 # 014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain the following comprehensive and accurate records:
(1) Facility-wide emissions for NOx, CO, SO2, VOC, PM, PM10, PM2.5, any single HAP, total HAPs, and CO2e per consecutive 12-month rolling period.
(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.
(3) Results of any visible emissions observations to demonstrate compliance with the 10% opacity limit.
(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.
(5) All maintenance performed on each air contamination source and air cleaning device.
(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.
(7) Hours of operation, kept on both a monthly and previous 12-month basis, for each air contamination source and air cleaning device;
(8) Records of the date, time, duration, volume of natural gas released to atmosphere, and emissions from each blowdown and emergency shutdown at the facility.
(9) Records of daily volumes of process gas routed to the VRU (via the VRU header meter) and flare (via the header meter), shall be maintained.
(10) Material throughput and emission records shall be updated each month, using monthly records.

 # 015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

V. REPORTING REQUIREMENTS.

 # 016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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 authorization.

 # 017 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

In accordance with 25 Pa. Code § 135.3, the owner or operator of a facility shall submit to the Department via AES*Online or AES*XML at www.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:

(i) NOx; (ii) CO; (iii) SOx; (iv) PM10; (v) PM2.5; (vi) VOC;

SECTION C. Site Level Plan Approval Requirements

(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.

(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.

 # 018 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(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.

(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.

(c) The report shall describe the:

(i) Name and location of the facility;
(ii) Nature and cause of the malfunction or breakdown;
(iii) Time when the malfunction or breakdown was first observed;
(iv) Expected duration of excess emissions;
(v) Estimated rate of emissions;
(vi) corrective actions or preventative measures taken,
(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.

(d) The owner or operator shall notify the Department immediately when corrective measures have been accomplished.

(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.

(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.

(g) Malfunctions shall be reported to the Department at the following address:

Pennsylvania Department of Environmental Protection
Southwest Regional Office
Air Quality Program
400 Waterfront Drive
Pittsburgh, PA 15222-4745
412-442-4000

SECTION C. Site Level Plan Approval Requirements

 # 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

The Facility is subject to New Source Performance Standards from 40 CFR Part 60 Subpart OOOOa. Per 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.

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

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

 # 020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.7]

Subpart A - General Provisions

Notification and record keeping.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 021 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

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

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

(3) Paving and maintenance of roadways.

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

 # 022 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 023 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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.

SECTION C. Site Level Plan Approval Requirements

Additionally, the owner/operator may not cause or permit the operation of an air contamination source in a manner inconsistent with good operating practices.

VII. ADDITIONAL REQUIREMENTS.

 # 024 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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.

 # 025 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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.

 # 026 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Air contamination sources and air cleaning devices authorized for construction/modification and/or operation under this plan approval include the following:

• 330 MMscfd Cryo Plant III: SFID 405
• De-Ethanizer II: SFID 406
• One (1) Cryo Plant III regenerative heater rated at a maximum heat input of 21.75 MMBtu/hr equipped with flue gas recirculation (FGR): SFID 038
• Two (2) DeEthanizer II hot medium oil (HMO) heaters rated at a maximum heat input of 73.85 MMBtu/hr and equipped with FGR: SFID 039 and 040
• One (1) 500-gallon methanol storage tank: SFID 303
• One (1) high-pressure pig receiver: SFID 801
• Three (3) electric-driven centrifugal compressors and associated dry seal gas venting: SFID 603 – 31000203 – Industrial Processes, Oil and Gas Production, Natural Gas Production; Compressors.
• One (1) electric-driven reciprocating compressor (rod packing) SFID 105
• One (1) Vapor Recovery Unit (VRU): SFID C603
• Equipment blowdowns and venting: SFID 601
• Fugitive emissions components: SFID 701
• Truck Loadout: SFID 702
• Measurement Devices: SFID 703
• Plant Flare: SFID C601

 # 027 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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 reviewing engineer to schedule the Initial Operating Permit Inspection.

 # 028 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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 Plan Approval PA-63-01011 and GP5-63-01011B (AG5-63-00011A).

SECTION C. Site Level Plan Approval Requirements

 # 029 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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.

 # 030 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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.

 # 031 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This Plan Approval is based on site-specific and Federal requirements. In the event of an inconsistency or any conflicting requirements, the most stringent provision, term, condition, method or rule shall be used by default.

