COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

PLAN APPROVAL

Issue Date:	February 12, 2021	Effective Date:	February 22, 2023
Revision Date:	February 15, 2023	Expiration Date:	August 21, 2024
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. 23-0119E

Federal Tax Id - Plant Code: 23-3102655-3

Owner Information

Name: ENERGY TRANSFER MKT & TERM LP
Mailing Address: 100 GREEN ST
MARCUS HOOK, PA 19061-4800

Plant Information

Plant: ENERGY TRANSF MKT & TERM LP/MARCUS HOOK TERM
Location: 23 Delaware County 23825 Marcus Hook Borough
SIC Code: 4226 Trans. & Utilities - Special Warehousing And Storage, Nec

Responsible Official

Name: EDWARD G HUMAN
Title: SENIOR DIR. - MH OPER.
Phone (610) 859 - 1912 Email: EDWARD.HUMAN@energytransfer.com

Plan Approval Contact Person

Name: KEVIN SMITH
Title: ENV COMPLIANCE SPECIALIST
Phone: (610) 859 - 1279 Email: kevin.smith2@energytransfer.com

[Signature] _____

JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER

Plan Approval Description

This plan approval is for the reevaluation of the following authorizations at the facility, listed in chronological order by original issuance/approval date, as a single aggregated project

(a) Plan Approval No. 23-0119 (originally issued on February 2, 2013).

(b) Plan Approval No. 23-0119A (originally issued on September 5, 2013).

(c) Plan Approval No. 23-0119B (originally issued on January 30, 2014).

(d) Plan Approval No. 23-0119C (originally issued on November 19, 2014).

(e) Plan Approval No. 23-0119D (originally issued on February 26, 2015).

(f) Request for Determination of Changes of Minor Significance and Exemption from Plan Approval/Operating Permit (RFD) No. 5236 (approved August 13, 2015).

(g) RFD No. 5340 (approved October 1, 2015).

(h) Plan Approval No. 23-0119E (originally issued on April 1, 2016).

(i) Increases to the VOC emission restrictions for existing internal floating roof storage tanks 607, 609, and 611 (Source IDs 188, 190, and 192, respectively) under Plan Approval No. 23-0119F (originally issued on August 15, 2016).

(j) RFD No. 5918 (approved September 26, 2016).

(k) RFD No. 5944 (approved September 26, 2016).

(l) RFD No. 6484 (approved August 17, 2017).

(m) De minimis emissions increase (letter dated August 24, 2018).

(n) De minimis emissions increase (letter dated December 10, 2018).

(o) De minimis emissions increase (letter dated March 22, 2019).

(p) RFD No. 7944 (approved August 21, 2019).

(q) RFD No. 8829 and Determination of Changes of Minor Significance (approved November 3, 2020).

(r) Plan Approval No. 23-0119J (pending issuance).

SECTION A. Table of Contents

SECTION A. Table of Contents

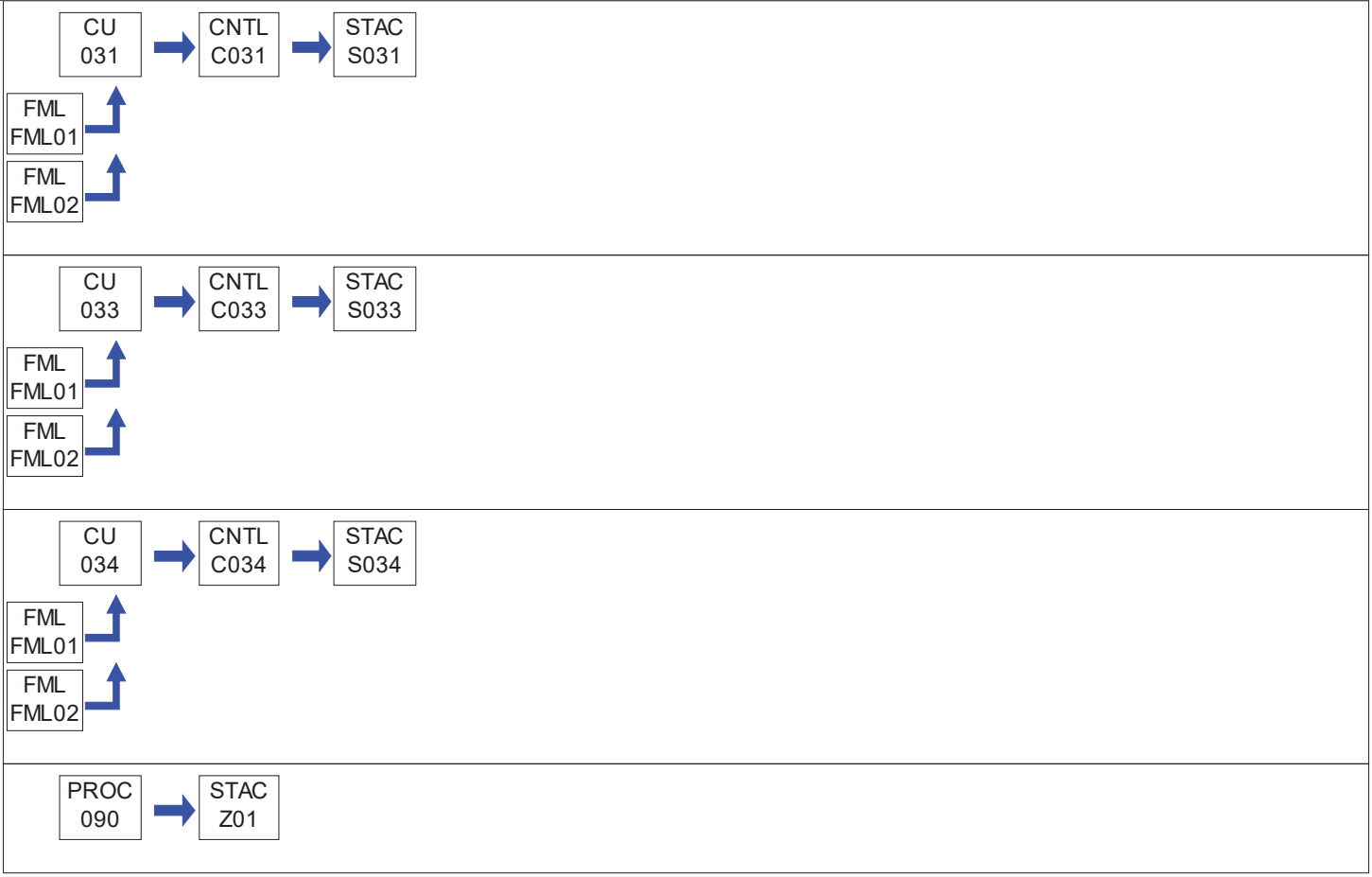
SECTION A. Plan Approval Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
031	AUXILIARY BOILER 1	392.500 MMBTU/HR	
		427.500 MCF/HR	PROCESS GAS
		392.500 MCF/HR	Natural Gas
033	AUXILIARY BOILER 3	392.500 MMBTU/HR	
		392.500 MCF/HR	Natural Gas
		427.500 MCF/HR	PROCESS GAS
034	AUXILIARY BOILER 4	392.500 MMBTU/HR	
		392.500 MCF/HR	Natural Gas
		427.500 MCF/HR	PROCESS GAS
090	DEPROPANIZER (15-2S T-4)	N/A	PROPANE/C4+
091	DEPROPANIZER (15-2B T-4)	N/A	PROPANE/C4+
092	DEBUTANIZER (15-2B T-2)	N/A	PROPANE/BUTANE/C5+
101	REFRIGERATED ETHANE TANK (300K BBL)	N/A	ETHANE
102	REFRIGERATED PROPANE TANK (500K BBL)	N/A	PROPANE
103	NSPS SUBPART VVA FUGITIVE EQUIPMENT LEAKS		
104	MARINE VESSEL LOADING (REFRIGERATED)	N/A	ETHANE/PROPANE/BUTAN
105	CAVERN		
106A	DEMETHANIZER	N/A	ETHANE/PROPANE/METHA
111	NATURAL GASOLINE LOADING RACK	N/A	PENTANE/NAPHTHA/NATUI
112	NEW COOLING TOWERS	4.800 M Gal/HR	WATER
115	MARINE VESSEL LOADING	N/A	PETROLEUM PRODUCTS
117	REFRIGERATED ETHANE TANK (300K BBL)	N/A	ETHANE
118	REFRIGERATED BUTANE TANK (575K BBL)	N/A	BUTANE
119	REFRIGERATED PROPANE TANK (900K BBL)	N/A	PROPANE
120	REFRIGERATED PROPANE TANK (589K BBL)	N/A	PROPANE
133	TANK 246 INT FLOAT 54.4 MBBL	N/A	PETROLEUM LIQUIDS
136	TANK 250 INT FLOAT 80.4 MBBL	N/A	PETROLEUM LIQUIDS
139	EXISTING COOLING TOWERS	1.710 M Gal/HR	WATER
178	TANK 527 INT FLOAT 69.7 MBBL	N/A	PETROLEUM LIQUIDS
188	TANK 607 INT FLOAT 100 MBBL	N/A	PETROLEUM LIQUIDS
190	TANK 609 INT FLOAT 98.17 MBBL	N/A	PETROLEUM LIQUIDS
192	TANK 611 INT FLOAT 87.8 MBBL	N/A	PETROLEUM LIQUIDS
204	TANK 253 INT FLOAT 90.5 MBBL	N/A	PETROLEUM LIQUIDS
212	TANK 610 INT FLOAT 96.0 MBBL	N/A	PETROLEUM LIQUIDS
C01	WEST COLD FLARE (MODIFIED)	240.000 CF/HR	NAT GAS (PILOT & PURGE)
C02	EAST COLD FLARE (NEW TANKS PROJECT)	117.000 CF/HR	NAT GAS (PILOT & PURGE)
C031	LOW NOX BURNERS & FGR (AUX BOILER 1)		
C033	LOW NOX BURNERS & FGR (AUX BOILER 3)		
C034	LOW NOX BURNERS & FGR (AUX BOILER 4)		
C111	NAT GAS LOADING RACK VAPOR BALANCE SYS		
C115	VAPOR RECOVERY SYSTEM		
FML01	NATURAL GAS		
FML02	PROCESS GAS		

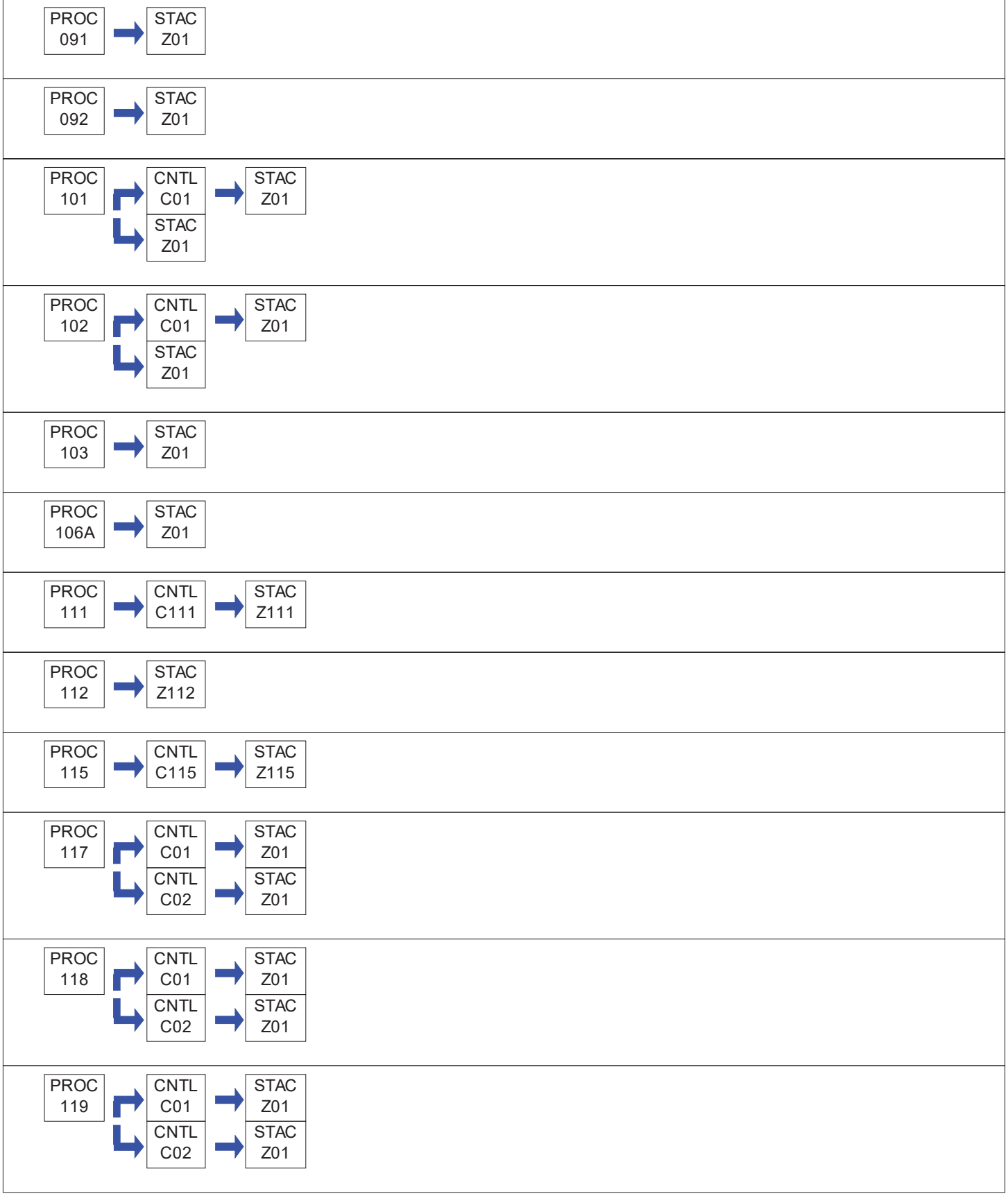
SECTION A. Plan Approval Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
S031	AUX BOILER 1 STACK		
S033	AUX BOILER 3 STACK		
S034	AUX BOILER 4 STACK		
Z01	NSPS SUBPART VVA FUGITIVE EQUIPMENT		
Z111	NAT GAS LOADING RACK FUGITIVES		
Z112	NEW COOLING TOWER FUGITIVES		
Z115	MARINE VESSEL LOADING FUGITIVES		
Z133	TANK 246 INT FLOAT FUGITIVES		
Z136	TANK 250 INT FLOAT FUGITIVES		
Z139	COOLING TOWER FUGITIVES		
Z178	TANK 527 INT FLOAT FUGITIVES		
Z188	TANK 607 INT FLOAT FUGITIVES		
Z190	TANK 609 FUGITIVES		
Z192	TANK 611 INT FLOAT FUGITIVES		
Z204	TANK 253 INT FLOAT FUGITIVES		
Z212	TANK 610 INT FLOAT FUGITIVES		
ZC01	C01 COLD FLARE STACK		
ZC02	COLD FLARE (NEW TANKS PROJECT)		

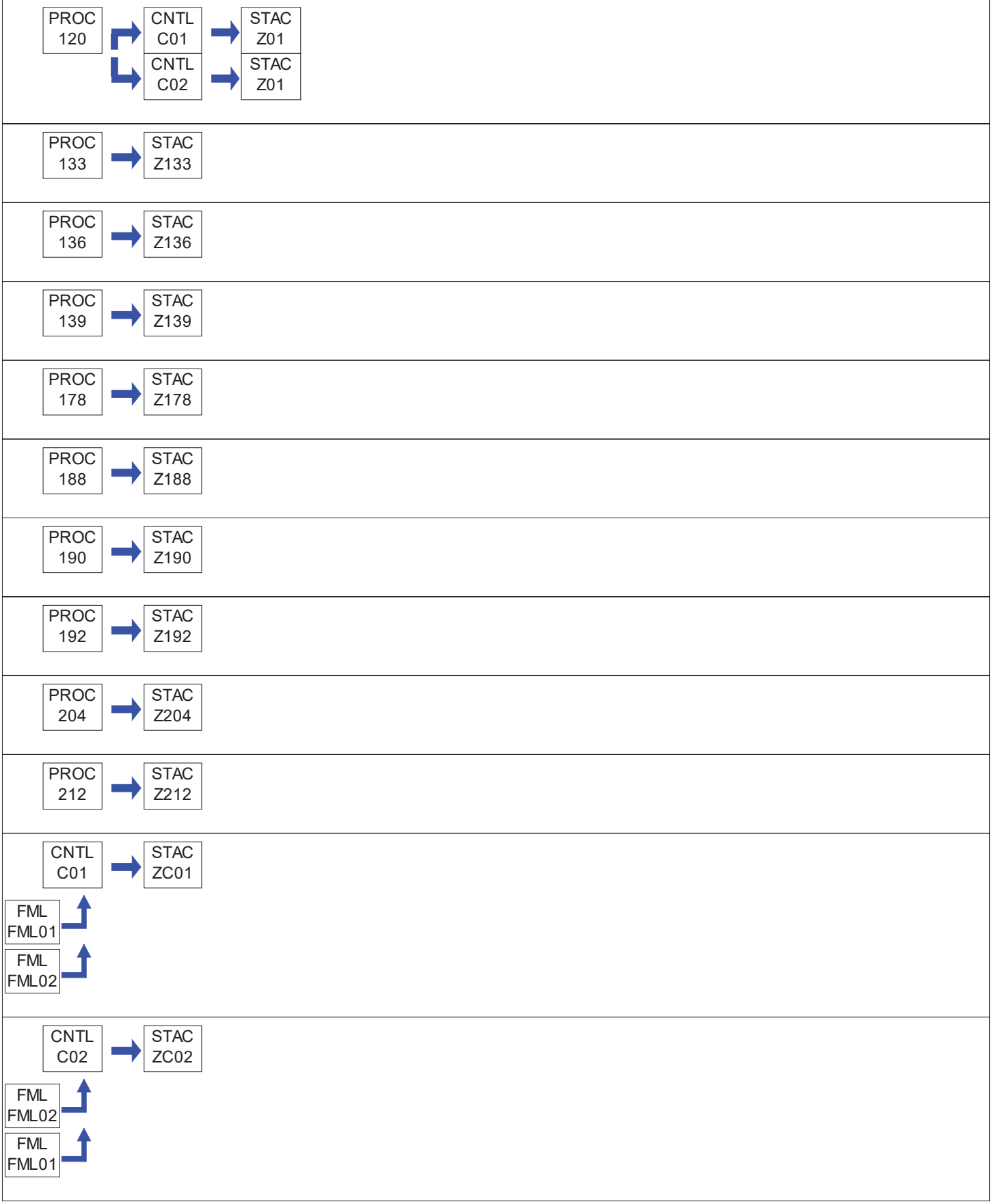
PERMIT MAPS



PERMIT MAPS


PROC 091
STAC Z01
PROC 092
STAC Z01
PROC 101
CNTL C01
STAC Z01
STAC Z01
PROC 102
CNTL C01
STAC Z01
STAC Z01
PROC 103
STAC Z01
PROC 106A
STAC Z01
PROC 111
CNTL C111
STAC Z111
PROC 112
STAC Z112
PROC 115
CNTL C115
STAC Z115
PROC 117
CNTL C01
STAC Z01
CNTL C02
STAC Z01
PROC 118
CNTL C01
STAC Z01
CNTL C02
STAC Z01
PROC 119
CNTL C01
STAC Z01
CNTL C02
STAC Z01

PERMIT MAPS


PROC 120
CNTL C01
STAC Z01
CNTL C02
STAC Z01
PROC 133
STAC Z133
PROC 136
STAC Z136
PROC 139
STAC Z139
PROC 178
STAC Z178
PROC 188
STAC Z188
PROC 190
STAC Z190
PROC 192
STAC Z192
PROC 204
STAC Z204
PROC 212
STAC Z212
CNTL C01
STAC ZC01
FML FML01
FML FML02
CNTL C02
STAC ZC02
FML FML02
FML FML01

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 15 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(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(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 § 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.

