



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

**TITLE V/STATE OPERATING PERMIT**

Issue Date: March 2, 2015

Effective Date:

Revision Date:

Expiration Date: April 1, 2025

Revision Type: Modification, Significant

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

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

**TITLE V Permit No: 23-00119**

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

**Owner Information**

Name: ENERGY TRANSFER MKT & TERMLP

Mailing Address: 100 GREEN ST  
MARCUS HOOK, PA 19061-4800

**Plant Information**

Plant: ENERGY TRANSF MKT & TERMLP/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

**Permit 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



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**SECTION A. Site 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)		
091	DEPROPANIZER (15-2B T-4)		
092	DEBUTANIZER (15-2B T-2)		
101	REFRIGERATED ETHANE TANK (300K BBL)	N/A	ETHANE
102	REFRIGERATED PROPANE TANK (500K BBL)	N/A	PROPANE
103	NSPS SUBPART WA FUGITIVE EQUIPMENT LEAKS	N/A	
104	MARINE VESSEL LOADING (REFRIGERATED)	N/A	ETHANE/PROPANE/BUTA
105	CAVERN		
106A	DEMETHANIZER	N/A	ETHANE/PROPANE/METH
111	NATURAL GASOLINE LOADING RACK	N/A	PENTANE/NAPHTHA/NATI
112	NEW COOLING TOWERS	1.800 M Gal/HR	WATER
113	(6) DIESEL ENGINE PUMPS	N/A	#2 Oil
115	MARINE VESSEL LOADING	N/A	PETROLEUM PRODUCTS
116	MARINE VESSEL BALLASTING	N/A	BALLAST WATER
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
121	TANK 139 INT FLOAT 6.5 MBBL	N/A	PETRO. LIQUIDS
122	TANK 130 EXT FLOAT 208.5 MBBL	N/A	PETROL. LIQUIDS
123	TANK 131 EXT FLOAT 208.5 MBBL	N/A	PETROL. LIQUIDS
124	REFRIGERATED ETHANE STORAGE TANK (600,000 BBL)	N/A	ETHANE
125	REFRIGERATED ETHANE STORAGE TANK (600,000 BBL)	N/A	ETHANE
128	TANK 234 INT FLOAT 70.1 MBBL	N/A	PETROL. LIQUIDS
130	TANK 132 INT FLOAT 14.6 MBBL	N/A	PETROL. LIQUIDS
132	TANK 242 INT FLOAT 69.2 MBBL	N/A	PETROL LIQUIDS
133	TANK 246 INT FLOAT 54.4 MBBL	N/A	PETROL LIQUIDS
134	TANK 248 INT FLOAT 52.4 MBBL	N/A	PETROL LIQUIDS
136	TANK 250 INT FLOAT 80.4 MBBL	N/A	PETROL LIQUIDS
139	EXISTING COOLING TOWERS	N/A	RECYCLE WATER
141	WSAC SYSTEMS (2)	N/A	WATER