 # 032 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

In instances of multiple applicable emission limitations, the most stringent emission limitation applies.

 # 033 [25 Pa. Code §129.14]

Open burning operations

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

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

(1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.
(2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.
(3) The emissions interfere with the reasonable enjoyment of life or property.
(4) The emissions cause damage to vegetation or property.
(5) The emissions are or may be deleterious to human or animal health.

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

(1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
(2) Any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
(3) A fire set for the prevention and control of disease or pests, when approved by the Department.
(4) A fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation.
(5) A fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure.
(6) A fire set solely for recreational or ceremonial purposes.
(7) A fire set solely for cooking food.

(d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:
(1) As used in this subsection the following terms shall have the following meanings:
Air curtain destructor—A mechanical device which forcefully projects a curtain of air across a pit in which open burning is being conducted so that combustion efficiency is increased and smoke and other particulate matter are contained.
Clearing and grubbing wastes—Trees, shrubs and other native vegetation which are cleared from land during or prior to the process of construction. The term does not include demolition wastes and dirt laden roots.
(2) Subsection (a) notwithstanding, clearing and grubbing wastes may be burned in a basin subject to the following requirements:

SECTION C. Site Level Plan Approval Requirements

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

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

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

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

(3) N/A

(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.

 # 034 [25 Pa. Code §135.4]

Report format

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.

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this plan approval including Section B (relating to Plan Approval General Requirements).

IX. COMPLIANCE SCHEDULE.

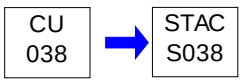
No compliance milestones exist.

SECTION D. Source Level Plan Approval Requirements

Source ID: 038 Source Name: 21.75 MMBTU/HR CRYO PLANT 3 REGEN HEATER W/FGR

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: HEATERS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

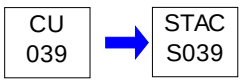
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 039 Source Name: 73.85 MMBTU/HR DE-ETHANIZER 2 HMO HEATER 1 W/FGR

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: HEATERS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

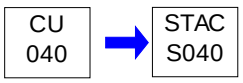
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 040 Source Name: 73.85 MMBTU/HR DE-ETHANIZER 2 HMO HEATER 2 W/FGR

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: HEATERS



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 303 Source Name: 500-GALLON METHANOL TANK

Source Capacity/Throughput: N/A

PROC 303 → STAC S303

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Total combined methanol usage at the facility shall not exceed 150 gallons on a consecutive 12-month rolling basis.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain records of the total throughput through the methanol storage tanks on a consecutive 12-month rolling basis.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

SECTION D. Source Level Plan Approval Requirements

Source ID: 405 Source Name: 330 MMSCFD CRYO PLANT 3

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SUBPART OOOOB FACILITIES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 406 Source Name: DE-ETHANIZER 2

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SUBPART OOOOB FACILITIES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

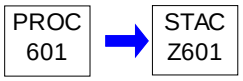
VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 601 Source Name: VENTING/BLOWDOWNS

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

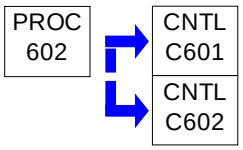
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

SECTION D. Source Level Plan Approval Requirements

Source ID: 602 Source Name: CRYO 3 / DE-ETH 2 BLOWDOWNS AND VENTING

Source Capacity/Throughput:

Conditions for this source occur in the following groups: SUBPART OOOOB FACILITIES
VRU AND SOURCES CONTROLLED BY VRU



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

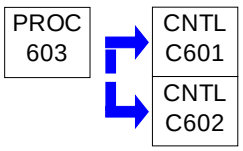
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 603 Source Name: CRYO 3 / DE-ETH 2 CENTRIFUGAL COMPRESSOR DRY SEAL VENTS

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: SUBPART OOOOB FACILITIES
VRU AND SOURCES CONTROLLED BY VRU



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

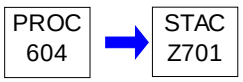
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 604 Source Name: RESIDUE CENTRIFUGAL COMPRESSOR DRY SEAL VENTS

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: SUBPART OOOOB FACILITIES
VRU AND SOURCES CONTROLLED BY VRU



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 605 Source Name: CO2 RECIP COMPRESSOR ROD PACKING