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.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The permittee shall comply with all existing requirements specified in Title V Operating Permit No. 23-00119, except those for the sources listed in Section A, of this plan approval. These requirements, including those previously incorporated by reference from Plan Approval No. 23-0119D, shall be superseded and replaced by the requirements for said sources specified in this plan approval.

(b) All terms and conditions of previously-issued Plan Approval Nos. 23-0119D and 23-0119E (original) are incorporated into this plan approval.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The offsetting nitrogen oxides (NOx) Emission Reduction Credits (ERCs) and volatile organic compound (VOC) ERCs identified in this plan approval are approved for use at this facility in accordance with the requirements of 25 Pa. Code Chapter 127, Subchapter E, including 25 Pa. Code §§ 127.205(3), 127.210, and 127.211.

 # 003 [25 Pa. Code §127.208]

ERC use and transfer requirements.

[Additional authority for this plan approval condition is derived from 25 Pa. Code §§ 127.206(d) and 127.210(a).]

In accordance with 25 Pa. Code § 127.206(d), the permittee is required to surrender 46.35 tons of NOx ERCs and 59.07 tons of VOC ERCs, determined as follows, for use at this facility:

(a) NOx ERCs Required: [60.89 tons (aggregated emissions increase determined in accordance with 25 Pa. Code §§ 127.203a and 127.203(b)(1)(i))] × [offset ratio of 1.3:1 (as indicated in 25 Pa. Code § 127.210(a))] = 79.15 tons – [32.80 tons (NOx ERCs previously retired for sources and equipment under the single aggregated project)].

(b) VOC ERCs Required: [187.48 tons (aggregated emissions increase determined in accordance with 25 Pa. Code

SECTION C. Site Level Plan Approval Requirements

§§ 127.203a and 127.203(b)(1)(i))] × [offset ratio of 1.3:1 (as indicated in 25 Pa. Code § 127.210(a))] = 243.72 tons – [134.72 tons (VOC ERCs previously retired for sources and equipment under the single aggregated project)] – [49.93 tons (VOC ERCs to be obtained and surrendered under Plan Approval No. 23-0119J)].

 # 004 [25 Pa. Code §127.208]

ERC use and transfer requirements.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 127.210(a)–(b).]

(a) This plan approval authorizes the transfer and use of the following NOx ERCs and VOC ERCs for offset purposes in accordance with 25 Pa. Code § 127.208(2):

Source	Amount/Type of Certified ERCs (Dates Generated / Entered into ERC Registry System)
Exelon Generation Company, LLC Eddystone Borough, Delaware County	64.00 tons/yr NOx (February 17, 2011 / March 19, 2013)
Sunoco, Inc. (successor to Sun Company, Inc.) Marcus Hook Boro, Delaware County	59.07 tons/yr VOCs (September 30, 1994 / April 19, 2002)

(b) 46.35 tons of the NOx ERCs and 59.07 tons of the VOC ERCs indicated in (a), above, will be used to offset the aggregated emissions increases specified in Condition # 003(a)–(b), Section C, of this plan approval, respectively, in accordance with 25 Pa. Code § 127.210. These NOx ERCs and VOC ERCs will provide emission offsets at the required ratio of 1.3:1.

 # 005 [25 Pa. Code §127.208]

ERC use and transfer requirements.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 127.206(f)–(g).]

Upon the issuance of this plan approval, the NOx ERCs indicated in Condition # 004(a), Section C, of this plan approval, are no longer subject to the 10-year expiration date established pursuant to 25 Pa. Code § 127.206(f), except that the expiration date will not be extended for any NOx ERCs not used and subsequently reentered into the ERC Registry System.

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: 031 Source Name: AUXILIARY BOILER 1

Source Capacity/Throughput:	392.500 MMBTU/HR	
	427.500 MCF/HR	PROCESS GAS
	392.500 MCF/HR	Natural Gas

Conditions for this source occur in the following groups: 0

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: 033 Source Name: AUXILIARY BOILER 3

Source Capacity/Throughput:	392.500 MMBTU/HR	
	392.500 MCF/HR	Natural Gas
	427.500 MCF/HR	PROCESS GAS

Conditions for this source occur in the following groups: 0

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: 034 Source Name: AUXILIARY BOILER 4

Source Capacity/Throughput:	392.500 MMBTU/HR	
	392.500 MCF/HR	Natural Gas
	427.500 MCF/HR	PROCESS GAS

Conditions for this source occur in the following groups: 0

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: 090 Source Name: DEPROPANIZER (15-2S T-4)

Source Capacity/Throughput: N/A PROPANE/C4+

PROC 090 → STAC Z01

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.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Applicable requirements for this depropanizer can be found in Section D (under Source ID 103), of this plan approval.

SECTION D. Source Level Plan Approval Requirements

Source ID: 091 Source Name: DEPROPANIZER (15-2B T-4)

Source Capacity/Throughput: N/A PROPANE/C4+

PROC 091 → STAC Z01

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.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Applicable requirements for this depropanizer can be found in Section D (under Source ID 103), of this plan approval.

SECTION D. Source Level Plan Approval Requirements

Source ID: 092 Source Name: DEBUTANIZER (15-2B T-2)

Source Capacity/Throughput: N/A PROPANE/BUTANE/C5+

PROC 092 → STAC Z01

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.

 # 001 [25 Pa. Code §127.12b]

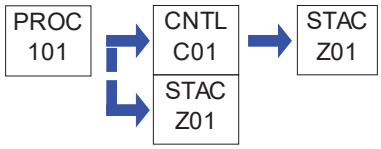
Plan approval terms and conditions.

Applicable requirements for this debutanizer can be found in Section D (under Source ID 103), of this plan approval.

SECTION D. Source Level Plan Approval Requirements

Source ID: 101 Source Name: REFRIGERATED ETHANE TANK (300K BBL)

Source Capacity/Throughput: N/A ETHANE



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.

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall keep a record of all periods of operation during which the flare pilot flame is absent.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall keep readily accessible records showing the dimensions of this refrigerated ethane storage tank and an analysis showing its capacity for the life of the tank.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. These records shall be kept for a minimum of 5 years.

V. REPORTING REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Testing and procedures.

The permittee of each source that is equipped with a closed vent system and control device as required in 40 CFR §§ 60.112b(a)(3) or (b)(2) (other than a flare) is exempt from 40 CFR § 60.8 and shall meet the following requirements:

(a) submit for approval by the Administrator as an attachment to the notification required by 40 CFR § 60.7(a)(1) or, if the

SECTION D. Source Level Plan Approval Requirements

facility is exempt from 40 CFR § 60.7(a)(1), as an attachment to the notification required by 40 CFR § 60.7(a)(2), an operating plan containing the information listed below.

(1) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95% requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(2) a description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(b) The permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with (a)(1), above, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall submit the following:

(a) records shall be kept of all periods of operation during which the flare pilot flame is absent; and
(b) semiannual reports of all periods in which the pilot flame was absent shall be furnished to the Administrator and the Department.

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

(a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from this refrigerated ethane storage tank and be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR § 60.485(b).

(b) The associated West Cold Flare (Source ID C01) shall be designed and operated to reduce inlet VOC emissions by 98% or greater, and meet the specifications described in 40 CFR § 60.18.

VII. ADDITIONAL REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This source consists of a 300,000-bbl refrigerated ethane storage tank with vapor recovery system. Ethane vapors are condensed to a liquid state by the vapor recovery system before being hard-piped back to the tank.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

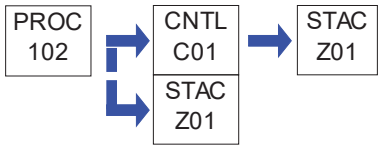
[Additional authority for this plan approval condition is derived from 40 CFR § 60.480a(d)(5) and 25 Pa. Code Chapter 122.]

Additional applicable requirements for this refrigerated ethane storage tank can be found in Section D (under Source ID 103), of this plan approval, except that the tank storing non-VOCs is exempt from the requirements of 40 CFR §§ 60.482-1a through 60.482-11a.

SECTION D. Source Level Plan Approval Requirements

Source ID: 102 Source Name: REFRIGERATED PROPANE TANK (500K BBL)

Source Capacity/Throughput: N/A PROPANE



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.

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall keep a record of all periods of operation during which the flare pilot flame is absent.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall keep readily accessible records showing the dimensions of this refrigerated propane storage tank and an analysis showing its capacity for the life of the tank.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. These records shall be kept for a minimum of 5 years.

V. REPORTING REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Testing and procedures.

The permittee of each source that is equipped with a closed vent system and control device as required in 40 CFR §§ 60.112b(a)(3) or (b)(2) (other than a flare) is exempt from 40 CFR § 60.8 and shall meet the following requirements:

(a) submit for approval by the Administrator as an attachment to the notification required by 40 CFR § 60.7(a)(1) or, if the

SECTION D. Source Level Plan Approval Requirements

facility is exempt from 40 CFR § 60.7(a)(1), as an attachment to the notification required by 40 CFR § 60.7(a)(2), an operating plan containing the information listed below.

(1) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95% requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(2) a description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(b) The permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with (a)(1), above, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall submit the following:

(a) records shall be kept of all periods of operation during which the flare pilot flame is absent; and
(b) semiannual reports of all periods in which the pilot flame was absent shall be furnished to the Administrator and the Department.

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

(a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from this refrigerated propane storage tank and be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR § 60.485(b).

(b) The associated West Cold Flare (Source ID C01) shall be designed and operated to reduce inlet VOC emissions by 98% or greater, and meet the specifications described in 40 CFR § 60.18.

VII. ADDITIONAL REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This source consists of a 500,000-bbl refrigerated propane storage tank with vapor recovery system. Propane vapors are condensed to a liquid state by the vapor recovery system before being hard-piped back to the tank.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Additional applicable requirements for this refrigerated propane storage tank can be found in Section D (under Source ID 103), of this plan approval.

SECTION D. Source Level Plan Approval Requirements

Source ID: 103 Source Name: NSPS SUBPART VVA FUGITIVE EQUIPMENT LEAKS

Source Capacity/Throughput:

PROC 103 → STAC Z01

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.

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Test methods and procedures.

(a) In conducting the performance tests required in 40 CFR § 60.8, the permittee shall use the test methods in appendix A of this part or other methods and procedures as specified below, except as provided in 40 CFR § 60.8(b).
(b) The permittee shall determine compliance with the standards in 40 CFR §§ 60.482-1a through 60.482-11a and 60.483a, as follows:
(1) EPA Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in EPA Method 21. The following calibration gases shall be used:
(i) zero air (less than 10 ppm of hydrocarbon in air); and
(ii) a mixture of methane or n-hexane and air at a concentration no more than 2,000 ppm greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.

(2) a calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in EPA Method 21, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the instrument reading for each scale used as specified in 40 CFR § 60.486a(e)(7). Calculate the average algebraic difference between the three meter readings and the most recent calibration value. Divide this algebraic difference by the initial calibration value and multiply by 100 to express the calibration drift as a percentage. If any calibration drift assessment shows a negative drift of more than 10% from the initial calibration value, then all equipment monitored since the last calibration with instrument readings below the appropriate leak definition and above the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) must be re-monitored. If any calibration drift assessment shows a positive drift of more than 10% from the initial calibration value, then, at the permittee's discretion, all equipment since the last calibration with instrument readings above the appropriate leak definition and below the leak definition multiplied by (100 plus the percent of positive drift/divided by 100) may be re-monitored.

(c) The permittee shall determine compliance with the no-detectable-emission standards in 40 CFR §§ 60.482-2a(e), 60.482-3a(i), 60.482-4a, 60.482-7a(f), and 60.482-10a(e) as follows:
(1) the requirements of (b), above, shall apply; and
(2) EPA Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The permittee shall test each piece of equipment unless it is demonstrated that a process unit is not in VOC service (i.e., that the VOC content would never be reasonably expected to exceed 10%, by weight). For purposes of this demonstration, the following methods and procedures shall be used:
(1) procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93

SECTION D. Source Level Plan Approval Requirements

shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment;

(2) organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid; and

(3) engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, (d)(1)–(2), above, shall be used to resolve the disagreement.

(e) The permittee shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:

(1) the vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 shall be used to determine the vapor pressures;

(2) the total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H2O at 68 °F) is equal to or greater than 20%, by weight; and

(3) the fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d)–(e) and (g) of this condition shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) The permittee shall determine compliance with the standards of flares as follows:

(1) EPA Method 22 shall be used to determine visible emissions;

(2) a thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare;

(3) the maximum permitted velocity for air assisted flares shall be computed using the following equation:

Vmax = K1 + K2HT

Where:

Vmax = Maximum permitted velocity, m/sec (ft/sec);

HT = Net heating value of the gas being combusted, MJ/scm (Btu/scf);

K1 = 8.706 m/sec = 28.56 ft/sec; and

K2 = 0.7084 m4/(MJ-sec) = 0.087 ft4/(Btu-sec).

(4) the net heating value (HT) of the gas being combusted in a flare shall be computed using the equation found in 40 CFR § 60.485(g)(4);

(5) EPA Method 18 or ASTM D6420-99 (2004) (where the target compound(s) are those listed in Section 1.1 of ASTM D6420-99, and the target concentration is between 150 ppbv and 100 ppmv) and ASTM D2504-67, 77, or 88 (Reapproved 1993) shall be used to determine the concentration of sample component “i”;

(6) ASTM D2382-76 or 88 or D4809-95 shall be used to determine the net heat of combustion of component “i” if published values are not available or cannot be calculated; and

(7) EPA Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

(h) The permittee shall determine compliance with 40 CFR §§ 60.483-1a or §60.483-2a, as follows:

(1) the percent of valves leaking shall be determined using the following equation:

%VL = (VL / VT) * 100

Where:

%VL = Percent leaking valves;

VL = Number of valves found leaking; and

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

(2) the total number of valves monitored shall include difficult-to-monitor and unsafe-to-monitor valves only during the monitoring period in which those valves are monitored;

(3) the number of valves leaking shall include valves for which repair has been delayed;

(4) any new valve that is not monitored within 30 days of being placed in service shall be included in the number of valves leaking and the total number of valves monitored for the monitoring period in which the valve is placed in service;

(5) if the process unit has been subdivided in accordance with 40 CFR § 60.482-7a(c)(1)(ii), the sum of valves found leaking during a monitoring period includes all subgroups; and

(6) the total number of valves monitored does not include a valve monitored to verify repair.

SECTION D. Source Level Plan Approval Requirements

III. MONITORING REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall use dataloggers and/or other electronic data collection devices for all data collection during all LDAR monitoring. The permittee shall ensure that the responsible personnel transfer, on a daily basis, electronic data from electronic datalogging devices to the electronic database. For each monitoring event in which an electronic data collection device is used, the collected monitoring data shall include an accurate time and date stamp, the monitoring reading, and identifying information on the operator and the instrument used to perform the monitoring.

The permittee may use paper logs where necessary or more feasible (e.g., small rounds, remonitoring, or when dataloggers are not available or broken), and shall record, at a minimum, the identification of the technician undertaking the monitoring, the date, daily start and end times for the monitoring conducted, each monitoring reading, and the identification of the monitoring equipment. The permittee shall transfer any manually recorded monitoring data to the electronic database within 7 days of monitoring.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-11a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Standards: Connectors in gas/vapor service and in light liquid service.

(a) The permittee shall initially monitor all connectors in the process unit for leaks by no later than 12 months after initial startup. If all connectors in the process unit have been monitored for leaks prior to the compliance date, no initial monitoring is required provided either no process changes have been made since the monitoring or the permittee can determine that the results of the monitoring, with or without adjustments, reliably demonstrate compliance despite process changes. If required to monitor because of a process change, the permittee is required to monitor only those connectors involved in the process change.

(b) Except as allowed in 40 CFR §§ 60.482-1a(c), 60.482-10a, or as specified in (e), below, the permittee shall monitor all connectors in gas and vapor and light liquid service, as specified in (a) and (b)(3) of this condition.

(1) The connectors shall be monitored to detect leaks by the method specified in 40 CFR § 60.485a(b) and, as applicable, 40 CFR § 60.485a(c).

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

(3) The permittee shall perform monitoring, subsequent to the initial monitoring required in (a), above, as specified in (b)(3)(i)–(iii) of this condition, and shall comply with the requirements of (b)(3)(iv)–(v), below. The required period in which monitoring must be conducted shall be determined from (b)(3)(i)–(iii), below, using the monitoring results from the preceding monitoring period. The percent leaking connectors shall be calculated as specified in (c), below.

(i) if the percent leaking connectors in the process unit was greater than or equal to 0.5%, then monitor within 12 months (1 year);

(ii) if the percent leaking connectors in the process unit was greater than or equal to 0.25% but less than 0.5%, then monitor within 4 years. The permittee may comply with the requirements of (b)(3) by monitoring at least 40% of the connectors within 2 years of the start of the monitoring period, provided all connectors have been monitored by the end of the 4-year monitoring period.

(iii) if the percent leaking connectors in the process unit was less than 0.25 percent, then monitor as provided in (b)(3)(iii)(A), below and either (b)(3)(iii)(B) or (b)(3)(iii)(C), below, as appropriate.

(A) the permittee shall monitor at least 50% of the connectors within 4 years of the start of the monitoring period.

(B) if the percent of leaking connectors calculated from the monitoring results in (b)(3)(iii)(A), above is greater than or equal to 0.35% of the monitored connectors, the permittee shall monitor as soon as practical, but within the next 6 months, all connectors that have not yet been monitored during the monitoring period. At the conclusion of monitoring, a new monitoring period shall be started, pursuant to (b)(3), above, based on the percent of leaking connectors within the total monitored connectors.

(C) if the percent of leaking connectors calculated from the monitoring results in (b)(3)(iii)(A), above, is less than 0.35% of the monitored connectors, the permittee shall monitor all connectors that have not yet been monitored within 8 years of the start of the monitoring period.

(iv) If during the monitoring conducted in (b)(3)(i)–(iii), above, a connector is found to be leaking, it shall be re-monitored once within 90 days after repair to confirm that it is not leaking.

(v) The permittee shall keep a record of the start date and end date of each monitoring period under this condition for each process unit.

SECTION D. Source Level Plan Approval Requirements

(c) For use in determining the monitoring frequency, as specified in (a) and (b)(3), above, the percent leaking connectors as used in (a) and (b)(3), above shall be calculated by using the following equation:

%CL = CL/ Ct* 100

Where:

%CL = Percent of leaking connectors as determined through periodic monitoring required in (a) and (b)(3)(i)–(iii), above;

CL = Number of connectors measured at 500 ppm or greater, by the method specified in 40 CFR § 60.485a(b); and

Ct = Total number of monitored connectors in the process unit or affected facility.

(d) When a leak is detected, pursuant to (a)–(b), above, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR § 60.482-9a. A first attempt at repair as defined in this subpart shall be made no later than 5 calendar days after the leak is detected.

(e) Any connector that is designated, as described in (e)(1)–(2), below, as an unsafe-to-monitor connector is exempt from the requirements of (a)–(b), above if:

(1) the permittee demonstrates that the connector is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with (a)–(b), above; and

(2) the permittee has a written plan that requires monitoring of the connector as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in (d), above, if a leak is detected.