**SECTION A. Site Inventory List**

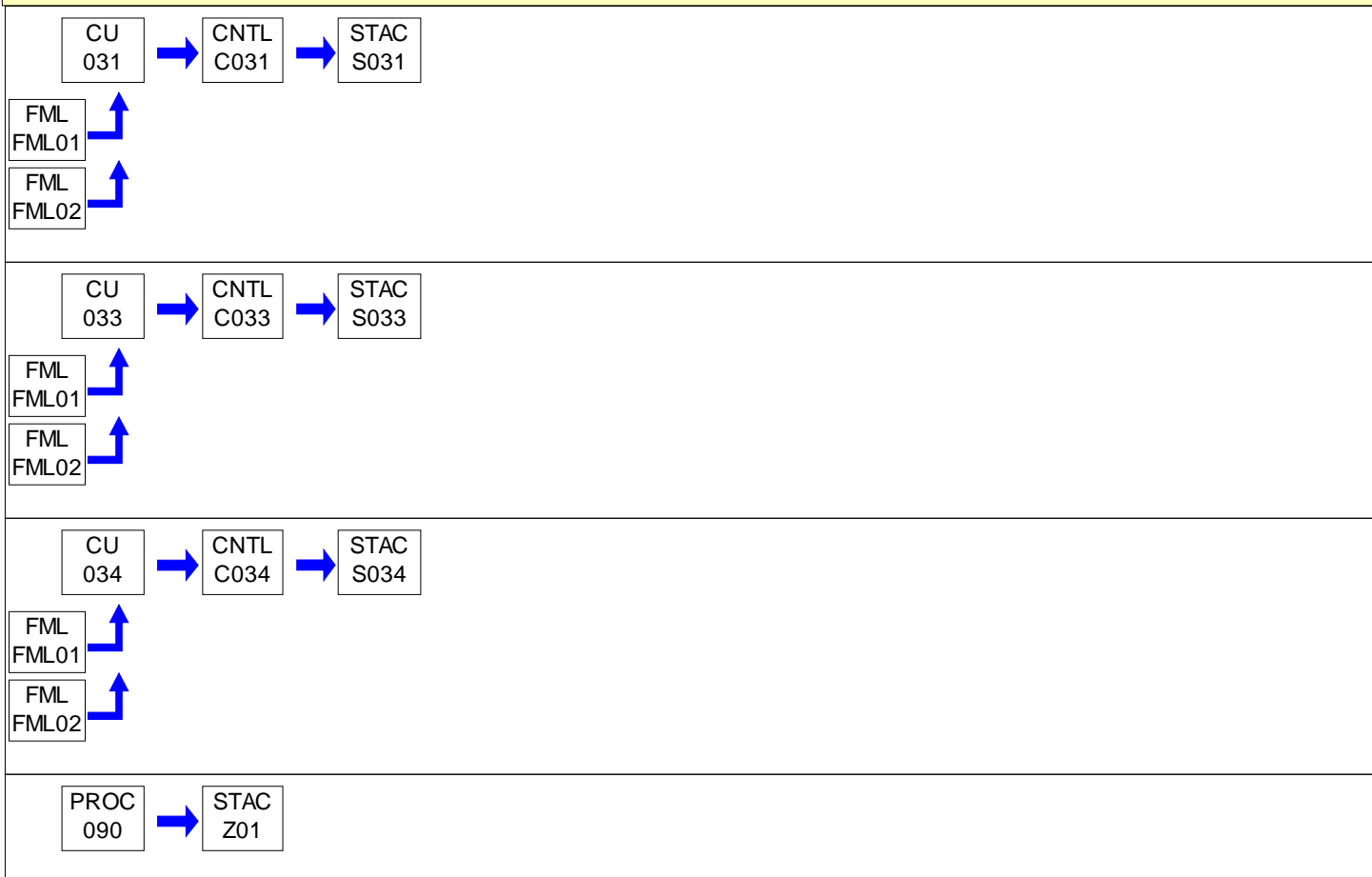
Source ID	Source Name	Capacity/Throughput	Fuel/Material
142	PROJECT PHOENIX DEMETHANIZERS (2)		
146	TANK 344 FIXED ROOF 190.3 MBBL	N/A	PETROL LIQUIDS
148	TANK 352 INT FLOAT 179.7 MBBL	N/A	PETROL LIQUIDS
149	TANK 353 INT FLOAT 189.7 MBBL	N/A	PETROL LIQUIDS
150	TANK 354 INT FLOAT 182.2 MBBL	N/A	PETROL LIQUIDS
151	TANK 355 INT FLOAT 189.7 MBBL	N/A	PETROL LIQUIDS
177	TANK 524 INT FLOAT 75.7 MBBL	N/A	PETROL LIQUIDS
178	TANK 527 INT FLOAT 69.7 MBBL	N/A	PETROL LIQUIDS
179	TANK 528 EXT FLOAT 149.2 MBBL	N/A	PETROL LIQUIDS
180	TANK 529 EXT FLOAT 149.2 MBBL	N/A	PETROL LIQUIDS
182	TANK 594 EXT FLOAT 81.3 MBBL	N/A	PETROL LIQUIDS
188	TANK 607 INT FLOAT 100 MBBL	N/A	PETROL LIQUIDS
190	TANK 609 INT FLOAT 98.17 MBBL	N/A	PETROL LIQUIDS
192	TANK 611 INT FLOAT 87.8 MBBL	N/A	PETROL LIQUIDS
202	TANK 3 INT FLOAT 41.0 MBBL	N/A	PETROL LIQUIDS
204	TANK 253 INT FLOAT 90.5 MBBL	N/A	PETROL LIQUIDS
212	TANK 610 INT FLOAT 96.0 MBBL	N/A	PETROL LIQUIDS
225	TANK 638 INT FLOAT 61.13 MBBL	N/A	PETROL LIQUIDS
300	MISC TANKS	N/A	PETROL LIQUIDS
302	TANK 2 INT FLOAT 59.5 MBBL	N/A	PETROL LIQUIDS
357	TANK 357 INT FLOAT 182.9 MBBL	N/A	PETROL LIQUIDS
358	TANK 358 INT FLOAT 182.9 MBBL	N/A	PETROL LIQUIDS
367	VEHICLE REFUELING - DIESEL		
368	VEHICLE REFUELING - GASOLINE		
402	BLIND CHANGING	N/A	PETROL LIQUIDS
403	NESHAP ZZZZ FIRE PUMPS (2)	N/A	Diesel Fuel
404	NSPS IIII EMERGENCY GENERATOR	N/A	Diesel Fuel
405	NSPS IIII FIRE PUMPS (4)	N/A	Diesel Fuel
701	WASTEWATER TREATMENT SYSTEM	N/A	PETROL LIQUIDS
801	NSPS SUBPART V FUGITIVE LEAKS		
T001	NSPS KB EXT FLOAT TANKS	N/A	PETROL LIQUIDS
T002	NSPS KB INT FLOAT TANKS	N/A	PETROL LIQUIDS
T003	NESHAP SUBPART R TANKS	N/A	PETROL LIQUIDS
T004	NESHAP SUBPART EEEE TANKS	N/A	PETROL LIQUIDS
C01	WEST COLD FLARE (MODIFIED)	240.000 CF/HR	PURGE AND PILOT GAS
C02	EAST COLD FLARE (NEW TANKS PROJECT)	117.000 CF/HR	PURGE AND PILOT
C03	WEST WARM FLARE	4,833.330 CF/HR	PURGE AND PILOT GAS
C031	LOW NOX BURNERS & FGR (AUX BOILER 1)		
C033	LOW NOX BURNERS & FGR (AUX BOILER 3)		
C034	LOW NOX BURNERS & FGR (AUX BOILER 4)		