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: SUBPART OOOOB FACILITIES

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

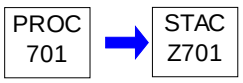
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 701 Source Name: FUGITIVES

Source Capacity/Throughput: N/A

Conditions for this source occur in the following groups: SUBPART OOOOB FACILITIES



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Actual VOC emissions from connectors and valves at the facility shall be calculated semi-annually using the EPA Correlation Approach to demonstrate compliance with the requirement to achieve a ninety percent (90%) emissions reduction on connectors and a ninety-nine percent (99%) emissions reduction on valves compared to the EPA Average Emission Factor Approach.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

VOC emissions from fugitive emissions components shall not exceed 4.86 tons in any consecutive 12-month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall maintain the following records:

(a) 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
(b) Record of construction indicating that new underground drain piping has been welded.
(c) Record of construction showing that piping connections are welded, flanged, or screwed (if two-inch diameter or smaller).
(d) A list of all difficult-to-monitor or unsafe-to-monitor components at the facility.
(e) A record of hydraulic testing, gas testing, or gas analyzer results on new or reworked piping connections.
(f) Records of the semi-annual connector and valve emissions reduction percentages.

V. REPORTING REQUIREMENTS.

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

SECTION D. Source Level Plan Approval Requirements

VI. WORK PRACTICE REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

A facility-wide leak detection and repair (LDAR) program shall be implemented as follows:

(a) Connectors/flanges: Semiannual Method 21
(b) Pressure relief: Quarterly Method 21
(c) Valves: Quarterly Method 21
(d) Pumps: Monthly Method 21

VII. ADDITIONAL REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Within ten (10) days of when the most recent leaking component is added to the delay of repair list, the cumulative daily

SECTION D. Source Level Plan Approval Requirements

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:

(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)

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The owner or operator shall install low-emission valves for each new, replaced, or reworked valve 1" or greater.

A. "Low-Emission Valve" shall mean either of the following:
i. A valve (including its specific packing assembly of stem sealing component) for which the manufacturer has issued a written warranty that it will not emit fugitives at greater than 100 ppm, and that, if it does so emit at greater than 100 ppm at any time in the first five years after installation the manufacturer will replace the valve; provided, however, that no valve shall qualify as a low-emission valve by reason of written warranty unless the valve (including its specific packing assembly) either:
a. first was tested by the manufacturer or a qualified testing firm pursuant to the generally accepted good engineering practices for the testing fugitive of emissions; or
b. is an extension of another valve that qualified as a low-emission valve under Subparagraph i above; or

ii. A valve (including its specific packing assembly) that:
a. Has been tested by the manufacturer or a qualified testing firm pursuant to generally accepted good engineering practices for testing fugitive emissions and that, during the test, at no time leaked at greater than 500 ppm, and on average, leaked at less than 100 ppm; or
b. Is an extension of another valve that qualified as a low-emission valve under Subparagraph i above.

B. For purposes of (i)(b) and (ii)(b) above, an "extension of another valve" means that the characteristics of the valve that affect sealing performance (e.g., type of valve, stem motion, tolerances, surface finishes, loading arrangement, and stem and body seal material, design, and construction) are the same or essentially equivalent as between the tested and the untested valve.

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Within ninety (90) days of Plan Approval issuance, a site specific LDAR monitoring plan shall be submitted that specifies the monitoring methods, frequencies, and minimum durations between monitoring surveys for each type of fugitive emissions component.

SECTION D. Source Level Plan Approval Requirements

Source ID: 702 Source Name: TRUCK LOADOUT

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: VRU AND SOURCES CONTROLLED BY VRU



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

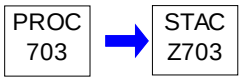
VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 703 Source Name: MEASUREMENT DEVICES

Source Capacity/Throughput: N/A Natural Gas



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VII. ADDITIONAL REQUIREMENTS.

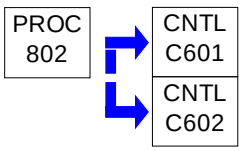
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

SECTION D. Source Level Plan Approval Requirements

Source ID: 802 Source Name: HIGH PRESSURE PIG RECEIVER (HC3)

Source Capacity/Throughput: N/A Natural Gas

Conditions for this source occur in the following groups: VRU AND SOURCES CONTROLLED BY VRU



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

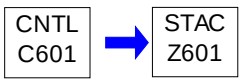
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: C601 Source Name: PLANT FLARE

Source Capacity/Throughput: N/A

Conditions for this source occur in the following groups: SUBPART OOOOB FACILITIES



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions of VOCs from the flare stack shall not exceed 12.01 tons during any consecutive 12-month period, updated monthly.