(f) Inaccessible, ceramic, or ceramic-lined connectors.

(1) Any connector that is inaccessible or that is ceramic or ceramic-lined (e.g., porcelain, glass, or glass-lined), is exempt from the monitoring requirements of (a)–(b), above, from the leak repair requirements of (d), above, and from the recordkeeping and reporting requirements of 40 CFR §§ 63.1038–63.1039. An inaccessible connector is one that meets any of the provisions specified in (f)(1)(i)–(vi), below, as applicable:

(i) buried;

(ii) insulated in a manner that prevents access to the connector by a monitor probe;

(iii) obstructed by equipment or piping that prevents access to the connector by a monitor probe;

(iv) unable to be reached from a wheeled scissor-lift or hydraulic-type scaffold that would allow access to connectors up to 7.6 meters (25 feet) above the ground;

(v) inaccessible because it would require elevating the monitoring personnel more than 2 meters (7 feet) above a permanent support surface or would require the erection of scaffold; or

(vi) not able to be accessed at any time in a safe manner to perform monitoring. Unsafe access includes, but is not limited to, the use of a wheeled scissor-lift on unstable or uneven terrain, the use of a motorized man-lift basket in areas where an ignition potential exists, or access would require near proximity to hazards such as electrical lines, or would risk damage to equipment.

(2) If any inaccessible, ceramic, or ceramic-lined connector is observed by visual, audible, olfactory, or other means to be leaking, the visual, audible, olfactory, or other indications of a leak to the atmosphere shall be eliminated as soon as practical.

(g) Except for instrumentation systems and inaccessible, ceramic, or ceramic-lined connectors meeting the provisions of (f), above, the permittee shall identify the connectors subject to the requirements of this condition. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Standards: Pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid or heavy liquid service.

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at valves in heavy liquid service, the permittee shall follow either of the following procedures:

(1) the permittee shall monitor the equipment within 5 days by the method specified in 40 CFR § 60.485a(b) and shall comply with (b)–(d), below; or

SECTION D. Source Level Plan Approval Requirements

(2) the permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.
(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(c) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR § 60.482-9a, with the first attempt at repair made no later than 5 calendar days after each leak is detected.
(d) First attempts at repair include, but are not limited to, the best practices described in 40 CFR §§ 60.482-2a(c)(2) and 60.482-7a(e).

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

Records of the first attempt at repair shall be maintained on site.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486a]
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Recordkeeping requirements.

(a) The permittee shall record the following information for each monitoring event required by 40 CFR §§ 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a:
(1) monitoring instrument identification;
(2) operator identification;
(3) equipment identification;
(4) date of monitoring; and
(5) instrument reading.

(b) When each leak is detected as specified in 40 CFR §§ 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following requirements apply:
(1) a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment;
(2) the identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR § 60.482-7a(c) and no leak has been detected during those 2 months;
(3) the identification on a connector may be removed after it has been monitored as specified in 40 CFR § 60.482-11a(b)(3)(iv) and no leak has been detected during that monitoring; and
(4) the identification on equipment, except on a valve or connector, may be removed after it has been repaired.

(c) When each leak is detected as specified in 40 CFR §§ 60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, 60.482-11a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for a minimum of 5 years in a readily accessible location:
(1) the instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak;
(2) the date the leak was detected and the dates of each attempt to repair the leak;
(3) repair methods applied in each attempt to repair the leak;
(4) maximum instrument reading measured by EPA Method 21 at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping;
(5) "repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak;
(6) the signature of the employee (or other designee of the permittee) whose decision it was that repair could not be effected without a process shutdown;
(7) the expected date of successful repair of the leak if a leak is not repaired within 15 days;
(8) dates of process unit shutdowns that occur while the equipment is unrepaired; and
(9) the date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR § 60.482-10a shall be recorded and kept in a readily accessible location:
(1) detailed schematics, design specifications, and piping and instrumentation diagrams;

(2) the dates and descriptions of any changes in the design specifications;
(3) a description of the parameter or parameters monitored, as required in 40 CFR § 60.482-10a(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring;
(4) periods when the closed vent systems and control devices required in 40 CFR §§ 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a are not operated as designed, including periods when a flare pilot light does not have a flame; and
(5) dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR §§ 60.482-2a, 60.482-3a, 60.482-4a, and 60.482-5a.

(e) The following information pertaining to all equipment subject to the requirements in 40 CFR §§ 60.482-1a to 60.482-11a shall be recorded in a log that is kept in a readily accessible location:
(1) a list of identification numbers for equipment subject to the requirements of this subpart;
(2) a list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR §§ 60.482-2a(e), 60.482-3a(i), and 60.482-7a(f). The designation of equipment as subject to these requirements shall be signed by the permittee. Alternatively, the permittee may establish a mechanism with PADEP that satisfies this requirement;
(3) a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR § 60.482-4a;
(4) the dates of each compliance test as required in 40 CFR §§ 60.482-2a(e), 60.482-3a(i), 60.482-4a, and 60.482-7a(f);
(i) the background level measured during each compliance test.
(ii) the maximum instrument reading measured at the equipment during each compliance test.
(5) a list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hrs/yr in accordance with 40 CFR § 60.482-1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hrs/yr;
(6) the date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service;
(7) records of the information specified in (i)–(vi), below, for monitoring instrument calibrations conducted according to Sections 8.1.2 and 10 of EPA Method 21 and 40 CFR § 60.485a(b);
(i) Date of calibration and initials of operator performing the calibration.
(ii) Calibration gas cylinder identification, certification date, and certified concentration.
(iii) Instrument scale(s) used.
(iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with Section 10.1 of EPA Method 21.
(v) Results of each calibration drift assessment required by 40 CFR § 60.485a(b)(2) (i.e., instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value).
(vi) If the permittee makes their own calibration gas, a description of the procedure used.

(8) the connector monitoring schedule for each process unit as specified in 40 CFR § 60.482-11a(b)(3)(v);
(9) records of each release from a pressure relief device subject to 40 CFR § 60.482-4a; and
(10) if applicable, a list of identification numbers for equipment in vacuum service.

(f) The following information pertaining to all valves subject to the requirements of 40 CFR § 60.482-7a(g)–(h), all pumps subject to the requirements of 40 CFR § 60.482-2a(g), and all connectors subject to the requirements of 40 CFR § 60.482-11a(e) shall be recorded in a log that is kept in a readily accessible location:
(1) a list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector; and
(2) a list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) The following information shall be recorded for valves complying with 40 CFR § 60.483-2a:
(1) a schedule of monitoring; and
(2) the percent of valves found leaking during each monitoring period.

(h) The following information shall be recorded in a log that is kept in a readily accessible location:
(1) design criterion required in 40 CFR §§ 60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and
(2) any changes to this criterion and the reasons for the changes.

SECTION D. Source Level Plan Approval Requirements

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR § 60.480a(d):
(1) an analysis demonstrating the design capacity of the affected facility;
(2) a statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and
(3) an analysis demonstrating that equipment is not in VOC service.

(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

(k) The provisions of 40 CFR § 60.7(b) and (d) do not apply to affected facilities subject to 40 CFR Part 60, Subpart VVa.

V. REPORTING REQUIREMENTS.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487a]
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Reporting requirements.

(a) The permittee shall submit semiannual reports to the Administrator and the Department beginning 6 months after the initial startup date.
(b) The initial semiannual report shall include the following information:
(1) process unit identification;
(2) number of valves subject to the requirements of 40 CFR § 60.482-7a, excluding those valves designated for no detectable emissions under the provisions of 40 CFR § 60.482-7a(f);
(3) If applicable, number of pumps subject to the requirements of 40 CFR § 60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of 40 CFR § 60.482-2a(e) and those pumps complying with 40 CFR § 60.482-2a(f);
(4) if appliable, number of compressors subject to the requirements of 40 CFR § 60.482-3a, excluding those compressors designated for no detectable emissions under the provisions of 40 CFR § 60.482-3a(i) and those compressors complying with 40 CFR § 60.482-3a(h); and
(5) number of connectors subject to the requirements of 40 CFR § 60.482-11a;

(c) All semiannual reports shall include the following information, summarized from the information in 40 CFR § 60.486a:
(1) process unit identification;
(2) for each month during the semiannual reporting period:
(i) Number of valves for which leaks were detected as described in 40 CFR § 60.482-7a(b) or §60.483-2a;
(ii) Number of valves for which leaks were not repaired as required in 40 CFR § 60.482-7a(d)(1);
(iii) Number of pumps for which leaks were detected as described in 40 CFR § 60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii);
(iv) Number of pumps for which leaks were not repaired as required in 40 CFR § 60.482-2a(c)(1) and (d)(6);
(v) Number of compressors for which leaks were detected as described in 40 CFR § 60.482-3a(f);
(vi) Number of compressors for which leaks were not repaired as required in 40 CFR § 60.482-3a(g)(1);
(vii) Number of connectors for which leaks were detected as described in 40 CFR § 60.482-11a(b);
(viii) Number of connectors for which leaks were not repaired as required in 40 CFR § 60.482-11a(d); and
(ix) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) dates of process unit shutdowns which occurred within the semiannual reporting period; and
(4) revisions to items reported according to (b), above, if changes have occurred since the initial report or subsequent revisions to the initial report.

(d) The permittee electing to comply with the provisions of 40 CFR §§60.483-1a or 60.483-2a shall notify the Administrator and the Department of the alternative standard selected at least 90 days before implementing either of the provisions.

(e) The permittee shall report the results of all performance tests in accordance with 40 CFR § 60.8. The provisions of 40 CFR § 60.8(d) do not apply to affected facilities subject to the provisions of 40 CFR Part 60, Subpart VVa, except that the

SECTION D. Source Level Plan Approval Requirements

permittee must notify the Administrator and the Department of the schedule for the initial performance tests at least 30 days before the initial performance tests.
(f) The requirements of (a)–(c), above, remain in force until and unless EPA, in delegating enforcement authority to a state under section 111(c) of the CAA, approves reporting requirements or an alternative means of compliance surveillance adopted by such state. In that event, affected sources within the state will be relieved of the obligation to comply with the requirements of (a)–(c), above, provided that they comply with the requirements established by the state.

VI. WORK PRACTICE REQUIREMENTS.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

To the extent that good engineering practice will permit, valves and piping connections shall be so located to be accessible for leak-checking. Non-accessible valves, as approved by the Department, shall be identified, with the approved list maintained on site.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

All piping connections shall be welded or flanged, except that threaded connections are permissible on piping smaller than 2 inches in diameter. Gas or hydraulic testing of the piping connections at no less than operating pressure shall be performed prior to installation or returning the components to service, or they shall be monitored for leaks using an approved gas analyzer within eight (8) hours of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.

Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. Except during sampling, the second valve shall be closed. If 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 twenty-four (24) hours. If the repair or replacement is not completed within twenty-four (24) hours, a cap, blind flange, plug, or second valve must be installed.

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Damaged or leaking valves or connectors found to be emitting compounds by visual inspection to be leaking (e.g., dripping process fluids) shall be date-tagged with a weatherproof and readily visible identification number and date the leak was found. The tag shall remain in place until the component is replaced or repaired.

Damaged or leaking pump, compressor, and agitator seals found to be emitting compounds by visual inspection to be leaking (e.g., dripping process fluids) shall be date-tagged with a weatherproof and readily visible identification number and date the leak was found. The tag shall remain in place until the component is replaced or repaired.

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

When a leak is detected, it shall be repaired as soon as practical, but no later than 15 days after it is detected. A first attempt of repair shall be made no later than 5 calendar days after the leak is detected. Following the repair or replacement, the part shall be monitored for leakage and the results recorded.

If the repair of a component would require a unit shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging. A listing of all components that qualify for delay of repair shall be maintained on a "delay of repair" list. The cumulative daily emissions from all components on the delay of repair list shall be estimated using EPA's Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-107 and using the emission factors in Table 2-1, or other Department and EPA approved equivalent. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shutdown, the Department shall be notified and may require early unit shutdown, or other appropriate action based on the number and severity of tagged leaks awaiting shutdown.

SECTION D. Source Level Plan Approval Requirements

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

All piping, valves, relief valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI), American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

 # 013 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

All underground piping shall contain no buried valves, and all buried connectors shall be welded.

 # 014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is derived from 40 CFR § 60.482-2a and 25 Pa. Code Chapter 122 and § 127.205(1).]

As applicable.

(a) Each pump in light liquid service shall be:
(1) monitored monthly to detect leaks by the methods specified in 40 CFR § 60.485a(b), except as provided in 40 CFR § 60.482-1a(c) and (f), and in (d)–(f), below. A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in 40 CFR § 60.482-1a(c), and in (d)–(f), below.
(2) checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR § 60.482-1a(f).

(b) Leaks.
(1) A leak is defined as 500 parts per million (ppm) or greater for all pumps.
(2) If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in either (b)(2)(i) or (ii), below. This requirement does not apply to a pump that was monitored after a previous weekly inspection and the instrument reading was less than the concentration specified in (b)(1)(i) or (ii), above, whichever is applicable:
(i) monitor the pump within 5 days as specified in 40 CFR § 60.485a(b). A leak is detected if the instrument reading measured during monitoring indicates a leak as specified in (b)(1)(i) or (ii), above. The leak shall be repaired using the procedures in (c), below; or
(ii) designate the visual indications of liquids dripping as a leak, and repair the leak using either the procedures in (c), below, or by eliminating the visual indications of liquids dripping.

(c) Leak Detection.
(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR § 60.482-9a.
(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in (c)(2)(i)–(ii), below.
(i) tightening the packing gland nuts; and
(ii) ensuring that the seal flush is operating at design pressure and temperature.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of (a), above, provided the requirements specified in (d)(1)–(6), below, are met:
(1) Each dual mechanical seal system is:
(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR § 60.482-10a; or
(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
(2) The barrier fluid system is in heavy liquid service or is not in VOC service.
(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

SECTION D. Source Level Plan Approval Requirements

(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals. If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the permittee shall follow the procedure specified in either (d)(4)(i) or (ii), below, prior to the next required inspection.

(i) Monitor the pump within 5 days as specified in 40 CFR § 60.485a(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 500 ppm or greater is measured, a leak is detected; or

(ii) Designate the visual indications of liquids dripping as a leak.

(5)(i) Each sensor as described in (d)(3), above, is checked daily or is equipped with an audible alarm.

(ii) The permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in (d)(5)(ii), above, a leak is detected.

(6) When a leak is detected pursuant to (d)(4)(i), above, it shall be repaired as specified in (c), above.

(i) A leak detected pursuant to (d)(5)(iii), above, shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.

(ii) A designated leak pursuant to (d)(4)(ii), above, shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

(e) Any pump that is designated, as described in 40 CFR § 60.486a(e)(1)–(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of (a) and (c)–(d), above, if the pump:

(1) has no externally actuated shaft penetrating the pump housing;

(2) is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in 40 CFR § 60.485a(c); and

(3) Is tested for compliance with (e)(2), above, initially upon designation, annually, and at other times requested by the Administrator or the Department.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of 40 CFR § 60.482-10a, it is exempt from (a)–(e), above.

(g) Any pump that is designated, as described in 40 CFR § 60.486a(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements in (a) and (d)(4)–(6), above, if:

(1) the permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with (a), above; and

(2) the permittee has a written plan that requires monitoring of the pump as frequently as practicable during safe-to monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in (c), above, if a leak is detected.

[Compliance with this streamlined plan approval condition assures compliance with the leak definition for pumps of 2,000 ppm indicated in 40 C.F.R. § 60.482-2a(b)(1)(ii).]

 # 015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is derived from 40 CFR § 60.482-7a and 25 Pa. Code Chapter 122 and § 127.205(1).]

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR § 60.485a(b) and shall comply with (b)–(d), below, except as provided in (e)–(g), below, and 40 CFR §§ 60.482-1a(c) and (f), 60.483-1a, and 60.483-2a;

(1) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to (a) or (a)(2), of this condition, except for a valve that replaces a leaking valve and except as provided in (e)–(f), below, and 40 CFR §§ 60.482-1a(c), 60.483-1a, and 60.483-2a.

(2) The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation. If the existing valves in the process unit are monitored in accordance with 40 CFR §§ 60.483-1a or 60.483-2a, count the new valve as leaking when calculating the percentage of valves leaking as described in 40 CFR § 60.483-2a(b)(5). If less than 0.5% of the valves are leaking for that process unit, the valve must be monitored for the first time during the next

SECTION D. Source Level Plan Approval Requirements

scheduled monitoring event for existing valves in the process unit or within 90 days, whichever comes first.

(b) If an instrument reading of 500 ppm or greater is measured, a leak is detected.
(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup.
(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(c) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR § 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(d) First attempts at repair include, but are not limited to, the following best practices where practicable:
(1) tightening of bonnet bolts;
(2) replacement of bonnet bolts;
(3) tightening of packing gland nuts; and
(4) injection of lubricant into lubricated packing.

(e) Any valve that is designated, as described in 40 CFR § 60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of (a), above, if the valve:
(1) has no external actuating mechanism in contact with the process fluid;
(2) is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR § 60.485a(c); and
(3) is tested for compliance with (e)(2), above, initially upon designation, annually, and at other times requested by the Administrator.

(f) Any valve that is designated, as described in 40 CFR § 60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of (a), above, if:
(1) the permittee demonstrates that the valve is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with the requirements of (a), above; and
(2) the permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(g) Any valve that is designated, as described in 40 CFR § 60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of (a), above, if:
(1) the permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters (7 feet) above a support surface;
(2) the process unit within which the valve is located has less than 3.0% of its total number of valves designated as difficult-to-monitor; and
(3) the permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

[Compliance with this streamlined plan approval condition assures compliance with the leak percentage for valves required for a reduction in monitoring frequency of 2.0% indicated in 40 C.F.R. § 60.482-7a(a)(2)(ii).]

 # 016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is derived from 40 CFR §§ 60.483-1a(b)–(d) and 60.483-2a(b)(1)–(6), and 25 Pa. Code Chapter 122 and § 127.205(1).]

(a) The permittee shall not have a facility with a leak percentage greater than 2.0%, determined as described in 40 CFR § 60.485a(h).

(b) The following requirements shall be met to comply with an allowable percentage of valves leaking:
(1) a performance test as specified in (c), below, shall be conducted initially upon issuance of this plan approval, annually, and at other times as requested by the Administrator or the Department.

SECTION D. Source Level Plan Approval Requirements

(3) if a valve leak is detected, it shall be repaired in accordance with 40 CFR § 60.482-7a(d)–(e).

(c) Performance tests shall be conducted in the following manner:
(1) all valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in 40 CFR § 60.485a(b);
(2) if an instrument reading of 500 ppm or greater is measured, a leak is detected; and
(3) the leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the facility.

(d) The permittee shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in 40 CFR § 60.482-7a.
(1) After two consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 0.5%, the permittee may begin to skip one of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
(2) After five consecutive quarterly leak detection periods with the percentage of valves leaking equal to or less than 0.5%, the permittee may begin to skip three of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
(3) If the percentage of valves leaking is greater than 0.5%, the leak detection periods shall revert to quarterly (until compliance with (d)(1) or (2), above, is reestablished).
(4) The percentage of valves leaking shall be determined as described in 40 CFR § 60.485a(h).
(5) The permittee must keep a record of the percent of valves found leaking during each leak detection period.
(6) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for a process unit following one of the alternative standards in this section must be monitored in accordance with 40 CFR § 60.482-7a(a)(2)(i) or (ii) before the provisions of this condition can be applied to that valve.