**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
C04	PROJECT PHOENIX COLD FLARE	9.452 MCF/HR	PILOT/PURGE/SWEEP GA
C111	NAT GAS LOADING RACK VAPOR BALANCE SYS		
C115	VAPOR RECOVERY SYSTEM		
C701	CARBON CANISTERS		
FML01	NATURAL GAS		
FML02	PROCESS GAS		
S031	AUX BOILER 1 STACK		
S033	AUX BOILER 3 STACK		
S034	AUX BOILER 4 STACK		
S113	DIESEL PUMP STACKS (6)		
S403	NESHAP ZZZZ STACKS		
S404	NSPS IIII GENERTAOR STACK		
S405	NSPS IIII FIRE PUMP STACKS		
Y302	TANK 2 INT FLOAT FUGITIVES		
Y402	BLIND CHANGING FUGITIVES		
Z01	NSPS SUBPART VVA FUGITIVE EQUIPMENT		
Z111	NAT GAS LOADING RACK FUGITIVES		
Z112	NEW COOLING TOWER FUGITIVES		
Z115	MARINE VESSEL LOADING FUGITIVES		
Z116	MARINE VESSEL BALLASTING FUGITIVES		
Z121	TANK 139 INT FLOAT FUGITIVES		
Z122	TANK 130 EXT FLOAT FUGITIVES		
Z123	TANK 131 EXT FLOAT FUGITIVES		
Z128	TANK 234 INT FLOAT FUGITIVES		
Z130	TANK 132 INT FLOAT FUGITIVES		
Z132	TANK 242 INT FLOAT FUGITIVES		
Z133	TANK 246 INT FLOAT FUGITIVES		
Z134	TANK 248 INT FLOAT FUGITIVES		
Z136	TANK 250 INT FLOAT FUGITIVES		
Z139	COOLING TOWER FUGITIVES		
Z141	WSAC SYSTEMS FUGITIVE EMISSIONS		
Z146	TANK 344 FIXED ROOF FUGITIVES		
Z148	TANK 352 INT FLOAT FUGITIVES		
Z149	TANK 353 INT FLOAT FUGITIVES		
Z150	TANK 354 INT FLOAT FUGITIVES		
Z151	TANK 355 INT FLOAT FUGITIVES		
Z177	TANK 524 INT FLOAT FUGITIVES		
Z178	TANK 527 INT FLOAT FUGITIVES		
Z179	TANK 528 EXT FLOAT FUGITIVES		
Z180	TANK 529 EXT FLOAT FUGITIVES		
Z182	TANK 594 EXT FLOAT FUGITIVES		