Throughput Restriction(s).

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Annual plant flare throughput (including sweep and purge gas) shall not exceed 116.518 MMscf in any consecutive 12-month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Owner/Operator shall monitor:
(1) Daily gas throughput and heat content.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

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

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

SECTION D. Source Level Plan Approval Requirements

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

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain the following comprehensive and accurate records:
(1) Daily gas throughput and heat content, kept on both a monthly and previous 12-month basis.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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.

VII. ADDITIONAL REQUIREMENTS.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

(a) Introduction.

(1) This section contains requirements for control devices used to comply with applicable subparts of 40 CFR parts 60 and 61. The requirements are placed here for administrative convenience and apply only to facilities covered by subparts referring to this section.

(2) N/A

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

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

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

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

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

Vmax = (XH2-K1)* K2

Where:

Vmax = Maximum permitted velocity, m/sec.

SECTION D. Source Level Plan Approval Requirements

K1 = Constant, 6.0 volume-percent hydrogen.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

HT = K * Sum (For i=1 to i=n) Ci * Hi

where:

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

K = (1.740 * 10^-7) (1/ppm) (g mole/scm) (MJ/kcal)
where the standard temperature for (g mole/scm) is 20 Degrees C

SECTION D. Source Level Plan Approval Requirements

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

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.

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

(5) The maximum permitted velocity, Vmax, for flares complying with paragraph (c)(4)(iii) shall be determined by the following equation.

Log10 (Vmax) = (HT + 28.8)/31.7

Vmax = Maximum permitted velocity, M/sec

28.8 = Constant

31.7 = Constant

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

(6) The maximum permitted velocity, Vmax, for air-assisted flares shall be determined by the following equation.

Vmax = 8.706 + 0.7084 (HT)

Vmax = Maximum permitted velocity, m/sec

8.706 = Constant

0.7084 = Constant

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

(g) - (i) N/A.

[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]

SECTION E. Source Group Plan Approval Restrictions.

Group Name: HEATERS

Group Description: Cryo III and DeEthanizer II heaters

Sources included in this group

ID	Name
038	21.75 MMBTU/HR CRYO PLANT 3 REGEN HEATER W/FGR
039	73.85 MMBTU/HR DE-ETHANIZER 2 HMO HEATER 1 W/FGR
040	73.85 MMBTU/HR DE-ETHANIZER 2 HMO HEATER 2 W/FGR

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to 25 Pa. Code §123.11, the following particulate limitations apply:

(1) Source ID 038 is subject to a particulate matter limit of 0.4 pounds per million Btu.
(2) Source IDs 039 and 040 are subject to a particulate matter limit of 0.32 pounds per million Btu

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions from Source IDs 038, 039, and 040 shall not exceed the following:

(1) 9 ppmdv NOx at 3% O2
(2) 49 ppmdv CO at 3% O2

II. TESTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) For each heater, 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:

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

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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:

SECTION E. Source Group Plan Approval Restrictions.

(a) Records of annual tune-ups/inspections;
(b) Fuel consumption records on a monthly basis;
(c) 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 each heater;
(d) A description of any corrective actions taken as part of the tune-up;
(e) The date(s) the annual tune-up/inspection was conducted;
(f) The factory calibration certification sheets for the portable analyzer;
(g) The type and amount of fuel used over the 12 months prior to the tune-up;
(h) Daily fuel consumption (in units of mass and heat input), kept on both a monthly and previous 12-month basis.
(i) Records including a description of testing methods, results, heater operating data collected during tests, and a copy of the calculations performed to determine compliance with emission standards for the regenerative heater.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The Owner/Operator shall conduct an annual tune-up/inspection on each heater. At a minimum the tune-up/inspection shall consist of the following:
(1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary;
(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;
(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly;
(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 each heater is subject;

VII. ADDITIONAL REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Each heater (Source IDs 038, 039, and 040) shall be equipped with and operated at all times with flue gas recirculation (FGR).