 # 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Standards: Closed vent systems and control devices.

As applicable.

WORK PRACTICE STANDARD
(a) The vapor recovery system shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95% or greater.

MONITOR
(b) The permittee shall monitor the control devices to ensure that they are operated and maintained in conformance with their designs.
(c) Except as provided in (f)–(h), below, the permittee shall inspect the vapor collection system or closed vent system as follows:
(1) conduct an initial inspection according to the procedures in 40 CFR § 60.485a(b); and
(2) conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
(3) if the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:
(i) conduct an initial inspection according to the procedures in 40 CFR § 60.485a(b); and
(ii) conduct annual inspections according to the procedures in 40 CFR § 60.485a(b).

WORK PRACTICE STANDARD
(d) Leaks, as indicated by an instrument reading greater than 500 ppmv above background or by visual inspections, shall be repaired as soon as practicable except as provided in (e), below.
(1) a first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
(2) repairs shall be completed no later than 15 calendar days after the leak is detected.

(e) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
(f) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection

SECTION D. Source Level Plan Approval Requirements

requirements of (c)(1)–(2), above.
(g) Any parts of the closed vent system that are designated, as described in (g)(1), below, as unsafe to inspect are exempt from the inspection requirements of (c)(1)–(2), above, if they comply with the requirements in (g)(1)–(2), below:
(1) the permittee determines 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 (c)(1)–(2), above; and
(2) the permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to inspect times.

(h) Any parts of the vapor recovery system that are designated, as described in (h)(2), below, as difficult to inspect are exempt from the inspection requirements of (c)(1)–(2), above, if they comply with the requirements specified in (h)(1)–(3), below:
(1) the permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters (7 feet) above a support surface; and
(2) the process unit within which the vapor recovery system is located becomes an affected facility through 40 CFR §§ 60.14 or 60.15, or the permittee designates less than 3.0% of the total number of vapor recovery system equipment as difficult to inspect; and
(3) the permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

RECORDS
(i) The permittee shall record the following:
(1) identification of all parts of the vapor recovery system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment;
(2) identification of all parts of the vapor recovery system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment;
(3) for each inspection during which a leak is detected, a record of the information specified in 40 CFR § 60.486a(c);
(4) for each inspection conducted in accordance with 40 CFR § 60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected; and
(5) for each visual inspection conducted in accordance with (c)(2), above, during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(j) The vapor recovery system used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

 # 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-1a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Standards: General.

(a) The permittee shall demonstrate compliance with the requirements of 40 CFR §§ 60.482-1a through 60.482-10a, as applicable, or 40 CFR § 60.480a(e) for all equipment within 180 days of initial startup.
(b) Compliance with 40 CFR §§ 60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR § 60.485a.
(c) The permittee may request a determination of equivalence of a means of emission limitation to the requirements of 40 CFR §§ 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, and 60.482-10a as provided in §60.484a. If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of 40 CFR §§ 60.482-2a, 60.482-3a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, or 60.482-10a, the permittee shall comply with the requirements of that determination.
(d) Equipment that the permittee designates as being in VOC service less than 300 hrs/yr is excluded from the requirements of 40 CFR §§ 60.482-2a through 60.482-11a, if it is identified as required in 40 CFR § 60.486a(e)(6) and it meets any of the conditions specified in (d)(1)–(3), below:
(1) the equipment is in VOC service only during startup and shutdown, excluding startup and shutdown between batches of the same campaign for a batch process;
(2) the equipment is in VOC service only during process malfunctions or other emergencies; or
(3) the equipment is backup equipment that is in VOC service only when the primary equipment is out of service.

(e) If a dedicated batch process unit operates less than 365 days during a year, the permittee may monitor to detect leaks

SECTION D. Source Level Plan Approval Requirements

from pumps, valves, and open-ended valves or lines at the frequency specified as follows instead of monitoring as specified in 40 CFR §§ 60.482-2a, 60.482-7a, and 60.483.2a:

(1) If used less than 25% of the hours of the year, then the equivalent monitoring frequency shall be as follows:
(i) Monthly - performed quarterly
(ii) Quarterly - performed annually
(iii) Semiannally - performed annually

(2) If used 25% or more, but less than 50% of the hours of the year, then the equivalent monitoring frequency shall be as follows:
(i) Monthly - performed quarterly
(ii) Quarterly - performed semi-annually
(iii) Semiannally - performed annually

(3) If used 50% or more, but less than 75% of the hours of the year, then the equivalent monitoring frequency shall be as follows:
(i) Monthly - performed bimonthly
(ii) Quarterly - performed three quarters
(iii) Semiannally - performed semiannually

(4) If used 75% or more, but less than 100% of the hours of the year, then the equivalent monitoring frequency shall be as follows:
(i) Monthly - performed monthly
(ii) Quarterly - performed quarterly
(iii) Semiannally - performed semiannually

(f) Pumps and valves that are shared among two or more batch process units that are subject to 40 CFR 60, Subpart VVa, may be monitored at the frequencies specified in (e), above, provided the operating time of all such process units is considered.

(g) The monitoring frequencies specified in (e), above, are not requirements for monitoring at specific intervals and can be adjusted to accommodate process operations. The permittee may monitor at any time during the specified monitoring period (e.g., month, quarter, year), provided the monitoring is conducted at a reasonable interval after completion of the last monitoring campaign. Reasonable intervals are defined in (g)(1)–(4), below:
(1) when monitoring is conducted quarterly, monitoring events must be separated by at least 30 calendar days;
(2) when monitoring is conducted semiannually (i.e., once every 2 quarters), monitoring events must be separated by at least 60 calendar days;
(3) when monitoring is conducted in three quarters per year, monitoring events must be separated by at least 90 calendar days; and
(4) when monitoring is conducted annually, monitoring events must be separated by at least 120 calendar days.

(h) If the storage vessel is shared with multiple process units, the process unit with the greatest annual amount of stored materials (predominant use) is the process unit the storage vessel is assigned to. If the storage vessel is shared equally among process units, and one of the process units has equipment subject to 40 CFR Part 60, Subpart VVa, the storage vessel is assigned to that process unit. If the storage vessel is shared equally among process units, none of which have equipment subject to 40 CFR Part 60, Subpart VVa, the storage vessel is assigned to any process unit subject to 40 CFR Part 60, Subpart VVa. If the predominant use of the storage vessel varies from year to year, then the permittee must estimate the predominant use initially and reassess every 3 years. The permittee must keep records of the information and supporting calculations that show how predominant use is determined. All equipment on the storage vessel must be monitored when in VOC service.

(i) If applicable, equipment that is in vacuum service is excluded from the requirements of 40 CFR §§ 60.482-2a through 60.482-10a if it is identified as required in 40 CFR § 60.486a(e)(5).

 # 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Standards: Compressors.

As applicable.

SECTION D. Source Level Plan Approval Requirements

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR § 60.482-1a(c), and in (h)–(j), below.
(b) Each compressor seal system as required in paragraph (a) of this section shall be:
(1) operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
(2) equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR § 60.482-10a; or
(3) equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.
(d) Each barrier fluid system as described in (a), above, shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
(e) Each sensor as required in (d), above, shall be checked daily or shall be equipped with an audible alarm. The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under (e)(2), above, a leak is detected.
(g) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR § 60.482-9a. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(h) A compressor is exempt from the requirements of (a)–(b), above, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR § 60.482-10a, except as provided in (i), below.
(i) Any compressor that is designated, as described in 40 CFR § 60.486a(e)(1)–(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of (a)–(h), above, if the compressor:
(1) is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in 40 CFR § 60.485a(c); and
(2) is tested for compliance with (i)(1), above, initially upon designation, annually, and at other times requested by the Administrator or the Department.

(j) Any existing reciprocating compressor in a process unit which becomes an affected source under provisions of 40 CFR §§ 60.14 or 60.15 is exempt from (a)–(e) and (h), above, provided the permittee demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of (a)–(e) and (h), above.

 # 020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR § 60.485a(c).
(b) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR § 60.482-9a. No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR § 60.485a(c).
(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR § 60.482-10a is exempted from the requirements of (a)–(b), above.
(d) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of (a)–(b), above, provided that after each pressure release, the permittee installs a new rupture disk upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR § 60.482-9a.

SECTION D. Source Level Plan Approval Requirements

 # 021 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-5a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Standards: Sampling connection systems.

As applicable.

Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR § 60.482-1a(c) and the following requirements:
(a) gases displaced during filling of the sample container are not required to be collected or captured;
(b) containers that are part of a closed-purge system must be covered or closed when not being filled or emptied;
(c) gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured; and
(d) each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either (d)(1), (2), (3), or (4), below:
(1) return the purged process fluid directly to the process line;
(2) collect and recycle the purged process fluid to a process;
(3) capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR § 60.482-10a; or
(4) collect, store, and transport the purged process fluid to any of the following systems or facilities:
(i) a waste management unit as defined in 40 CFR § 63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR Part 63, Subpart G, applicable to Group 1 wastewater streams;
(ii) a treatment, storage, or disposal facility subject to regulation under 40 CFR Parts 262, 264, 265, or 266;
(iii) a facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR Part 261;
(iv) a waste management unit subject to and operated in compliance with the treatment requirements of 40 CFR § 61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 CFR §§ 61.343–347; or
(v) a device used to burn off-specification used oil for energy recovery in accordance with 40 CFR Part 279, Subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR Part 261.

(c) in-situ sampling systems and sampling systems without purges are exempt from the requirements above.

 # 022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Standards: Open-ended valves or lines.

(a) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR § 60.482-1a(c), and in (d)–(e), below. The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with (a), above.
(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of (a)–(c), above.
(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in (a)–(c), above, are exempted from those requirements.

 # 023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9a]

Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit

SECTION D. Source Level Plan Approval Requirements

shutdown. Monitoring to verify repair must occur within 15 days after startup of the process unit.
(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
(c) Delay of repair for valves and connectors will be allowed if:
(1) the permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
(2) when repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 CFR § 60.482-10a.
(d) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
(e) When delay of repair is allowed for a leaking valve, or connector that remains in service, the valve, or connector may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

VII. ADDITIONAL REQUIREMENTS.

 # 024 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The following process units with fugitive components in VOC service shall be subject to the standards codified in this source, as applicable:

(a) Source ID 101 - Refrigerated Ethane Tank;
(b) Source ID 102 - Refrigerated Propane Tank;
(c) Source ID 104 - Marine Vessel Loading (Refrigerated);
(d) Source ID 106 - Deethanizer (components "in VOC service" as defined in 40 CFR § 60.481a);
(e) Source ID 111 - Natural Gasoline Loading Rack;
(f) Source ID 117 - Refrigerated Ethane Tank;
(g) Source ID 118 - Refrigerated Butane Tank;
(h) Source ID 119 - Refrigerated Propane Tank;
(i) Source ID 120 - Refrigerated Propane Tank;
(j) Source ID 133 - Tank 246;
(k) Source ID 136 - Tank 250;
(l) Source ID 178 - Tank 527;
(m) Source ID 188 - Tank 607;
(n) Source ID 190 - Tank 609;
(o) Source ID 192 - Tank 611;
(p) Source ID 204 - Tank 253;
(q) Source ID 212 - Tank 610;
(r) The 15-2B rail loading and unloading rack for propane, butane, and natural gasoline;
(s) Source ID C01 - West Cold Flare (modified);
(t) Source ID C02 - East Cold Flare (New Tanks Project);
(u) A 50,000-bbl sphere (S20) for propane storage;
(v) A 50,000-bbl sphere (S21) for butane storage; and
(w) Three spheres for pentane storage, as follows:
(1) HS-16 (40,000 bbl);
(2) Sphere 3 (40,500 bbl); and
(3) Sphere 4 (40,500 bbl).

SECTION D. Source Level Plan Approval Requirements

Source ID: 104 Source Name: MARINE VESSEL LOADING (REFRIGERATED)

Source Capacity/Throughput: N/A ETHANE/PROPANE/BUTANE

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.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall monitor the pumping pressure and the operating parameters of the vapor recovery unit during vessel loading operations.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall visually check for cracks or other deformations in the seals between the loading arm and marine vessel before loading ethane, propane, or butane into the marine vessel.

IV. RECORDKEEPING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall record their findings of each of the above inspections and monitoring for this source.

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.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

No product shall be pumped into the loading arm until the loading arm has been properly attached to the marine vessel and the return vapor line and its equipment is functioning properly.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Prior to breaking the seal between the loading arm and the marine vessel, the permittee shall ensure that gaseous ethane, propane, and butane is sent to vapor recovery system.

VII. ADDITIONAL REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Additional applicable requirements for this source can be found in Section D (under Source ID 103), of this plan approval.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Refrigerated marine vessel loading is permitted as follows:

SECTION D. Source Level Plan Approval Requirements

(a) Dock 1A: loading of ethane, propane, and butane;
(b) Dock 2A: loading of ethane only; and
(c) Dock 3C (located in the state of Delaware): loading of propane and butane.

Each of the loading docks is equipped with two identical loading arms and one vapor return line.

SECTION D. Source Level Plan Approval Requirements

Source ID: 105 Source Name: CAVERN

Source Capacity/Throughput:

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.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall conduct a monitoring program consistent with the following requirements:

(a) check yearly, by methods referenced in 25 Pa. Code § 139.14, pump seals and pipeline valves in liquid service;
(b) check quarterly by methods referenced in 25 Pa. Code § 139.14, compressor seals, pipeline valves in gaseous service, and pressure relief valves in gaseous service;
(c) check monthly, by visual methods, all pump seals;
(d) check within 24 hours, by methods referenced in 25 Pa. Code § 139.14, pump seal from which VOC liquids are observed to be dripping;
(e) check, by methods referenced in 25 Pa. Code § 139.14, a relief valve within 24 hours after it has vented to the atmosphere;
(f) check within 72 hours after repair, by methods referenced in 25 Pa. Code § 139.14, any component that was found leaking; and
(g) record leaking components which have a VOC concentration exceeding 10,000 ppm when tested in accordance with the provisions of 25 Pa. Code § 139.14 and place an identifying tag on each component.

Pressure relief devices which are connected to an operating flare header, vapor recovery devices, inaccessible valves, storage tank valves and valves that are not externally regulated are exempt from the monitoring requirements above. Inaccessible valves will have the same meaning as provided in 40 CFR § 60.482-7(h)(1) for difficult-to-monitor components and 40 CFR § 60.482-7(g)(1) for unsafe-to-monitor components.

The permittee, upon the detection of a leaking component, shall affix a weatherproof and readily visible tag, bearing an identification number and the date upon which the leak is located to the leaking component. This tag shall remain in place until the leaking component is repaired.

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain a leaking components monitoring log, which shall contain, at a minimum, the following data:

(a) the name and process unit where the component is located;
(b) the type of component (e.g., valve, seal, etc.);
(c) the tag number of component;
(d) the dates on which the leaking component was discovered and repaired;
(e) the date and instrument reading of the recheck procedure after a leaking component was repaired;
(f) a record of the calibration of the monitoring instrument;
(g) those leaks that cannot be repaired until turnaround; and
(h) the total number of components checked and the total number of components found leaking.

Copies of the monitoring log shall be retained by the permittee for 5 years after the date on which the record was made or the report was prepared.

SECTION D. Source Level Plan Approval Requirements

Copies of the monitoring log shall immediately be made available to the Department, upon verbal or written request, at any reasonable time.

V. REPORTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

The permittee may submit to the Department a list of components the inspection of which would involve a significant element of danger. The Department may exempt the components on this list from the requirements of this section if the permittee can demonstrate to the satisfaction of the Department that a significant element of danger exists which cannot be reasonably eliminated and that these exemptions will not result in a significant reduction in the effectiveness in the control of VOC emissions. Any component so exempted by the Department prior to, or subsequent to, issuance of an operating permit is exempt from the provisions of this source.

 # 004 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

Upon completion of each yearly and quarterly monitoring procedure, the permittee shall:

(a) submit a report to the Department by the last business day of January, April, July, and October that lists:
(1) all leaking components that were located during the previous calendar quarter but not repaired within 15 days;
(2) all leaking components awaiting unit turnaround;
(3) the total number of components inspected; and
(4) the total number of components found leaking; and

(b) submit a signed statement with the report attesting to the fact that, with the exception of those leaking components listed in subcondition (a) above, monitoring and repairs were performed as stipulated in the monitoring program.

VI. WORK PRACTICE REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

Except for safety pressure relief valves and fittings on all valves equal to or smaller than 1 inch in diameter, the permittee shall not install or operate a valve at the end of a pipe or line containing VOCs unless the pipe or line is sealed with a second valve, a blind flange, a plug or a cap. The sealing device may be removed only when a sample is being taken or during maintenance operations.

 # 006 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

The permittee shall:

(a) repair and retest the leaking components as soon as possible. Every reasonable effort shall be made to repair each leak within 15 days unless a unit shutdown is required to make the necessary repair; and
(b) identify leaking components which cannot be repaired until the unit is shutdown.

 # 007 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

Pipeline valves and pressure relief valves in gaseous VOC service shall be marked in some manner that will be readily obvious to both the personnel performing the monitoring and the Department.

 # 008 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

(a) The permittee may submit an alternative plan for the control of leaks from equipment to the Department. If the Department finds that the alternative plan will achieve an emission reduction which is equivalent to or greater than the reduction which can be achieved under this source and that the alternative plan is enforceable, then the Department will allow the implementation of this alternative plan.
(b) The permittee may submit to the Department a list of components the inspection of which would involve a significant

SECTION D. Source Level Plan Approval Requirements

element of danger. The Department may exempt the components on this list from the requirements of this source if the permittee can demonstrate to the satisfaction of the Department that a significant element of danger exists which cannot be reasonably eliminated and that these exemptions will not result in a significant reduction in the effectiveness in the control of VOC emissions.

VII. ADDITIONAL REQUIREMENTS.

 # 009 [25 Pa. Code §127.503]

Application information.

The following plant areas shall adhere to the above conditions for this source.

Cavern numbers 1, 2, 3, and 5.

SECTION D. Source Level Plan Approval Requirements

Source ID: 106A Source Name: DEMETHANIZER

Source Capacity/Throughput: N/A ETHANE/PROPANE/METHANE

PROC 106A → STAC Z01

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.

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The applicable requirements for this source can be found in Source 103 (Fugitive Equipment Leaks).

SECTION D. Source Level Plan Approval Requirements

Source ID: 111 Source Name: NATURAL GASOLINE LOADING RACK

Source Capacity/Throughput: N/A PENTANE/NAPHTHA/NATURAL G

I. RESTRICTIONS.

Fuel Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Unloading shall be limited to natural gasoline and truck/railcar loading shall be limited to refined pentane or light naphtha.

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.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall conduct weekly inspections of the loading rack hoses and fittings for leaks, cracked lines, pitting, or any similar conditions that warrant maintenance or repair.

IV. RECORDKEEPING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain records of:

(a) daily throughput and type of petroleum products loaded and unloaded at this loading rack;
(b) 12-month rolling summation of the throughput of petroleum products; and
(c) the results of the weekly hose/fitting inspections.

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.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

For this loading/unloading rack, the permittee shall ensure that all liquid and vapor lines are equipped with fittings that provide vapor-tight connections, and that close upon disconnection.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

For each tank truck, the permittee shall ensure that there are no visually or audibly detectable leaks in the truck, the pressure/vacuum relief valves, hatch covers, or associated vapor and liquid lines during loading or unloading.