SECTION E. Source Group Plan Approval Restrictions.

Group Name: SUBPART OOOOB FACILITIES

Group Description: Affected Facilities under 40 CFR Part 60 Subpart OOOOb

Sources included in this group

ID	Name
405	330 MMSCFD CRYO PLANT 3
406	DE-ETHANIZER 2
602	CRYO 3 / DE-ETH 2 BLOWDOWNS AND VENTING
603	CRYO 3 / DE-ETH 2 CENTRIFUGAL COMPRESSOR DRY SEAL VENTS
604	RESIDUE CENTRIFUGAL COMPRESSOR DRY SEAL VENTS
605	CO2 RECIP COMPRESSOR ROD PACKING
701	FUGITIVES
C601	PLANT FLARE
C602	CRYO 3 / DE-ETH 2 VENTING VRU

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to 40 CFR §60.5370b(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.

VII. ADDITIONAL REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

For each process unit equipment affected facility located at an onshore natural gas processing plant, you must comply with the requirements of §60.5400b or the alternative requirements in §60.5401b to reduce methane and VOC emissions from equipment leaks, except 1.) as provided in §60.5402b, or 2.) as specified elsewhere in this Plan Approval.

SECTION E. Source Group Plan Approval Restrictions.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

As specified in 40 CFR §60.5365b, the owner or operator must comply with the requirements applicable to each affected facility under 40 CFR Part 60 Subpart OOOOb--Standards of Performance for Crude Oil and Natural Gas Facilities for Which Construction, Modification or Reconstruction Commenced After December 6, 2022.

SECTION E. Source Group Plan Approval Restrictions.

Group Name: VRU AND SOURCES CONTROLLED BY VRU

Group Description: VRU and All Sources Controlled by VRU System

Sources included in this group

ID	Name
602	CRYO 3 / DE-ETH 2 BLOWDOWNS AND VENTING
603	CRYO 3 / DE-ETH 2 CENTRIFUGAL COMPRESSOR DRY SEAL VENTS
604	RESIDUE CENTRIFUGAL COMPRESSOR DRY SEAL VENTS
702	TRUCK LOADOUT
802	HIGH PRESSURE PIG RECEIVER (HC3)
C602	CRYO 3 / DE-ETH 2 VENTING VRU

I. RESTRICTIONS.

Operation Hours Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Sources connected to the closed vent system shall be controlled to the maximum extent practicable by the VRU except when bypassed during infrequent emergencies and malfunctions or directed to the plant flare during VRU maintenance, repair, or malfunction, of which such events shall not exceed five percent (5%) of the Harmon Creek III operational hours in any 12-month consecutive rolling period, or 438 hours per 12-month consecutive rolling period, whichever is less.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Records of the hours of operation of the VRU system shall be maintained on a monthly and consecutive 12-month rolling basis.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The vapor recovery unit (VRU) closed vent system shall be designed and operated in accordance with 40 CFR §60.5411b as follows:

(a) Closed vent system requirements.
(1) Reciprocating compressor rod packing, process controllers, and pumps. You must design the closed vent system to capture and route all gases, vapors, and fumes to a process.
(2) Associated gas wells, centrifugal compressors, process controllers in Alaska, pumps complying with § 60.5393b(b)(1), storage vessels, and process unit equipment. You must design the closed vent system to capture and route all gases, vapors, and fumes to a process or a control device that meets the requirements specified in § 60.5412b(a) through (d) of this section. For pumps complying with § 60.5393b(b)(3), you must design the closed vent system to capture and route all gases, vapors, and fumes to a control device that meets the requirements specified in § 60.5412b(a) through

SECTION E. Source Group Plan Approval Restrictions.

(d) of this section.

(3) You must design and operate the closed vent system with no identifiable emissions as demonstrated by § 60.5416b(a) and (b).

(4) Bypass devices. You must meet the requirements specified in paragraphs (a)(4)(i) and (ii) of this section if the closed vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device or being routed to a process.

(i) Except as provided in paragraph (a)(4)(ii) of this section, you must comply with either paragraph (a)(4)(i)(A) or (B) of this section for each bypass device.

(A) You must properly install, calibrate, maintain, and operate a flow indicator at the inlet to the bypass device. The flow indicator must be capable of taking periodic readings as specified in § 60.5416b(a)(4)(i) and sound an alarm, or initiate notification via remote alarm to the nearest field office, when the bypass device is open such that the stream is being, or could be, diverted away from the control device or process, and sent to the atmosphere. You must maintain records of each time the alarm is activated according to § 60.5420b(c)(10).

(B) You must secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.

(ii) Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of paragraph (a)(4)(i) of this section.

(b) Cover requirements for storage vessels and centrifugal compressors, and reciprocating compressors.

(1) The cover and all openings on the cover (e.g., access hatches, sampling ports, pressure relief devices and gauge wells) shall form a continuous impermeable barrier over the entire surface area of the liquid in the storage vessel or centrifugal compressor wet seal fluid degassing system, or reciprocating compressor rod packing emissions collection system.

(2) Each cover opening shall be secured in a closed, sealed position (e.g., covered by a gasketed lid or cap) whenever material is in the unit on which the cover is installed except during those times when it is necessary to use an opening as follows:

(i) To add material to, or remove material from the unit (this includes openings necessary to equalize or balance the internal pressure of the unit following changes in the level of the material in the unit);

(ii) To inspect or sample the material in the unit;

(iii) To inspect, maintain, repair, or replace equipment located inside the unit; or

(iv) To vent liquids, gases, or fumes from the unit through a closed vent system designed and operated in accordance with the requirements of paragraph (a) of this section to a control device or to a process.

(3) Each storage vessel thief hatch shall be equipped, maintained and operated with a weighted mechanism or equivalent, to ensure that the lid remains properly seated and sealed under normal operating conditions, including such times when working, standing/breathing, and flash emissions may be generated. You must select gasket material for the hatch based on composition of the fluid in the storage vessel and weather conditions.

(4) You must design and operate the cover with no identifiable emissions as demonstrated by § 60.5416b(a) and (b), except when operated as provided in paragraphs (b)(2)(i) through (iv) of this section.

(c) Design requirements.

(1) You must conduct an assessment that the closed vent system is of sufficient design and capacity to ensure that all gases, vapors, and fumes from the affected facility are routed to the control device or process and that the control device or process is of sufficient design and capacity to accommodate all emissions from the affected facility. The assessment must be certified by a qualified professional engineer or an in-house engineer with expertise on the design and operation of the closed vent system in accordance with paragraphs (c)(1)(i) and (ii) of this section.

(i) You must provide the following certification, signed and dated by a qualified professional engineer or an in-house engineer: “I certify that the closed vent system design and capacity assessment was prepared under my direction or supervision. I further certify that the closed vent system design and capacity assessment was conducted, and this report was prepared pursuant to the requirements of subpart OOOOb of this part. Based on my professional knowledge and experience, and inquiry of personnel involved in the assessment, the certification submitted herein is true, accurate, and complete.”

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

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Per § 60.5416b, for each closed vent system and cover at your centrifugal compressor, reciprocating compressor, process controller, pump, storage vessel, and process unit equipment affected facilities, you must comply with the following requirements, as applicable:

SECTION E. Source Group Plan Approval Restrictions.

(a) Inspections for closed vent systems, covers, and bypass devices. If you install a control device or route emissions to a process, you must inspect each closed vent system according to the procedures and schedule specified in paragraphs (a)(1) and (2) of this section, inspect each cover according to the procedures and schedule specified in paragraph (a)(3) of this section, and inspect each bypass device according to the procedures of paragraph (a)(4) of this section, except as provided in paragraphs (b)(7) and (8) of this section.

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

(i) Conduct an initial inspection according to the test methods and procedures specified in paragraph (b) of this section to demonstrate that the closed vent system operates with no identifiable emissions within the first 30 calendar days after startup of the affected facility routing emissions through the closed vent system.

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

(iii) Conduct AVO inspections in accordance with and at the same frequency as specified for fugitive emissions components affected facilities located at the same type of site as specified in § 60.5397b(g). Process unit equipment affected facilities must conduct annual AVO inspections concurrent with the inspections required by paragraph (a)(1)(ii) of this section.

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

(i) Conduct an initial inspection according to the test methods and procedures specified in paragraph (b) of this section within the first 30 calendars days after startup of the affected facility routing emissions through the closed vent system to demonstrate that the closed vent system operates with no identifiable emissions.