SECTION D. Source Level Plan Approval Requirements

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The permittee shall assure that loading and unloading takes place only if the tank trucks are equipped with vapor collection equipment that is compatible with the facility's vapor collection system.
(b) The permittee shall act to assure that the facility's and the tank truck's vapor collection systems are connected during each loading and unloading operation. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the loading racks.

VII. ADDITIONAL REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

For the purpose of this plan approval, natural gasoline (also called liquid natural gas) is defined as a natural gas liquid having a vapor pressure between that of natural gas condensate (drip gas) and liquefied petroleum gas and having a boiling point within the range of gasoline. These are generally the C5's (pentane and isopentane) and heavier hydrocarbon chains (commonly called naphthas) that are liquids at ambient pressure and temperature.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Applicable requirements for this natural gasoline loading rack can be found in Section D (under Source ID 103), of this plan approval.

SECTION D. Source Level Plan Approval Requirements

Source ID: 112 Source Name: NEW COOLING TOWERS

Source Capacity/Throughput: 4.800 M Gal/HR WATER

PROC 112 → STAC Z112

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Total PM emissions from these cooling towers shall not exceed the following:

(a) Mariner East 1 (30,000 gpm) Cooling Tower - 0.02 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(iii) and 0.25 tons in any consecutive 12-month period;
(b) Mariner East 2 (50,000 gpm) Cooling Tower - 0.02 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(iii) and 0.40 tons in any consecutive 12-month period.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

VOC emissions from these cooling towers shall not exceed the following:

(a) Mariner East 1 (30,000 gpm) Cooling Tower - 5.52 tons in any consecutive 12-month period; and
(b) Mariner East 2 (50,000 gpm) Cooling Tower - 9.19 tons in any consecutive 12-month period.

II. TESTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) For each cooling tower the permittee shall collect a sample of the cooling water at locations where the cooling water enters and exits the heat exchanger and analyze it for VOCs to enable the early detection of leaks. For the purpose of this source, a leak is detected if the exit mean concentration is found to be greater than the entrance mean by at least 1 ppm or 10% of the entrance mean, whichever is greater.
(b) The concentration of the VOCs in the cooling water shall be determined using any EPA-approved method listed in 40 CFR Part 136. The method shall be sensitive to concentrations as low as 1 ppm and the same method shall be used for both entrance and exit samples. Alternative methods may be used upon approval by the Department and EPA.
(c) When a sample is found to contain VOCs, the permittee shall resample the following day to ensure reliability of the analysis.
(d) The value from analyzed sample(s) shall be used in the monthly VOC emission calculation.
(e) Monitoring for VOC leaks shall be performed on a monthly basis.

III. MONITORING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall inspect the high-efficiency drift eliminators on these cooling towers on a 3-year (preventative maintenance cycle) basis.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall demonstrate compliance with the PM emission limit on these cooling towers by performing a monthly analysis for specific conductivity in µmhos, or other Department-approved method.

SECTION D. Source Level Plan Approval Requirements

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall monitor the average circulation flow rate through each cooling tower on a monthly basis when the cooling tower is in operation.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall perform a daily visual and odor inspection of the cooling tower water basin for the presence of hydrocarbons. If hydrocarbons are discovered (e.g., bubbles, odor, sheen, etc.), the permittee shall follow the guidelines below for leaks for this source.

IV. RECORDKEEPING REQUIREMENTS.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The following shall be kept for each cooling tower:

(a) results of the 3-year (preventative maintenance cycle) inspections of the high efficiency drift eliminators;
(b) monthly records of the total/suspended solids and/or conductivity readings of the cooling water;
(c) average monthly cooling water circulation flow rate rate through the cooling tower;
(d) manufacturer's specifications for the design drift rate for the cooling tower;
(e) emissions of PM and VOC, including VOCs from leaks (monthly and consecutive 12-month); and
(f) results of the daily visual inspection of the cooling tower water basin.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

To delay the repair of leaks, the permittee shall record the following information:
(a) the reason(s) for delaying repair;
(b) a schedule for completing the repair as soon as practical;
(c) the date and concentration of the leak as first identified and the results of all subsequent testing/monitoring events during the delay of repair period; and
(d) an estimate of the potential VOC emissions from the leaking cooling tower for each required delay of repair monitoring interval following the procedures below:
(1) determine the leak concentration and convert the stripping gas leak concentration, in units of ppm, to an equivalent liquid concentration, in units of ppmw.
(2) determine the mass flow rate of the cooling water at the monitoring location where the leak was detected. If the monitoring location is an individual cooling tower riser, determine the total cooling water mass flow rate. Cooling water mass flow rates may be determined using direct measurement, pump curves, heat balance calculations, or other engineering methods. Volumetric flow measurements may be used and converted to mass flow rates using the density of water at the specific monitoring location temperature or using the default density of water at 8.32 lbs/gal;
(3) for delay of repair monitoring intervals prior to repair of the leak, calculate the potential VOC emissions for the leaking cooling tower for the monitoring interval by multiplying the leak concentration in the cooling water (in ppmw), determined in (d)(1), above, by the mass flow rate of the cooling water determined in (d)(2), above, and by the duration of the delay of repair monitoring interval. The duration of the delay of repair monitoring interval is the time period starting at midnight on the day of the previous monitoring event or at midnight on the day the repair would have had to be completed if the repair had not been delayed, whichever is later, and ending at midnight of the day the of the current monitoring event; and
(4) for delay of repair monitoring intervals ending with a repaired leak, calculate the potential VOC emissions by multiplying the duration of the final delay of repair monitoring interval by the leak concentration and cooling water flow rates determined for the last monitoring event prior to the re-monitoring event used to verify the leak was repaired. The duration of the final delay of repair monitoring interval is the time period starting at midnight of the day of the last monitoring event prior to remonitoring to verify the leak was repaired and ending at the time of the re-monitoring event that verified that the leak was repaired.

SECTION D. Source Level Plan Approval 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.

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) When a VOC leak is detected, the permittee shall troubleshoot and investigate for the source of the leak.

(b) Once a leak is detected, the permittee shall monitor the leak monthly until the leak has been repaired. Upon completion of the repair, the permittee shall monitor in accordance with Condition # 003(e), Section D (under Source ID 112), of this plan approval.

(c) The first attempt to isolate the leak and perform the necessary repairs shall be made no later than 14 days after the second sample results indicating a leak is returned.

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The leak shall be repaired within 45 days after identifying the leak, except as outlined in Condition # 012, Section D (under Source ID 112), of this plan approval. Actions that can be taken to achieve repair include but are not limited to:

(a) physical modifications to the leaking heat exchanger, such as welding the leak or replacing a tube;
(b) blocking the leaking tube within the heat exchanger;
(c) changing the pressure so that water flows into the process fluid;
(d) replacing the heat exchanger or heat exchanger bundle; or
(e) isolating, bypassing, or otherwise removing the leaking heat exchanger from service until it is otherwise repaired.

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee may delay the repair of a leaking heat exchanger if the criteria in (a) or (b), below, is met. The permittee must determine if a delay of repair is necessary as soon as practicable, but no later than 45 days after first identifying the leak.

(a) If the repair is technically infeasible without a shutdown and the total VOC emissions would be less than 25% of the permitted emission limits if a repair would take place, the permittee may delay repair until the next scheduled shutdown of the heat exchanger. If, during subsequent monthly monitoring, the VOC leak rate has increased, the permittee shall repair the leak within 30 days of the monitoring event indicating the increase.

(b) If the necessary equipment, parts, or personnel are not available and the total VOC concentration does not increase for all monthly monitoring periods during the delay of repair, the permittee may delay the repair for a maximum of 120 calendar days. The permittee must demonstrate that the necessary equipment, parts, or personnel were not available. If, during subsequent monthly monitoring, the VOC concentration increases, the permittee must repair the leak within 30 days of the monitoring event in which the leak was shown to increase.

 # 013 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The permittee shall not use chromium-based water treatment chemicals in these cooling towers.

(b) The cooling towers and equipment shall be installed, maintained, and operated in accordance with manufacturer's specifications.

VII. ADDITIONAL REQUIREMENTS.

 # 014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This source grouping consists of the following individual cooling towers:

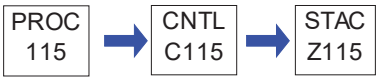
SECTION D. Source Level Plan Approval Requirements

(a) Mariner East 1 rated at 30,000 gpm capacity; and
(b) Mariner East 2 rated at 50,000 gpm capacity.

SECTION D. Source Level Plan Approval Requirements

Source ID: 115 Source Name: MARINE VESSEL LOADING

Source Capacity/Throughput: N/A PETROLEUM PRODUCTS



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.563]
Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations
Compliance and performance testing.

The permittee shall calculate an annual estimate of HAP emissions, excluding commodities exempted by 40 CFR § 63.560(d), from marine tank vessel loading operations. Emission estimates and emission factors shall be based on test data, or if test data is not available, shall be based on measurement or estimating techniques generally accepted in industry practice for operating conditions at the source. Compliance with the HAP/VOC emission reduction requirement shall be demonstrated using the methods specified in 40 CFR § 63.565 (d) and (l).

Control Device Efficiency Restriction(s).

 # 002 [25 Pa. Code §127.12b]
Plan approval terms and conditions.

All VOC vapors that result from loading of petroleum products with a Reid Vapor Pressure greater than 4.0 psia on Dock 3A, shall be processed through the vapor recovery system located on Dock 3B.

The permittee shall adhere to the following control efficiency restrictions for the Dock 3-B facilities:

(a) this plan approval is not intended to restrict the types of petroleum products that can be loaded through the marine vapor recovery system at the Dock 3A facility; and
(b) all VOC emissions shall be collected and added to the existing refinery vapor control system.

All collected emissions shall be combusted in combustion units that provide a destruction efficiency of at least 98%, by weight. The vent stream shall be introduced into the flame zone of these devices.

 # 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.562]
Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations
Standards.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 129.82.]

(a) All VOC vapors that results from loading gasoline or other normally liquid petroleum products with a Reid Vapor Pressure greater than 4.0 psia and vapors associated with the loading/unloading of any commodities with a total HAP content greater than 0.5%, by weight, shall be processed through the existing vapor recovery system.
(b) VOC and HAP emissions collected in the existing vapor control system shall be combusted in combustion units having a heat input capacity of 44 MW or greater and shall destroy HAP and VOC vapors by a minimum of 97%, by weight, and 98% by weight, respectively. The VOC reduction could alternatively be met by reducing gasoline loading emissions to, at most, 1,000 ppmv outlet VOC concentration.
(c) The permittee shall limit marine tank vessel loading operations of commodities with a total HAP content greater than 0.5%, by weight, to vessels that are vapor tight and to those vessels that are connected to the vapor collection system.

II. TESTING REQUIREMENTS.

 # 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.563]
Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations
Compliance and performance testing.

[Additional authority for this plan approval condition is derived from 40 CFR § 63.564 and 25 Pa. Code Chapter 122.]

SECTION D. Source Level Plan Approval Requirements

(a) Initial performance testing to demonstrate compliance with the operating pressure requirements of 33 CFR § 154.814 shall be conducted using the procedures in 40 § CFR 63.565(b).
(b) The permittee shall verify the accuracy of the pressure device (magnehelic gauge or equivalent device) used to demonstrate compliance with the negative pressure marine tank vessel requirement once each calendar year with a reference pressure monitor (traceable to National Institute of Standards and Technology (NIST) standards or an independent pressure measurement device dedicated for this purpose).
(c) Performance testing shall be conducted in accordance with 40 CFR §§ 63.7 and 63.565.

III. MONITORING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

When operating, the permittee shall monitor the loading of the type, quantity, and vapor pressure of petroleum products on a daily basis.

 # 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.562]

Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations

Standards.

The permittee shall:
(a) inspect and monitor all ductwork and piping connections to the vapor collection system and control devices once each calendar year using EPA Method 21;
(b) ensure that all monitoring equipment is installed such that representative measures of emissions or process parameters from the source are obtained. Equipment purchased from a vendor must include verification of the operational status of the monitoring equipment and shall include the manufacturer's written specifications;
(c) measure and record the vent stream flowrate of each by-pass line once every 15 minutes.
(1) The permittee shall install, calibrate, maintain, and operate a flow indicator and data recorder. The flow indicator shall be installed immediately downstream of any valve (i.e., entrance to by-pass line) that could divert the vent stream from the control device to the atmosphere;
(2) The permittee shall install, calibrate, maintain, and operate a flow indicator with either an audio or visual alarm. The flow indicator and alarm shall be installed immediately downstream of any valve (i.e., entrance to by-pass line) that could divert the vent stream from the control device to the atmosphere. The alarm shall be checked every 6 months to demonstrate that it is functioning properly; or
(3) Visually inspect the seal or closure mechanism once during each marine tank vessel loading operation and at least once every month to ensure that the valve is maintained in the closed position and that the vent stream is not diverted through the by-pass line; record all times when the car seals have been broken and the valve position has been changed. Each by-pass line valve shall be secured in the closed position with a car-seal or a lock-and-key type configuration.

(d) The permittee shall continuously monitor the operating pressure of the marine tank vessel during loading. Except for system breakdowns, out-of-control periods, repairs, maintenance periods, calibration checks, and zero (low-level) and high level calibration drift adjustments, all continuous parametric monitoring systems (CPMS) shall be in continuous operation while marine tank vessel loading operations are occurring and shall meet minimum frequency of operation requirements. Sources monitoring by use of CPMS shall complete a minimum of one cycle of operation (sampling, analyzing, and/or data recording) for each successive 15-minute period. The CPMS shall comply with the performance specifications either in Performance Specification 8 in 40 CFR § 63.7(c)(6).

(e) If the 3-hour or 3-cycle block average operating parameters in 40 CFR § 63.563(b)(4)–(9), outside the acceptable operating ranges, are measured and recorded (i.e., variances of the pollution control device or monitoring equipment), the permittee shall perform an unscheduled inspection of the control device and monitoring equipment and review of the parameter monitoring data. The permittee shall perform an inspection and review when total parameter variance time for the control device is greater than 10% of the operating time for marine tank vessel loading operations on a 30-day, rolling-average basis. The inspection and review shall be conducted within 24 hours after passing the allowable variance time of 10%. The inspection checklist from the requirements of 40 § 63.562(e)(2)(iii) and the monitoring data from requirements in 40 CFR §§ 63.562(e)(2)(ii) and 63.564 should be used to identify any maintenance problems that may be associated with the variance. The unscheduled inspection should encompass all components of the control device and monitoring equipment that can be inspected while in operation. If any maintenance problem is identified during the inspection, the permittee must take corrective action (e.g., adjustments to operating controls, etc.) as soon as practicable. If no immediate

maintenance problems are identified from the inspection performed while the equipment is operating, a complete inspection in accordance with 40 § 63.562(e)(2) must be conducted prior to the next marine tank vessel loading operation and corrective action (e.g., replacement of defective parts) must be taken as soon as practicable for any maintenance problem identified during the complete inspection.

IV. RECORDKEEPING REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

On a monthly basis, the permittee shall record the aggregate gasoline loaded into marine vessels and perform throughput calculations on a consecutive 12-month rolling basis, and on a 24-month annual average basis.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Compliance with this plan approval condition assures compliance with 40 CFR § 52.2020(d)(1) and 66 FR 54699 (10/30/01).]

The permittee shall retain records of the actual monthly and consecutive 12-month throughput for the marine vessel loading operations.

The permittee shall calculate an annual estimate of HAP emissions from the marine vessel loading operations.

These records shall be kept for 5 years.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 129.81.]

The permittee shall record on a monthly and consecutive 12-month rolling basis the volume of receipts delivered to the facility that are in vessels that do not ballast, such as barges, or that are in vessels which do not emit VOCs when ballasted, such as tankers using segregated ballast tanks.

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall record:

(a) the leak and repair history of the EPA Method 21 inspections; and
(b) the results of the bypass line checks/inspections.

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall retain daily records of the type, quantity, and vapor pressure of petroleum products that were loaded.

 # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.562]

Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations

Standards.

(a) The permittee shall develop and submit to the Administrator and the Department for approval, upon request, a site-specific performance evaluation test plan for the CMS performance evaluation required in 40 CFR § 63.8(e). The quality control program shall include:
(1) a written protocol that describes the procedures for initial and any subsequent calibration of the CMS;
(2) determination and adjustment of the calibration drift of the CMS;
(3) preventive maintenance of the CMS, including spare parts inventory; and
(4) data recording, calculations, and reporting, and accuracy audit procedures, including sampling and analysis methods.

(b) The operation and maintenance plan shall be revised within 45 working days after an event indicating failure or inadequacy or the plan to address a variance event. The revised plan shall include procedures for operating and maintaining the air pollution control equipment or monitoring equipment during similar variance events and a program for

SECTION D. Source Level Plan Approval Requirements

corrective action for such events.

(c) The source's Standard Operating Procedures (SOP) manual, OSHA plan, or other existing plan may be used to satisfy the requirement for the operating and maintenance plan provided that the alternative plan meets the requirements of 40 CFR § 63.562(e) and are made available for inspection when requested by the administrator.

V. REPORTING REQUIREMENTS.

 # 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.567]

Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations

Recordkeeping and reporting requirements.

(a) Within 90 days after the date of completing each performance test, the permittee must submit performance test data, except opacity data, electronically to EPA's Central Data Exchange by using the ERT (see http://www.epa.gov/ttn/chief/ert/ert tool.html) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.
(b) All reports required by 40 CFR Part 63, Subpart Y, not subject to the requirements in (a), above, must be sent to the Administrator at the appropriate address listed in 40 CFR § 63.13. If acceptable to both the Administrator and the permittee, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to (a), above, in paper format.

VI. WORK PRACTICE REQUIREMENTS.

 # 014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Compliance with this plan approval condition assures compliance with 40 CFR § 52.2020(d)(1) and 66 FR 54699 (10/30/01).]

The permittee shall limit the loading of tank trucks, railcars, and marine vessels to those whose collection systems are connected to the source's vapor collection system.

 # 015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 129.81.]

The discharge point of a cargo tank filling line must be no higher than the radius of the filling line or 10 centimeters (4 inches) above the bottom of the cargo tank or sump, whichever is greater.

 # 016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Compliance with this plan approval condition assures compliance with 40 CFR § 52.2020(d)(1), 66 FR 54699 (10/30/01), and 25 Pa. Code §§ 129.81(1)–(2), 129.99(d), and 129.100.]

(a) All VOC emissions shall be collected and routed to the existing vapor control system. All collected emissions shall be combusted in combustion units which provide a destruction efficiency of at least 98%, by weight. The vent stream shall be introduced into the flame zone of these devices.
(b) The permittee shall only load marine vessels which have been determined to be vapor tight as determined by any approved method listed in 40 CFR § 63.563(a)(4).
(c) The permittee shall operate its vapor collection system in such a manner that all pressure-vacuum vents remain closed and that the maximum normal operating pressure of the marine vessel's vapor collection equipment system does not exceed 0.8 times the lowest pressure-vacuum vent relief setting.
(d) On annual basis, the permittee shall inspect the vapor collection system for leaks and detectable emissions, and promptly repair any leaks. This annual inspection of the vapor collection system and control device(s) shall be done during the loading of marine vessels.
(e) Vent systems that contain valves that could divert a vent stream from a control device shall have car-sealed opened all of the valves in the vent system from the emission source to the control device, and car-sealed closed all of the valves in the vent system that would lead the vent stream to the atmosphere, either directly or indirectly, bypassing the control device.
(f) The permittee shall operate, maintain, and calibrate a recording pressure measurement device (magnehelic gauge or

SECTION D. Source Level Plan Approval Requirements

equivalent device) and an audible and visible alarm system that is activated when the vacuum pressure specified above is not attained. The alarm system must be placed so that it can be seen and heard where cargo transfer is controlled and on the open dock.

 # 017 [25 Pa. Code §129.81]

Organic liquid cargo vessel loading and ballasting

A minimum of 98% of the total volume of receipts delivered to the facility shall be in vessels that do not ballast, such as barges, or in vessels that do not emit VOCs when ballasted, such as tankers using segregated ballast tanks.

 # 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.562]

Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations

Standards.

If the permittee experiences an exceedance of its emission limit(s) during a malfunction, it shall notify the Administrator and Department by telephone or facsimile (FAX) transmission as soon as possible, but no later than 2 business days, if it wishes to avail itself to an affirmative defense to civil penalties for that malfunction.

The permittee seeking to assert an affirmative defense shall also submit a written report to the Administrator and Department within 45 days of the initial occurrence of the exceedance of the standard in this subpart to demonstrate, with all necessary supporting documentation, that it has met the requirements set forth in 40 CFR § 63.562(e)(7)(i).

 # 019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.562]

Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations

Standards.

The permittee shall develop a written operation and maintenance plan in accordance with the requirements of 40 CFR § 63.652(e), including a Continuous Monitoring System (CMS) quality control program.

 # 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.563]

Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations

Compliance and performance testing.

(a) If evidence of a potential leak is found during the annual inspection (visual, audible, olfactory, or any other detection method), all ductwork and piping and connections to vapor collection systems and control devices shall be inspected to the extent necessary to positively identify the potential leak and any potential leaks shall be monitored within 5 days using EPA Method 21. Each detection of a leak shall be recorded, and the leak shall be tagged until repaired.
(b) When a leak is detected, a first effort to repair the vapor collection system and control device shall be made within 15 days or prior to the next marine tank vessel loading operation, whichever is later.

 # 021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.563]

Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations

Compliance and performance testing.

(a) Each valve in the vapor collection system that would route displaced vapors to the atmosphere, either directly or indirectly, shall be secured closed during marine tank vessel loading operations either by using a car-seal or a lock-and-key type configuration, or the by-pass line from the valve shall be equipped with a flow indicator, except for those valves used for pressure/vacuum relief, analyzers, instrumentation devices, sampling, and venting for maintenance. Marine tank vessel loading operations shall not be performed with open by-pass lines.
(b) Repairs shall be made to valves, car-seals, or closure mechanisms no later than 15 days after a change in the position of the valve or a break in the car-seal or closure mechanism is detected or no later than prior to the next marine tank vessel loading operation, whichever is later.

 # 022 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.564]

Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations

Monitoring requirements.

(a) Marine vessel vapor tightness shall be determined using an approved method listed in 40 CFR § 63.563(a)(4).
(b) The permittee shall install, calibrate, maintain, and operate a recording pressure measurement device (magnehelic gauge or equivalent device) and an audible and visible alarm system that is activated when the negative pressure vacuum is not attained. The alarm shall be placed in a location that can be seen and heard when cargo transfer is controlled.

SECTION D. Source Level Plan Approval Requirements

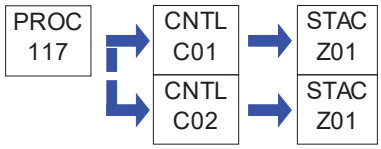
VII. ADDITIONAL REQUIREMENTS.

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: 117 Source Name: REFRIGERATED ETHANE TANK (300K BBL)

Source Capacity/Throughput: N/A ETHANE



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.

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall keep a record of all periods of operation during which the flare pilot flame is absent.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall keep readily accessible records showing the dimension of this refrigerated ethane storage tank and an analysis showing the capacity of the storage vessel for the life of the tank.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. These records shall be kept for a minimum of 5 years.

V. REPORTING REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Testing and procedures.

The permittee of each source that is equipped with a closed vent system and control device as required in 40 CFR §§ 60.112b (a)(3) or (b)(2) (other than a flare) is exempt from 40 CFR § 60.8 and shall meet the following requirements:

(a) submit for approval by the Administrator as an attachment to the notification required by 40 CFR § 60.7(a)(1) or, if the

SECTION D. Source Level Plan Approval Requirements

facility is exempt from 40 CFR § 60.7(a)(1), as an attachment to the notification required by 40 CFR § 60.7(a)(2), an operating plan containing the information listed below.

(1) documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95% requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(2) a description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(b) The permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with (a)(1), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall submit the following:

(a) records shall be kept of all periods of operation during which the flare pilot flame is absent; and
(b) semiannual reports of all periods in which the pilot flame was absent shall be furnished to the Administrator and the Department.

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

(a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from this refrigerated ethane storage tank and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR § 60.485(b).

(b) The associated West Cold Flare (Source ID C01) and East Cold Flare (Source ID C02) shall be designed and operated to reduce inlet VOC emissions by 98% or greater, and meet the specifications described in 40 CFR § 60.18.

VII. ADDITIONAL REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is derived from 40 CFR § 60.480a(d)(5) and 25 Pa. Code Chapter 122.]

Additional applicable requirements for this refrigerated ethane storage tank can be found in Section D (under Source ID 103), of this plan approval, except that this tank storing non-VOCs is exempt from the requirements of 40 CFR §§ 60.482-1a through 60.482-11a.

 # 008 [25 Pa. Code §127.12b]

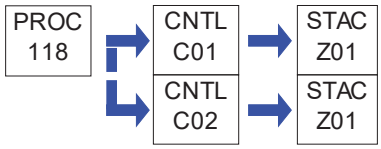
Plan approval terms and conditions.

This source consists of a 300,000-bbl refrigerated ethane storage tank with vapor recovery system. Ethane vapors are condensed to a liquid state by the vapor recovery system before being hard-piped back to the tank.

SECTION D. Source Level Plan Approval Requirements

Source ID: 118 Source Name: REFRIGERATED BUTANE TANK (575K BBL)

Source Capacity/Throughput: N/A BUTANE



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.

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall keep a record of all periods of operation during which the flare pilot flame is absent.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall keep readily accessible records showing the dimension of this refrigerated butane storage tank and an analysis showing the capacity of the storage vessel for the life of the tank.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. These records shall be kept for a minimum of 5 years.

V. REPORTING REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Testing and procedures.

The permittee of each source that is equipped with a closed vent system and control device as required in 40 CFR §§ 60.112b (a)(3) or (b)(2) (other than a flare) is exempt from 40 CFR § 60.8 and shall meet the following requirements:

(a) submit for approval by the Administrator as an attachment to the notification required by 40 CFR § 60.7(a)(1) or, if the

SECTION D. Source Level Plan Approval Requirements

facility is exempt from 40 CFR § 60.7(a)(1), as an attachment to the notification required by 40 CFR § 60.7(a)(2), an operating plan containing the information listed below.

(1) documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95% requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(2) a description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(b) The permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with (a)(1), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall submit the following:

(a) records shall be kept of all periods of operation during which the flare pilot flame is absent; and
(b) semiannual reports of all periods in which the pilot flame was absent shall be furnished to the Administrator and the Department.

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

(a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from this refrigerated butane storage tank and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR § 60.485(b).

(b) The associated West Cold Flare (Source ID C01) and East Cold Flare (Source ID C02) shall be designed and operated to reduce inlet VOC emissions by 98% or greater, and meet the specifications described in 40 CFR § 60.18.

VII. ADDITIONAL REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Additional applicable requirements for this refrigerated butane storage tank can be found in Section D (under Source ID 103), of this plan approval.

 # 008 [25 Pa. Code §127.12b]

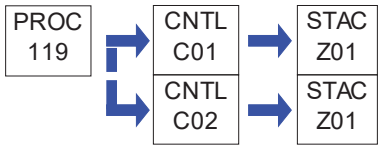
Plan approval terms and conditions.

This source consists of a 600,000-bbl refrigerated butane storage tank with vapor recovery system. Butane vapors will be condensed to a liquid state by the vapor recovery system before being hard-piped back to the tank.

SECTION D. Source Level Plan Approval Requirements

Source ID: 119 Source Name: REFRIGERATED PROPANE TANK (900K BBL)

Source Capacity/Throughput: N/A PROPANE



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.

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall keep a record of all periods of operation during which the flare pilot flame is absent.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall keep readily accessible records showing the dimensions of this refrigerated propane storage tank and an analysis showing its capacity for the life of the tank.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. These records shall be kept for a minimum of 5 years.

V. REPORTING REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Testing and procedures.

The permittee of each source that is equipped with a closed vent system and control device as required in 40 CFR §§ 60.112b (a)(3) or (b)(2) (other than a flare) is exempt from 40 CFR § 60.8 and shall meet the following requirements:

(a) submit for approval by the Administrator as an attachment to the notification required by 40 CFR § 60.7(a)(1) or, if the

SECTION D. Source Level Plan Approval Requirements

facility is exempt from 40 CFR § 60.7(a)(1), as an attachment to the notification required by 40 CFR § 60.7(a)(2), an operating plan containing the information listed below.

(1) documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95% requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(2) a description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(b) The permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with (a)(1), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall submit the following:

(a) records shall be kept of all periods of operation during which the flare pilot flame is absent; and
(b) semiannual reports of all periods in which the pilot flame was absent shall be furnished to the Administrator and the Department.

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

(a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from this refrigerated propane storage tank and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR § 60.485(b).

(b) The associated West Cold Flare (Source ID C01) and East Cold Flare (Source ID C02) shall be designed and operated to reduce inlet VOC emissions by 98% or greater, and meet the specifications described in 40 CFR § 60.18.

VII. ADDITIONAL REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Additional applicable requirements for this refrigerated propane storage tank can be found in Section D (under Source ID 103), of this plan approval.

 # 008 [25 Pa. Code §127.12b]

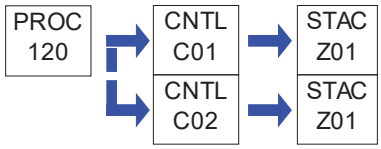
Plan approval terms and conditions.

This source consists of a 900,000-bbl refrigerated propane storage tank with vapor recovery system. Propane vapors are condensed to a liquid state by the vapor recovery system before being hard-piped back to the tank.

SECTION D. Source Level Plan Approval Requirements

Source ID: 120 Source Name: REFRIGERATED PROPANE TANK (589K BBL)

Source Capacity/Throughput: N/A PROPANE



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.

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall keep a record of all periods of operation during which the flare pilot flame is absent.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall keep readily accessible records showing the dimensions of this refrigerated propane storage tank and an analysis showing its capacity for the life of the tank.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Monitoring of operations.

The permittee shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. These records shall be kept for a minimum of 5 years.

V. REPORTING REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Testing and procedures.

The permittee of each source that is equipped with a closed vent system and control device as required in 40 CFR §§ 60.112b (a)(3) or (b)(2) (other than a flare) is exempt from 40 CFR § 60.8 and shall meet the following requirements:

(a) submit for approval by the Administrator as an attachment to the notification required by 40 CFR § 60.7(a)(1) or, if the

SECTION D. Source Level Plan Approval Requirements

facility is exempt from 40 CFR § 60.7(a)(1), as an attachment to the notification required by 40 CFR § 60.7(a)(2), an operating plan containing the information listed below.

(1) documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95% requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.

(2) a description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).

(b) The permittee shall operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with (a)(1), unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

The permittee shall submit the following:

(a) records shall be kept of all periods of operation during which the flare pilot flame is absent; and
(b) semiannual reports of all periods in which the pilot flame was absent shall be furnished to the Administrator and the Department.

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

(a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from this refrigerated propane storage tank and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in 40 CFR § 60.485(b).

(b) The associated West Cold Flare (Source ID C01) and East Cold Flare (Source ID C02) shall be designed and operated to reduce inlet VOC emissions by 98% or greater, and meet the specifications described in 40 CFR § 60.18.

VII. ADDITIONAL REQUIREMENTS.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Additional applicable requirements for this refrigerated propane storage tank can be found in Section D (under Source ID 103), of this plan approval.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

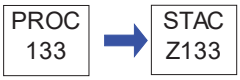
This source consists of a 600,000-bbl refrigerated propane storage tank with vapor recovery system. Propane vapors are condensed to a liquid state by the vapor recovery system before being hard-piped back to the tank.

SECTION D. Source Level Plan Approval Requirements

Source ID: 133 Source Name: TANK 246 INT FLOAT 54.4 MBBL

Source Capacity/Throughput: N/A PETROLEUM LIQUIDS

Conditions for this source occur in the following groups: IFR



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.

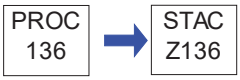
No additional requirements exist except as provided in other sections of this plan approval including Section B (Plan Approval General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Plan Approval Requirements

Source ID: 136 Source Name: TANK 250 INT FLOAT 80.4 MBBL

Source Capacity/Throughput: N/A PETROLEUM LIQUIDS

Conditions for this source occur in the following groups: IFR



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: 139 Source Name: EXISTING COOLING TOWERS

Source Capacity/Throughput: 1.710 M Gal/HR WATER

PROC 139 → STAC Z139

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Total PM emissions from this cooling tower shall not 0.02 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(iii).

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Compliance with this plan approval condition assures compliance with 25 Pa. Code § 129.99(d).]

VOC emissions from this cooling tower shall not exceed 4.60 tons in any consecutive 12-month period.

VOC emissions from leaks shall be tracked and accounted for in the VOC calculations, as applicable.

II. TESTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) For this cooling tower the permittee shall collect a sample of the cooling water at locations where the cooling water enters and exits the heat exchanger and analyze it for VOCs to enable the early detection of leaks. For the purpose of this source, a leak is detected if the exit mean concentration is found to be greater than the entrance mean by at least 1 ppm or 10% of the entrance mean, whichever is greater.

(b) The concentration of the VOCs in the cooling water shall be determined using any EPA-approved method listed in 40 CFR Part 136. The method shall be sensitive to concentrations as low as 1 ppm and the same method shall be used for both entrance and exit samples. Alternative methods may be used upon approval by the Department and EPA.

(c) When a sample is found to contain VOCs, the permittee shall resample the following day to ensure reliability of the analysis.

(d) The value from analyzed sample(s) shall be used in the monthly VOC emission calculation.

(e) Monitoring for VOC leaks shall be performed on a monthly basis.

III. MONITORING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall inspect the drift eliminators on this cooling tower on a 3-year (preventative maintenance cycle) basis.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall demonstrate compliance with the PM emission limit on this cooling tower by performing a monthly analysis for specific conductivity in µmhos, or other Department-approved method.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall monitor the average circulation flow rate through this cooling tower on a monthly basis when the cooling

SECTION D. Source Level Plan Approval Requirements

tower is in operation.

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall perform a daily visual and odor inspection of the cooling tower water basin for the presence of hydrocarbons. If hydrocarbons are discovered (e.g., bubbles, odor, sheen, etc.), the permittee shall follow the guidelines below for leaks for this source.

IV. RECORDKEEPING REQUIREMENTS.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Compliance with this plan approval condition assures compliance with 25 Pa. Code §§ 129.97(i) and 129.100(d).]

Using the average monthly flow, the permittee shall calculate monthly and consecutive 12-month VOC emissions from this cooling tower.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The following shall be kept for this cooling tower:

(a) results of the 3-year (preventative maintenance cycle) inspections of the drift eliminators;
(b) monthly records of the total/suspended solids and/or conductivity readings of the cooling water;
(c) average monthly cooling water circulation flow rate rate through the cooling tower;
(d) manufacturer's specifications for the design drift rate for the cooling tower;
(e) emissions of PM and VOC, including VOCs from leaks (monthly and consecutive 12-month); and
(f) results of the daily visual inspection of the cooling tower water basin.

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

To delay the repair of leaks, the permittee shall record the following information:
(a) the reason(s) for delaying repair;
(b) a schedule for completing the repair as soon as practical;
(c) the date and concentration of the leak as first identified and the results of all subsequent testing/monitoring events during the delay of repair period; and
(d) an estimate of the potential VOC emissions from the leaking cooling tower for each required delay of repair monitoring interval following the procedures below:
(1) determine the leak concentration and convert the stripping gas leak concentration, in units of ppm, to an equivalent liquid concentration, in units of ppmw.
(2) determine the mass flow rate of the cooling water at the monitoring location where the leak was detected. If the monitoring location is an individual cooling tower riser, determine the total cooling water mass flow rate. Cooling water mass flow rates may be determined using direct measurement, pump curves, heat balance calculations, or other engineering methods. Volumetric flow measurements may be used and converted to mass flow rates using the density of water at the specific monitoring location temperature or using the default density of water at 8.32 lbs/gal;
(3) for delay of repair monitoring intervals prior to repair of the leak, calculate the potential VOC emissions for the leaking cooling tower for the monitoring interval by multiplying the leak concentration in the cooling water (in ppmw), determined in (d)(1), above, by the mass flow rate of the cooling water determined in (d)(2), above, and by the duration of the delay of repair monitoring interval. The duration of the delay of repair monitoring interval is the time period starting at midnight on the day of the previous monitoring event or at midnight on the day the repair would have had to be completed if the repair had not been delayed, whichever is later, and ending at midnight of the day the of the current monitoring event; and
(4) for delay of repair monitoring intervals ending with a repaired leak, calculate the potential VOC emissions by multiplying the duration of the final delay of repair monitoring interval by the leak concentration and cooling water flow rates determined for the last monitoring event prior to the re-monitoring event used to verify the leak was repaired. The duration of the final delay of repair monitoring interval is the time period starting at midnight of the day of the last monitoring event prior to remonitoring to verify the leak was repaired and ending at the time of the re-monitoring event that verified that the leak was

SECTION D. Source Level Plan Approval Requirements

repaired.

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.

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Compliance with this plan approval condition assures compliance with 25 Pa. Code §§ 129.97(i) and 129.100(d).]

(a) To minimize VOC emissions from this cooling tower, the permittee shall operate and maintain the cooling tower system in a manner consistent with good operating and maintenance (O&M) practices. The permittee shall use its equipment inspection and monitoring program (I&M) to minimize and repair exchanger leaks. When VOC emissions are detected, the permittee shall as expeditiously as possible troubleshoot the problem, and isolate the leak.

(b) The permittee shall not use chromium-based water treatment chemicals in the cooling tower.

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) When a VOC leak is detected, the permittee shall troubleshoot and investigate for the source of the leak.

(b) Once a leak is detected, the permittee shall monitor the leak monthly until the leak has been repaired. Upon completion of the repair, the permittee shall monitor in accordance with Condition # 003(e), Section D (under Source ID 139), of this plan approval.

(c) The first attempt to isolate the leak and perform the necessary repairs shall be made no later than 14 days after the second sample results indicating a leak is returned.

 # 013 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The leak shall be repaired within 45 days after identifying the leak, except as outlined in Condition # 013, Section D (under Source ID 139), of this plan approval. Actions that can be taken to achieve repair include but are not limited to:

(a) physical modifications to the leaking heat exchanger, such as welding the leak or replacing a tube;
(b) blocking the leaking tube within the heat exchanger;
(c) changing the pressure so that water flows into the process fluid;
(d) replacing the heat exchanger or heat exchanger bundle; or
(e) isolating, bypassing, or otherwise removing the leaking heat exchanger from service until it is otherwise repaired.

 # 014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee may delay the repair of a leaking heat exchanger if the criteria in (a) or (b), below, is met. The permittee must determine if a delay of repair is necessary as soon as practicable, but no later than 45 days after first identifying the leak.