(ii) Conduct inspections according to the test methods, procedures, and frequencies specified in paragraph (b) of this section to demonstrate that the components or connections operate with no identifiable emissions.

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

(iv) Conduct AVO inspections in accordance with and at the same frequency as specified for fugitive emissions components affected facilities located at the same type of site, as specified in § 60.5397b(g). Process unit equipment affected facilities must conduct annual AVO inspections concurrent with the inspections required by paragraph (a)(2)(iii) of this section.

(3) For each cover, you must meet the requirements of paragraphs (a)(3)(i) through (iv) of this section.

(i) Conduct the inspections specified in paragraphs (a)(3)(ii) through (iv) of this section to identify defects that could result in air emissions and to ensure the cover operates with no identifiable emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in the cover, or between the cover and the separator wall; broken, cracked, or otherwise damaged seals or gaskets on closure devices; and broken or missing hatches, access covers, caps, or other closure devices. In the case where the storage vessel is buried partially or entirely underground, you must inspect only those portions of the cover that extend to or above the ground surface, and those connections that are on such portions of the cover (e.g., fill ports, access hatches, gauge wells, etc.) and can be opened to the atmosphere.

(ii) An initial inspection according to the test methods and procedures specified in paragraph (b) of this section, following installation of the cover to demonstrate that each cover operates with no identifiable emissions.

(iii) Conduct AVO inspections in accordance with and at the same frequency as specified for fugitive emissions components affected facilities located at the same type of site as specified in § 60.5397b(g). Process unit equipment affected facilities must conduct annual AVO inspections concurrent with the inspections required by paragraph (a)(1)(ii) of this section.

(iv) Inspections according to the test methods, procedures, and schedules specified in paragraph (b) of this section to demonstrate that each cover operates with no identifiable emissions.

(4) For each bypass device, except as provided for in § 60.5411b(a)(4)(ii), you must meet the requirements of paragraph (a)(4)(i) or (ii) of this section.

(i) Set the flow indicator to take a reading at least once every 15 minutes at the inlet to the bypass device that could

SECTION E. Source Group Plan Approval Restrictions.

divert the stream away from the control device and to the atmosphere.

(ii) If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device.

(b) No identifiable emissions test methods and procedures. If you are required to conduct an inspection of a closed vent system and cover as specified in paragraph (a)(1), (2), or (3) of this section or § 60.5398b(b), you must meet the requirements of paragraphs (b)(1) through (9) of this section. You must meet the requirements of paragraphs (b)(1), (2), (4), and (9) of this section for each self-contained process controller at your process controller affected facility as specified at § 60.5390b(a)(2).

(1) Initial and periodic inspection. You must conduct initial and periodic no identifiable emissions inspections as specified in paragraphs (b)(1)(i) through (iii) of this section, as applicable.

(i) You must conduct inspections for no identifiable emissions from your covers and closed vent systems at your well, centrifugal compressor, reciprocating compressor, process controller, pump, or storage vessel affected facility, using the procedures for conducting OGI inspections in § 60.5397b(c)(7). As an alternative you may conduct inspections in accordance with Method 21 of appendix A-7 to this part. Monitoring must be conducted at the same frequency as specified for fugitive emissions components affected facilities located at the same type of site, as specified in § 60.5397b(g).

(ii) For covers and closed vent systems located at onshore natural gas processing plants, OGI inspections for no identifiable emissions must be conducted initially and bimonthly in accordance with appendix K to this part. As an alternative you must conduct quarterly inspections for no identifiable emissions in accordance with Method 21 of appendix A-7 to this part.

(iii) For your self-contained process controller, you must conduct initial and quarterly inspections for no identifiable emissions using the procedures for conducting OGI inspections in § 60.5397b(c)(7). As an alternative you may conduct quarterly inspections in accordance with Method 21 of appendix A-7 to this part.

(2) OGI application. Where OGI is used, the closed vent system, cover, or self-contained process controller is determined to operate with no identifiable emissions if no emissions are imaged during the inspection. Emissions imaged by OGI constitute a deviation of the no identifiable emissions standard until an OGI inspection conducted in accordance with paragraph (b)(1) of this section determines that the closed vent system, cover, or self-contained process controller, as applicable, operates with no identifiable emissions.