(a) If the repair is technically infeasible without a shutdown and the total VOC emissions would be less than 25% of the permitted emission limits if a repair would take place, the permittee may delay repair until the next scheduled shutdown of the heat exchanger. If, during subsequent monthly monitoring, the VOC leak rate has increased, the permittee shall repair the leak within 30 days of the monitoring event indicating the increase.

(b) If the necessary equipment, parts, or personnel are not available and the total VOC concentration does not increase for all monthly monitoring periods during the delay of repair, the permittee may delay the repair for a maximum of 120 calendar

SECTION D. Source Level Plan Approval Requirements

days. The permittee must demonstrate that the necessary equipment, parts, or personnel were not available. If, during subsequent monthly monitoring, the VOC concentration increases, the permittee must repair the leak within 30 days of the monitoring event in which the leak was shown to increase.

VII. ADDITIONAL REQUIREMENTS.

 # 015 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

This source is a 15-2B Plant Cooling Tower. Capacity = 1,710,000 gal/hr cooling water.

 # 016 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

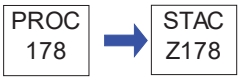
Within 18 months after the date of issuance of this plan approval, the permittee shall install new drift eliminator controls on this cooling tower.

SECTION D. Source Level Plan Approval Requirements

Source ID: 178 Source Name: TANK 527 INT FLOAT 69.7 MBBL

Source Capacity/Throughput: N/A PETROLEUM LIQUIDS

Conditions for this source occur in the following groups: IFR



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: 188 Source Name: TANK 607 INT FLOAT 100 MBBL

Source Capacity/Throughput: N/A PETROLEUM LIQUIDS

Conditions for this source occur in the following groups: IFR

PROC 188 → STAC Z188

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

VOC emissions from this internal floating roof storage tank shall not exceed 6.75 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.

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: 190 Source Name: TANK 609 INT FLOAT 98.17 MBBL

Source Capacity/Throughput: N/A PETROLEUM LIQUIDS

Conditions for this source occur in the following groups: IFR

PROC 190 → STAC Z190

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

VOC emissions from this heated internal floating roof storage tank shall not exceed 5.40 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.

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.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Within 18 months after the date of issuance of this plan approval, the permittee shall install a rim-mounted secondary seal on the internal floating roof of this storage tank.

SECTION D. Source Level Plan Approval Requirements

Source ID: 192 Source Name: TANK 611 INT FLOAT 87.8 MBBL

Source Capacity/Throughput: N/A PETROLEUM LIQUIDS

Conditions for this source occur in the following groups: IFR

PROC 192 → STAC Z192

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

VOC emissions from this heated internal floating roof storage tank shall not exceed 6.05 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.

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: 204 Source Name: TANK 253 INT FLOAT 90.5 MBBL

Source Capacity/Throughput: N/A PETROLEUM LIQUIDS

Conditions for this source occur in the following groups: IFR

PROC 204 → STAC Z204

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The use of the following tanks shall not result in aggregate VOC emissions in any consecutive 12-month period exceeding 40.4 tons.

Source No.	Tank No.
204	253
212	610
225	638

Compliance with the above emission limit shall be determined using a Department-approved method.

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).

SECTION D. Source Level Plan Approval Requirements

VII. ADDITIONAL REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The emission limit on internal floating roof storage tanks 253, 610, and 638 (Source IDs 204 and 212 in this plan approval, and Source ID 225 in Title V Operating Permit No. 23-00119, respectively) does not provide any relief from obtaining a plan approval for any future physical change or change in the method of operation of any of these three tanks. Future applicability determinations must consider the baseline actual emissions of the emissions unit(s) and not the compliance cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this compliance cap and agreeing to consider these three tanks as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all three tanks (i.e., should major NSR/PSD be triggered for any one tank, LAER/BACT is required for all three tanks).

SECTION D. Source Level Plan Approval Requirements

Source ID: 212 Source Name: TANK 610 INT FLOAT 96.0 MBBL

Source Capacity/Throughput: N/A PETROLEUM LIQUIDS

Conditions for this source occur in the following groups: IFR

PROC 212 → STAC Z212

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The use of the following tanks shall not result in aggregate VOC emissions in any consecutive 12-month period exceeding 40.4 tons.

Source No.	Tank No.
204	253
212	610
225	638

Compliance with the above emission limit shall be determined using a Department-approved method.

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).

SECTION D. Source Level Plan Approval Requirements

VII. ADDITIONAL REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The emission limit on internal floating roof storage tanks 253, 610, and 638 (Source IDs 204 and 212 in this plan approval, and Source ID 225 in Title V Operating Permit No. 23-00119, respectively) does not provide any relief from obtaining a plan approval for any future physical change or change in the method of operation of any of these three tanks. Future applicability determinations must consider the baseline actual emissions of the emissions unit(s) and not the compliance cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this compliance cap and agreeing to consider these three tanks as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all three tanks (i.e., should major NSR/PSD be triggered for any one tank, LAER/BACT is required for all three tanks).

SECTION D. Source Level Plan Approval Requirements

Source ID: C01 Source Name: WEST COLD FLARE (MODIFIED)

Source Capacity/Throughput: 240.000 CF/HR NAT GAS (PILOT & PURGE)

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

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 127.205(1).]

The permittee shall ensure that this cold flare is designed and operated to reduce inlet VOC emissions by equal to or greater than 99.0% whenever flows are being sent to the low-pressure cold flare tip only, or otherwise 98.0%.

[Compliance with this streamlined plan approval condition assures compliance with the VOC control efficiency restriction of 95% indicated in 40 C.F.R. § 60.112b(a)(3)(ii).]

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).

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

SECTION D. Source Level Plan Approval Requirements

Source ID: C02 Source Name: EAST COLD FLARE (NEW TANKS PROJECT)

Source Capacity/Throughput: 117.000 CF/HR NAT GAS (PILOT & PURGE)

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

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 127.205(1).]

The permittee shall ensure that this cold flare is designed and operated to reduce inlet VOC emissions by equal to or greater than 98.0%.

[Compliance with this streamlined plan approval condition assures compliance with the VOC control efficiency restriction of 95% indicated in 40 C.F.R. § 60.112b(a)(3)(ii).]

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).

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

SECTION E. Source Group Plan Approval Restrictions.

Group Name: 0

Group Description: Auxiliary Boiler Conditions

Sources included in this group

ID	Name
031	AUXILIARY BOILER 1
033	AUXILIARY BOILER 3
034	AUXILIARY BOILER 4

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for the short-term limit in (a), below, is derived from 25 Pa. Code § 129.99(d).]

Pursuant to the Best Available Control Technology (BACT) of the Prevention of Significant Deterioration (PSD) provisions in 40 CFR § 52.21 and of 25 Pa. Code § 127.83, the emissions limits below for CO and sulfuric acid mist are a result of a BACT determination.

Air contaminant emissions shall not exceed the following:

(a) NOx - 0.05 lbs/MMBtu (based on a 30-day rolling average) and 92.71 tons in any consecutive 12-month period;
(b) VOC (calculated as methane) - 0.004 lbs/MMBtu and 5.49 tons in any consecutive 12-month period;
(c) CO - 0.06 lbs/MMBtu (based on a 30-day rolling average) and 27.23 tons in any consecutive 12-month period;
(d) PM - 0.01 lbs/MMBtu and 21.94 tons in any consecutive 12-month period;
(e) SO2 - 0.008 lbs/MMBtu and 41.10 tons in any consecutive 12-month period; and
(f) Sulfuric Acid Mist - 0.0006 lbs/MMBtu and 3.15 tons in any consecutive 12-month period.

[The above short-term emission limits apply individually to each of these auxiliary boilers and shall be calculated as one-hour averages (except for NOx and CO), while the long-term emission limits apply as an aggregate of all three auxiliary boilers, calculated as consecutive 12-month totals.]

The above long-term emission limits on the three auxiliary boilers are compliance caps, imposed for the limited purpose of limiting emissions increases, for NSR/PSD purposes, related to the installation of the three auxiliary boilers. These caps do not provide any relief from obtaining a plan approval for any future physical change or change in the method of operation of any of the auxiliary boilers, or the addition or modification of any steam-consuming process(es) at the facility. The latter is true even if the permittee does not request a change in the compliance caps. Furthermore, by accepting these compliance caps and agreeing to consider the three auxiliary boilers as one emissions unit for NSR/PSD purposes, any future applicability determinations must involve all three auxiliary boilers (i.e., should major NSR/PSD be triggered for either a boiler or process change, LAER/BACT is required for all three auxiliary boilers). If the permittee finds it necessary to relax the cap at some future date, the source obligation requirements of 25 Pa. Code § 127.203(e)(2) and 40 CFR § 52.21(r)(4) apply.

Fuel Restriction(s).

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the Best Available Control Technology (BACT) of the Prevention of Significant Deterioration (PSD) provisions in 40 CFR § 52.21 and of 25 Pa. Code § 127.83, the following condition is a result of a BACT determination for sulfuric acid mist.

The permittee shall only combust natural gas or a combination of natural gas and process gas produced at this facility in any of these auxilary boilers. At no time shall the process gas have a sulfur content greater than 2.5 grains per 100 dry standard cubic feet based on a 24-hour average.

SECTION E. Source Group Plan Approval Restrictions.

II. TESTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the Best Available Control Technology (BACT) of the Prevention of Significant Deterioration (PSD) provisions in 40 CFR § 52.21 and of 25 Pa. Code § 127.83, the following condition is a result of a BACT determination for PM-10 emissions.

Stack tests shall be performed every 5 years for the following:

(a) VOCs;
(b) PM; and
(c) PM-10.

The above testing shall be conducted in accordance with 40 CFR § 60.8; 40 CFR Part 60, Subpart Db; and 25 Pa. Code Chapter 139.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) Each time the process gas fuel stream changes in a way that may affect the sulfur concentration to the atmosphere, the permittee shall sample sulfur concentrations in the process gas upstream of the boilers, using a Department-approved method, for a period of 14 consecutive days.

(b) Sampling shall be conducted to ensure that the data is representative of typical operating conditions affecting sulfur content in the fuel gas stream going to this auxiliary boiler.

(c) Any testing required by (a), above, shall begin within 48 hours of adding a new process gas stream.

(d) The permittee may rely on the average of the above test data to demonstrate compliance with the process gas sulfur concentration limit.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) At least 90 days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
(b) All stack testing shall be conducted in accordance with the provisions of EPA methods or other Department approved methodology and 25 Pa. Code Chapter 139.
(c) At least 30 days prior to the test, the Regional Air Quality Manager shall be informed of the date and time of the test.
(d) Within 60 days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.
(e) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

III. MONITORING REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for the NOx CEMs, below, is derived from 25 Pa. Code § 129.100.]

Pursuant to the Best Available Control Technology (BACT) of the Prevention of Significant Deterioration (PSD) provisions in 40 CFR § 52.21 and of 25 Pa. Code § 127.83, the following condition is a result of a BACT determination for CO emissions.

The permittee shall operate and maintain Department-certified continuous emission monitors (CEMs) for NOx, CO, and oxygen (O2) on each of these auxiliary boilers.

The NOx CEMs shall calculate and report emissions using a 30-day rolling average, expressed in lb/MMBtu, in accordance with 25 Pa. Code § 129.100(a)(1).

Additionally, the permittee shall follow the requirements found in Section C, pertaining to CEMs.

SECTION E. Source Group Plan Approval Restrictions.

[Compliance with any subsequently-issued revision to the Continuous Source Monitoring Manual will constitute compliance with this plan approval condition.]

 # 007 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The continuous monitoring system for NOx, CO, and O2 shall be maintained and operated to achieve the following data availability requirements:

(a) greater than or equal to 90% valid hours per calendar month; or
(b) greater than or equal to 95% valid hours per calendar quarter,

where a valid hour is defined as greater than or equal to 75% valid readings (45 minutes per hour).

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for the NOx CEMS, below, is derived from 25 Pa. Code § 129.100(a)(1).]

Continuous monitoring downstream of the air pollution control equipment shall be conducted for NOx, CO, and O2.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The heating value of the process gas shall be monitored as required in the sulfur concentration testing requirement above.

IV. RECORDKEEPING REQUIREMENTS.

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain records of the following:

(a) all air pollution control system performance evaluations and records of calibration checks, adjustments, and maintenance performed on all equipment in this plan approval;
(b) manufacturer's specifications for each of these auxiliary boilers;
(c) record of all the stack tests;
(d) current sulfur and heating value process gas test results used to demonstrate compliance with the sulfur concentration limitation;
(e) the emissions from the three auxiliary boilers in order to demonstrate compliance with its limits; and
(f) each start-up and shutdown of any of the auxiliary boilers. The information recorded shall include date, beginning time of start-up or shutdown, and the ending time of the start-up or shutdown.

 # 011 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Pursuant to the Best Available Control Technology (BACT) of the Prevention of Significant Deterioration (PSD) provisions in 40 CFR § 52.21 and of 25 Pa. Code § 127.83, the following condition is a result of a BACT determination for sulfuric acid mist.

The permittee shall retain records of the testing of the fuel gas for sulfur concentration for a period of 5 years.

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]

Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units

Reporting and recordkeeping requirements.

The permittee shall maintain the following records each operating day:
(a) calendar date;
(b) average hourly NOx emission rate (measured or predicted);
(c) the 30-day NOx emission rate calculated at the end of each operating day from the measured or predicted hourly NOx emission rate;
(d) identification of operating days when the NOx 30-day rolling average emission rate exceeds the permitted rate of 0.05 lbs/MMBtu;
(e) identification of all operating days when pollutant data is not obtained, along with the reason and description of corrective action taken;

SECTION E. Source Group Plan Approval Restrictions.

(f) identification of the times when emission data has been excluded and the reason;
(g) identification of the F-factor used in the calculation the method of determination, and the type of fuel combusted;
(h) identification of the times when the pollutant concentration exceeded the full span of the CEM system;
(i) description of any modification to the CEM system that could affect its ability to comply with Performance Specification 2 or 3; and
(j) results of the daily drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1.

 # 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7555]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

What records must I keep?

For each of these auxiliary boilers, you must keep the following records:

(a) monthly records of fuel use and type (per auxiliary boiler);
(b) if, consistent with 40 CFR § 63.7515(b), you choose to stack test less frequently than annually, you must keep a record that documents that your emissions in the previous stack test(s) were less than 75% of the applicable emission limit, and document that there was no change in source operations including fuel composition that would cause emissions of the relevant pollutant to increase within the past year;
(c) records of the occurrence and duration of each malfunction of the auxiliary boiler;
(d) records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR § 63.7500(a)(3), including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation;
(e) records of the calendar date, time, occurrence, and duration of each startup and shutdown; and
(f) records of the type(s) and amount(s) of fuels used during each startup and shutdown.

V. REPORTING REQUIREMENTS.

 # 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]

Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units

Reporting and recordkeeping requirements.

The permittee shall submit excess emission reports for any calendar quarter that has excess emissions from any of these auxiliary boilers, where an excess emission is any calculated 30-day rolling average nitrogen rate. If there are no excess emissions during the quarter, the permittee shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period.

 # 015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7550]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

What reports must I submit and when?

(a) The permittee shall submit, to the Department and EPA, semi-annual compliance reports that include the following information:

(1) the company and facility name and address;
(2) date of report and beginning and ending dates of the reporting period;
(3) information, emissions limitations, and operating parameter limitations for these auxiliary boilers;
(4) the total operating time during the reporting period;
(5) the date of the most recent tune-up, performed in accordance with 40 CFR § 63.7540(a)(10); and
(6) the date of the most recent burner inspection, if not performed annually and delayed until the next scheduled or unscheduled unit shutdown.
(7) the following information if any of the auxiliary boilers are subject to a requirement to perform testing to demonstrate compliance with the applicable emissions limit:
(i) the total fuel use by each auxiliary boiler subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure;
(ii) if you are conducting performance tests once every 3 years pursuant to 40 CFR § 63.7515(b) or (c), the date of the last two performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions;

SECTION E. Source Group Plan Approval Restrictions.

(iii) if there are no deviations from any emission limits or operating limits, a statement that there were no deviations from the emission limits or operating limits during the reporting period;

(iv) if a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken during a malfunction of the auxiliary boiler(s) to minimize emissions in accordance with 40 CFR § 63.7500(a)(3), including actions taken to correct the malfunction;

(v) if compliance is demonstrate by emission averaging, the permittee shall certify the emission level achieved or the control technology employed is no less stringent than the level or control technology contained in the notification of compliance status in 40 CFR § 63.7545(e)(5)(i); and

(vi) for each deviation from an emission limit or operating limit in this subpart by any of these auxiliary boilers where you are not using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the information required in (A)–(C), below.

(A) a description of the deviation and which emission limit or operating limit from which you deviated;

(B) information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken; and

(C) if the deviation occurred during an annual performance test, provide the date the annual performance test was completed.

(b) The permittee shall submit the compliance reports in (a)(1)–(2), above, according to the following schedule:

(1) By January 31, of each year, for the period covering July 1–December 31, of the previous year; and
(2) By July 31, of each year, for the period covering January 1–June 30, of the same year.

[Note: The Department considers the compliance reports submitted as of the date of postmark or electronic delivery.]

 # 016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7555]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

What records must I keep?

The permittee shall retain the following records:

(a) a copy of each notification and report submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report submitted, according to the requirements in 40 CFR § 63.10(b)(2)(xiv); and
(b) records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR § 63.10(b)(2)(viii).

VI. WORK PRACTICE REQUIREMENTS.

 # 017 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 129.99(d).]

The NOx emissions from each of these auxiliary boilers shall be controlled by the use of low-NOx burners and flue gas recirculation.

 # 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7525]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

What are my monitoring, installation, operation, and maintenance requirements?

The permittee shall install, operate, calibrate, and maintain an oxygen analyzer system in accordance with the manufacturer's specifications.

The boiler and all associated air pollution control system and monitoring equipment shall be operated and maintained in accordance with safety and good air pollution control practices and according to manufacturer’s recommendations.

SECTION E. Source Group Plan Approval Restrictions.

 # 019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7530]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?

[Additional authority for this plan approval condition is derived from 40 CFR Part 63, Subpart DDDDD, Table 4; and 25 Pa. Code § 127.35(b).]

The permittee shall maintain the operating load of each unit such that it does not exceed 110% of the highest hourly average operating load recorded during the most recent performance test.

The permittee shall maintain the 30-day rolling average oxygen content at or above the lowest hourly average oxygen concentration measured during the most recent CO performance test.

 # 020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?

The permittee shall perform an annual tune-up for each of these auxiliary boilers, in accordance with 40 CFR § 63.7540(a)(10)(i)–(vi).

VII. ADDITIONAL REQUIREMENTS.

 # 021 [25 Pa. Code §121.1 M - Z]

Definitions.

The NOx Allowance Control Period is defined as the period beginning May 1st of each year and ending on September 30th of the same year, inclusive.

 # 022 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Each of these auxiliary boilers has a rated heat input capacity of 392.5 MMBtu/hr, based on the higher heating value of the fuel combusted.

 # 023 [25 Pa. Code §145.8.]

Transition to CAIR NOx Trading Programs.

Transition to CAIR NOx trading programs.