(3) AVO application. Where AVO inspections are required, the closed vent system or cover is determined to operate with no identifiable emissions if no emissions are detected by AVO. Emissions detected by AVO constitute a deviation of the no identifiable emissions standard until an AVO inspection determines that the closed vent system or cover operates with no identifiable emissions.

(4) Method 21 application. Where Method 21 of appendix A-7 to this part is used for the inspection, the requirements of paragraphs (b)(4)(i) through (vii) of this section apply.

(i) The detection instrument must meet the performance criteria of Method 21 of appendix A-7 to this part, except that the instrument response factor criteria in section 8.1.1 of Method 21 must be for the average composition of the fluid and not for each individual organic compound in the stream.

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

(iii) Calibration gases must be as specified in paragraphs (b)(4)(iii)(A) and (B) of this section.

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

(B) A mixture of methane in air at a concentration less than 500 ppmv.

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

(v) Your detection instrument must meet the performance criteria specified in paragraphs (b)(4)(v)(A) and (B) of this section.

(A) Except as provided in paragraph (b)(4)(v)(B) of this section, the detection instrument must meet the performance criteria of Method 21 of appendix A-7 to this part, except the instrument response factor criteria in section 8.1.1 of Method 21 must be for the average composition of the process fluid, not each individual volatile organic compound in the stream. For process streams that contain nitrogen, air, or other inerts that are not organic hazardous air pollutants or volatile organic compounds, you must calculate the average stream response factor on an inert-free basis.

(B) If no instrument is available that will meet the performance criteria specified in paragraph (b)(4)(v)(A) of this

SECTION E. Source Group Plan Approval Restrictions.

section, you may adjust the instrument readings by multiplying by the average response factor of the process fluid, calculated on an inert-free basis, as described in paragraph (b)(4)(v)(A) of this section.

(vi) You must determine if a potential leak interface operates with no identifiable emissions using the applicable procedure specified in paragraph (b)(4)(vi)(A) or (B) of this section.

(A) If you choose not to adjust the detection instrument readings for the background organic concentration level, then you must directly compare the maximum organic concentration value measured by the detection instrument to the applicable value for the potential leak interface as specified in paragraph (b)(4)(vii) of this section.

(B) If you choose to adjust the detection instrument readings for the background organic concentration level, you must compare the value of the arithmetic difference between the maximum organic concentration value measured by the instrument and the background organic concentration value as determined in paragraph (b)(4)(iv) of this section with the applicable value for the potential leak interface as specified in paragraph (b)(4)(vii) of this section.

(vii) A closed vent system, cover, or self-contained process controller is determined to operate with no identifiable emissions if the organic concentration value determined in paragraph (b)(4)(vi) of this section is less than 500 ppmv. An organic concentration value determined in paragraph (b)(4)(vi) of this section of greater than or equal to 500 ppmv constitutes a deviation of the no identifiable emissions standard until an inspection conducted in accordance with paragraph (b)(4) of this section determines that the closed vent system, cover, or self-contained process controller, as applicable, operates with no identifiable emissions.

(5) Repairs. Whenever emissions or a defect is detected, you must repair the emissions or defect as soon as practicable according to the requirements of paragraphs (b)(5)(i) through (iii) of this section, except as provided in paragraph (b)(6) of this section.

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

(ii) Repair must be completed no later than 30 calendar days after the emissions or defect is detected.

(iii) For covers, grease or another substance compatible with the gasket material must be applied to deteriorating or cracked gaskets to improve the seal while awaiting repair.

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

(7) Unsafe to inspect requirements. You may designate any parts of the closed vent system or cover as unsafe to inspect if the requirements of paragraphs (b)(7)(i) and (ii) of this section are met. Unsafe to inspect parts are exempt from the inspection requirements of paragraphs (a)(1) through (3) of this section.

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

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

(8) Difficult to inspect requirements. You may designate any parts of the closed vent system or cover as difficult to inspect if the requirements of paragraphs (b)(8)(i) and (ii) of this section are met. Difficult to inspect parts are exempt from the inspection requirements of paragraphs (a)(1) through (3) of this section.

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

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

(9) Records and reports. You must maintain records of all inspection results as specified in § 60.5420b(c)(8) through (10). You must submit the reports as specified in § 60.5420b(b)(11).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements).

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Plan Approval facility.

SECTION G. Emission Restriction Summary.

No emission restrictions listed in this section of the permit.

SECTION H. Miscellaneous.

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