(a) Allowances. Allocations in 2009 will be made in accordance with the Federal CAIR Ozone Season Trading Program, 40 CFR Part 97 (relating to Federal NOx Budget Trading Program and CAIR NOx and SO2 Trading Programs). CAIR NOx Ozone Season allowance allocations for the control period starting May 1, 2010, and for each control period thereafter, will be distributed in accordance with 25 Pa. Code Chapter 145, Subchapter D.
(b) Termination and retirement of allowances. NOx allowances already allocated for 2009 or later are terminated and may not be used for compliance with the CAIR NOx Annual Trading Program or the CAIR NOx Ozone Season Trading Program, as those terms are defined in 40 CFR §§ 96.102 and 96.302.
(c) Requirements replaced. The emission limitations and monitoring requirements established in 25 Pa. Code Chapter 145, Subchapter A, are replaced by the requirements in 25 Pa. Code Chapter 145, Subchapter D, beginning with the May 1, 2010, control period. If the permittee has failed to demonstrate compliance with 25 Pa. Code § 145.54, the provisions in 40 CFR § 96.354 shall be used to withhold CAIR NOx Ozone Season allowances, as that term is defined in 40 CFR § 96.302, in calendar year 2010 and beyond. If no CAIR NOx Ozone Season allowances are provided to the source under 25 Pa. Code § 145.221, the permittee shall acquire and retire a number of CAIR NOx Ozone Season allowances as specified in 40 CFR § 96.354.
(d) Non-EGU NOx Trading Program Budget:
(1) Statewide limitation. The sum of NOx ozone season emissions from all non-EGUs subject to this sub condition may not exceed the Commonwealth's non-EGU NOx Trading Program budget of 3,619 tons during any ozone season.
(2) CAIR NOx Ozone Season allowances. The permittee shall monitor and report NOx emissions in accordance with 40 CFR Part 96, Subpart HHHH, and establish a CAIR-authorized account representative and general account, in accordance with 40 CFR Part 96, Subparts BBBB and FFFF, as incorporated into 25 Pa. Code Chapter 145, Subchapter D, by reference, for the purposes of ensuring continued compliance with the non-EGU NOx Trading Program budget limitation of (d)(1),

SECTION E. Source Group Plan Approval Restrictions.

above, and of retiring CAIR NOx Ozone Season allowances.

(3) CAIR NOx allowances. The permittee shall establish a CAIR-authorized account representative and general account in accordance with 40 CFR Part 96, Subparts BB and FF, as incorporated into 25 Pa. Code Chapter 145, Subchapter D, by reference, for the purpose of retiring CAIR NOx allowances.

(4) Emissions below Statewide limitation. If the total ozone season emissions from all non-EGUs are less than 3,438 tons of NOx, the Department's permanent retirement of allowances covers all applicable emissions and no additional account transactions are required by the sources.

(5) Allowable emissions per unit. By January 31, 2009, and by January 31 of each year thereafter, the Department will determine the allowable amount of NOx emissions for the next ozone season for each unit subject to this subsection, as follows:

Allowable emission rate × each unit's heat input

Where "Allowable emission rate" is equal to

$$\frac{\text{3,438 tons of NOx}}{\text{Combined heat input of all units during the most recent ozone season}}$$

(6) Allowance surrender for excess emissions. If the combined NOx emissions from all affected non-EGUs in the Commonwealth exceed 3,438 tons in an ozone season, then a source whose actual emissions exceeds its allowable emissions for that ozone season, as determined under (d)(5), above, shall surrender to the Department by April 30 of the year following the ozone season one CAIR NOx Ozone Season allowance and one CAIR NOx allowance for each ton of excess emissions. A source whose excess emissions are 0.5 ton or greater of the next excess ton shall surrender 1 full ton of CAIR NOx allowances (banked or current) for that excess emission. Sources under common ownership may include the allowable and actual emissions from multiple sources to determine whether a unit must surrender allowances.

(7) Surrender procedure. To surrender allowances under (d)(6), above, the permittee shall surrender the required CAIR NOx Ozone Season allowances and CAIR NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:

(i) the serial number of each allowance surrendered; and

(ii) the calculations used to determine the quantity of allowances required to be surrendered.

(8) Failure to surrender allowances. If the permittee fails to comply with (d)(7), above, the permittee shall by June 30 surrender three CAIR NOx Ozone Season allowances and three CAIR NOx allowances of the current or later year vintage for each ton of excess emissions as calculated under (d)(6), above.

(9) Liability not affected. The surrender of CAIR NOx ozone season allowances and CAIR NOx allowances under (d)(6), above, does not affect the liability of the permittee for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.

(i) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the permittee demonstrates that a lesser number of days should be considered.

(ii) Each ton of excess emissions is a separate violation.

(10) Actual emissions below allowable emissions. If a source's allowable emissions exceed their actual emissions for an ozone season, the permittee may deduct the difference or any portion of the difference from the actual emissions of source's under the permittee's common control that are subject to 25 Pa. Code § 129.201.

(11) Corrections. One hundred and eighty-one tons of allowable NOx emissions are available to the Department annually for accounting corrections.

SECTION E. Source Group Plan Approval Restrictions.

Group Name: COLD FLARE
Group Description: Cold Flare Conditions

Sources included in this group

ID	Name
C01	WEST COLD FLARE (MODIFIED)
C02	EAST COLD FLARE (NEW TANKS PROJECT)

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

Each of these cold flares shall be designed for and operated with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.

II. TESTING REQUIREMENTS.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

The permittee shall use Department-approved testing methods to demonstrate compliance with the standards for flares. These include, but are not limited to, the following:
(a) EPA Test Method 22, with an observation period of two (2) hours, as found in Appendix A of 40 CFR Part 60 shall be used to determine the compliance of this flare with the visible emission provisions.
(b) EPA Method 2, 2A, 2C, or 2D for determination of flare velocity. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.
(c) EPA Method 3A for determining flue gas composition and molecular weight.
(d) EPA Method 18 for determination of hydrocarbon constituents.
(e) The net heating value of the gas being combusted in the flare shall be combusted as stated in 40 CFR § 60.485a(g)(4).
(f) EPA Method 18 and ASTM D 2504-67 (or most recent equivalent revised method) shall be used to determine the concentration of sample component "i" in the equation stated in 40 CFR § 60.485a(g)(4).
(g) ASTM D 2382-76, or most recent equivalent revised method shall, be used to determine the net heat of combustion of component "i" referenced in 40 CFR § 60.485(g)(4), if published values are not available or cannot be calculated.

III. MONITORING REQUIREMENTS.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

(a) The permittee shall continuously monitor the presence of a pilot flame for each of these cold flares by using an infrared sensor or other device approved by the Department.
(b) The permittee shall monitor the type and amount of fuel combusted in each of the cold flares on a daily basis.

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

(a) The permittee shall maintain records of the continuous presence of a pilot flame for each of these cold flares.
(b) The permittee shall maintain daily records of the type and amount of fuel combusted in each of the cold flares.

V. REPORTING REQUIREMENTS.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

The permittee shall submit to the Department semi-annual exception reports of the date and time the pilot flame was not working.

SECTION E. Source Group Plan Approval Restrictions.

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.18]

Subpart A - General Provisions

General control device requirements.

The permittee shall ensure that each of these cold flares is operated and maintained in conformance with its design.

 # 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) Each of these cold flares shall be operated with a flame present at all times.
(b) Each of the cold flares shall be used only with the net heating value of the gas being combusted is 300 Btu/scf or greater. The net heating value of the gas being combusted shall be determined by the methods specified in 40 CFR § 60.18(f).
(c) The (air-assisted) low-pressure flare tips of each of the cold flares shall be designed and operated with an exit velocity less than the maximum velocity (Vmax), as determined by the method specified in 40 CFR § 60.18(f)(6).

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 E. Source Group Plan Approval Restrictions.

Group Name: IFR

Group Description: Internal Floating Roof Storage Tank Conditions

Sources included in this group

ID	Name
133	TANK 246 INT FLOAT 54.4 MBBL
136	TANK 250 INT FLOAT 80.4 MBBL
178	TANK 527 INT FLOAT 69.7 MBBL
188	TANK 607 INT FLOAT 100 MBBL
190	TANK 609 INT FLOAT 98.17 MBBL
192	TANK 611 INT FLOAT 87.8 MBBL
204	TANK 253 INT FLOAT 90.5 MBBL
212	TANK 610 INT FLOAT 96.0 MBBL

I. RESTRICTIONS.

Control Device Efficiency Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Additional authority for this plan approval condition is derived from 40 CFR § 60.112b and 25 Pa. Code Chapter 122 and §§ 129.56(a)(1) and 129.96.]

The permittee may not store VOCs in this internal floating roof storage tank that have a vapor pressure of 11 psia (76 kPa) or greater under actual storage conditions.

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.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The following shall be monitored on a monthly basis:

(a) type and amount of material stored; and
(b) actual vapor pressure of the material stored.

 # 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Testing and procedures.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 129.96.]

(a) The permittee shall visually inspect the internal floating roof and the primary seal prior to filling this storage tank with VOL.
(b) The permittee shall visually inspect the internal floating roof and the primary seal through the manholes and roof hatches on the fixed roof at least once every 12 months after the initial fill.
(c) The permittee shall visually inspect the internal floating roof, the primary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least every 10 years.

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The following shall be recorded on a monthly basis:

SECTION E. Source Group Plan Approval Restrictions.

(a) monthly and consecutive 12-month emission sums;
(b) records of all emission calculations;
(c) type and amount of material stored;
(d) actual vapor pressure of the material stored;
(e) records of any required annual inspections; and
(f) records of any required seal gap measurements.

 # 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Reporting and recordkeeping requirements.

The permittee shall keep a record of each visual inspection performed as required for this source, which shall include:

(a) identification of the storage tank;
(b) the date of the inspection; and
(c) the observed condition of each component inspected.

 # 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Monitoring of operations.

(a) The permittee shall keep records of the following for this internal floating roof storage tank:
(1) the dimensions of the tank;
(2) the capacity of the tank;
(3) the VOL stored;
(4) the period of storage for which the VOL was stored in the tank; and
(5) the maximum true vapor pressure of that VOL during the respective storage period.

(b) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

V. REPORTING REQUIREMENTS.

 # 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Testing and procedures.

(a) After each visual inspection that detects defects for this internal floating roof storage tank, the permittee shall submit a report to the Administrator and Department within 30 days of the inspection. The report shall contain the following information:
(1) the identity of the tank;
(2) the nature of the defects; and
(3) the date the tank was emptied or the nature of and date the repair was made.

(b) If defects found during the inspection cannot be repaired within 45 days and if the tank cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator and the Department in the inspection report in (a), above. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the permittee will take that will assure that the control equipment will be repaired or the tank will be emptied as soon as possible.

 # 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Testing and procedures.

(a) Except as provided in (b), below, for the visual inspections required for this internal floating roof storage tank, the permittee shall notify the Administrator in writing at least 30 calendar days prior to the filling or refilling of the tank with VOL to afford the Administrator and the Department the opportunity to inspect the tank prior to refilling.

SECTION E. Source Group Plan Approval Restrictions.

(b) If the inspection is not planned and the permittee could not have known about the inspection 30 days in advance of refilling the tank with VOL, the permittee shall notify the Administrator and Department at least 7 calendar days prior to refilling the tank. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator and Department at least 7 calendar days prior to refilling.

 # 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Reporting and recordkeeping requirements.

If any defects are detected in the visual inspections for this internal floating roof storage tank, a report shall be furnished to the Administrator of the EPA and the Department within 30 days of the inspection. The report shall identify the following:
(a) the identity of the tank;
(b) the nature of the defects; and
(c) the date the tank was emptied or the nature of and date the repair was made.

VI. WORK PRACTICE REQUIREMENTS.

 # 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Standard for volatile organic compounds (VOC).

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 129.56.]

(a) The internal floating roof shall rest or float on the liquid surface inside this storage tank (but not necessarily be in complete contact with it) at all times, except during those intervals when the tank is completely emptied or subsequently emptied and refilled.
(b) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

 # 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Standard for volatile organic compounds (VOC).

[Additional authority for this plan approval condition is derived from 25 Pa. Code §§ 129.56 and 129.96.]

The internal floating roof shall be equipped with one of the following closure devices between the wall of this storage tank and the edge of the internal floating roof:
(a) a foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;
(b) two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous; or
(c) a mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

 # 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Standard for volatile organic compounds (VOC).

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 129.56.]

(a) Except for automatic bleeder vents and rim space vents, each opening in a noncontact internal floating roof shall provide a projection below the liquid surface.
(b) Except for automatic bleeder vents, rim space vents, leg sleeves, column wells, ladder wells, sampling wells, and stub drains, each opening in the roof is to be equipped with a gasketed cover or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Covers on each access hatch and automatic

SECTION E. Source Group Plan Approval Restrictions.

gauge float well shall be bolted except when they are in use.
(c) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
(d) Rim vents shall be equipped with a gasket and are to be set to open only when the roof is being floated off the roof leg supports, or at the manufacturer's recommended setting.
(e) Each penetration of the internal floating roof that allows for the column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
(f) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90% of the opening.
(g) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

 # 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Testing and procedures.

[Additional authority for this plan approval condition is derived from 25 Pa. Code § 129.96.]

(a) If during the visual inspection required for this internal floating roof storage tank, the primary seal has holes, tears or other openings in the seal fabric, or there are defects in the internal floating roof, the permittee shall repair the items as necessary so that none of the conditions specified in this condition exist before filling the tank with VOL.
(b) If during the annual inspection required for the tank, the internal floating roof is not resting on the surface of the VOL inside the tank, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the tank from service within 45 days. If a failure cannot be repaired within 45 days and if the tank cannot be emptied within 45 days, a 30-day extension may be requested.
(c) If during the 10-year inspection required for the tank, the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10% open area, the permittee shall repair the items as necessary so that these items are repaired before refilling the tank with VOL.

VII. ADDITIONAL REQUIREMENTS.

 # 014 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Additional applicable requirements for this internal floating roof storage tank can be found in Section D (under Source ID 103), of this plan approval.

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Plan Approval facility.

SECTION G. Emission Restriction Summary.

Source Id	Source Description
031	AUXILIARY BOILER 1

Emission Limit			Pollutant
0.060	Lbs/MMBTU	30-day rolling average	CO
27.230	Tons/Yr	3 boiler aggregate	CO
0.050	Lbs/MMBTU	30-day rolling average	NOX
92.710	Tons/Yr	3 boiler aggregate	NOX
0.008	Lbs/MMBTU	30-day rolling average	SOX
41.100	Tons/Yr	3 boiler aggregate	SOX
0.001	Lbs/MMBTU	30-day rolling average	Sulfuric Acid
3.150	Tons/Yr	3 boiler aggregate	Sulfuric Acid
0.010	Lbs/MMBTU	30-day rolling average	TSP
21.940	Tons/Yr	3 boiler aggregate	TSP
0.004	Lbs/MMBTU	30-day rolling average	VOC
5.490	Tons/Yr	3 boiler aggregate	VOC

Source Id	Source Description
033	AUXILIARY BOILER 3

Emission Limit			Pollutant
0.060	Lbs/MMBTU	30-day rolling average	CO
27.230	Tons/Yr	3 boiler aggregate	CO
0.050	Lbs/MMBTU	30-day rolling average	NOX
92.710	Tons/Yr	3 boiler aggregate	NOX
0.008	Lbs/MMBTU	30-day rolling average	SOX
41.100	Tons/Yr	3 boiler aggregate	SOX
0.001	Lbs/MMBTU	30-day rolling average	Sulfuric Acid
3.150	Tons/Yr	3 boiler aggregate	Sulfuric Acid
0.010	Lbs/MMBTU	30-day rolling average	TSP
21.940	Tons/Yr	3 boiler aggregate	TSP
0.004	Lbs/MMBTU	30-day rolling average	VOC
5.490	Tons/Yr	3 boiler aggregate	VOC

Source Id	Source Description
034	AUXILIARY BOILER 4

Emission Limit			Pollutant
0.060	Lbs/MMBTU	30-day rolling average	CO
27.230	Tons/Yr	3 boiler aggregate	CO
0.050	Lbs/MMBTU	30-day rolling average	NOX
92.710	Tons/Yr	3 boiler aggregate	NOX
0.008	Lbs/MMBTU	30-day rolling average	SOX
41.100	Tons/Yr	3 boiler aggregate	SOX
0.001	Lbs/MMBTU	30-day rolling average	Sulfuric Acid
3.150	Tons/Yr	3 boiler aggregate	Sulfuric Acid
0.010	Lbs/MMBTU	30-day rolling average	TSP
21.940	Tons/Yr	3 boiler aggregate	TSP
0.004	Lbs/MMBTU	30-day rolling average	VOC
5.490	Tons/Yr	3 boiler aggregate	VOC

SECTION G. Emission Restriction Summary.

Source Id	Source Description
112	NEW COOLING TOWERS

Emission Limit			Pollutant
0.020	gr/DRY FT3		TSP
0.250	Tons/Yr	Mariner East 1	TSP
0.400	Tons/Yr	Mariner East 2	TSP
5.520	Tons/Yr	Mariner East 1	VOC
9.190	Tons/Yr	Mariner East 2	VOC

Source Id	Source Description
139	EXISTING COOLING TOWERS

Emission Limit			Pollutant
0.020	gr/DRY FT3		TSP
4.600	Tons/Yr	15-2B plant	VOC

Source Id	Source Description
188	TANK 607 INT FLOAT 100 MBBL

Emission Limit		Pollutant
6.750	Tons/Yr	VOC

Source Id	Source Description
190	TANK 609 INT FLOAT 98.17 MBBL

Emission Limit		Pollutant
5.400	Tons/Yr	VOC

Source Id	Source Description
192	TANK 611 INT FLOAT 87.8 MBBL

Emission Limit		Pollutant
6.050	Tons/Yr	VOC

Source Id	Source Description
204	TANK 253 INT FLOAT 90.5 MBBL

Emission Limit			Pollutant
40.400	Tons/Yr	group limit - Sources 204, 212, and 225	VOC

Source Id	Source Description
212	TANK 610 INT FLOAT 96.0 MBBL

Emission Limit			Pollutant
40.400	Tons/Yr	group limit - Sources 204, 212, and 225	VOC

Site Emission Restriction Summary

Emission Limit	Pollutant

SECTION G. Emission Restriction Summary.

SECTION H. Miscellaneous.

(a) This plan approval (APS ID 880945, Auth ID 1409701) is an extension of reevaluated Plan Approval No. 23-0119E, which was originally issued on February 12, 2020 (APS ID 880945, Auth ID 1282410), and previously extended on August 18, 2021 (APS ID 880945, Auth ID 1356655).

(b) In addition to the sources listed in Section A, of this plan approval, the following sources and equipment have been reevaluated as part of a single aggregated project. Notwithstanding this reevaluation, these sources and equipment have been determined by the Department to be insignificant sources of air contaminant emissions and, therefore, do not require additional restrictions, monitoring, or recordkeeping. They are still subject to any applicable federal, state, and local laws and regulations:

(1) Additional equipment to accommodate the offloading of railcars containing propane at existing railcar stations (under RFD No. 5918).

(2) Portable flares to vent ethane, propane, or butane from pipelines prior to any maintenance activities (under RFD No. 5944).

(3) The following additional equipment to remove alcohols, usually methanol, from feedstocks (potentially added during the winter months to prevent freezing in the pipeline) prior to their being processed at the facility (under RFD No. 6484):

(i) New methanol analyzer equipment.

(ii) New molecular sieve dehydration beds.

(iii) A new regeneration process.

(iv) A new internal floating roof wastewater storage tank for the temporary storage of methanol-rich wastewater, generated during the regeneration of molecular sieve dehydration beds by the regeneration process, prior to discharge to the process wastewater stream.

(v) All associated piping components for the methanol removal.

(4) A portable flare for instances where the demethanizer (Source ID 106A) is taken out of service for maintenance activities (under RFD No. 7944).

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