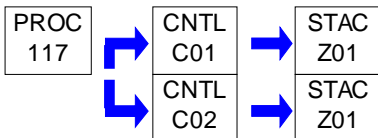
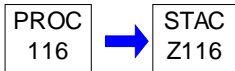
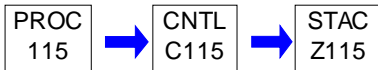
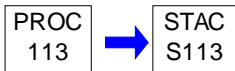
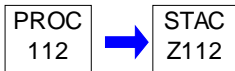
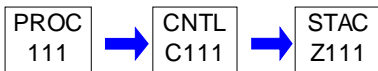
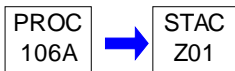
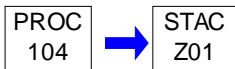
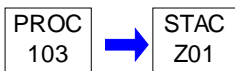
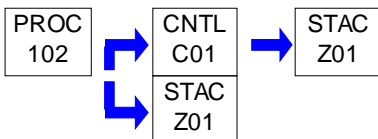
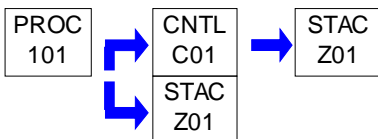
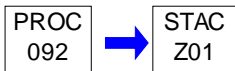
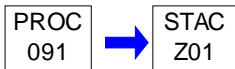
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
Z188	TANK 607 INT FLOAT FUGITIVES		
Z190	TANK 609 FUGITIVES		
Z192	TANK 611 INT FLOAT FUGITIVES		
Z202	TANK 3 INT FLOAT FUGITIVES		
Z204	TANK 253 INT FLOAT FUGITIVES		
Z212	TANK 610 INT FLOAT FUGITIVES		
Z225	TANK 638 INT FLOAT FUGITIVES		
Z300	MISC TANKS FUGITIVES		
Z357	TANK 357 FUGITIVES		
Z358	TANK 358 FUGITIVES		
Z368	VEHICLE LOADING (GAS/DIESEL) FUGITIVES		
Z701	WASTEWATER TREATMENT SYSTEM FUGITIVES		
ZC02	COLD FLARE (NEW TANKS PROJECT)		
ZC03	WEST WARM FLARE		
ZC04	PROJECT PHOENIX COLD FLARE FUGITIVE EMISSIONS		

**PERMIT MAPS**



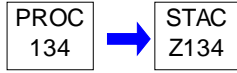
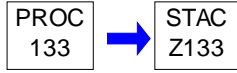
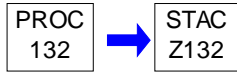
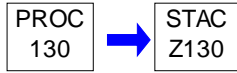
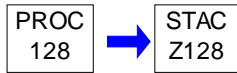
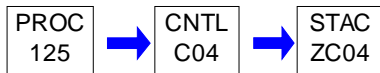
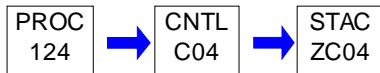
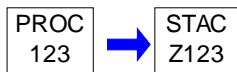
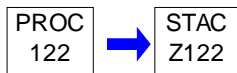
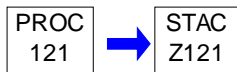
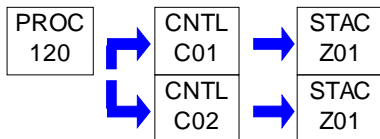
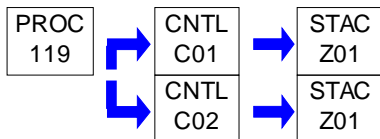
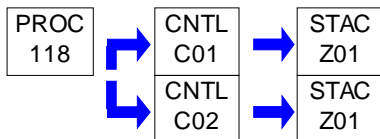
## PERMIT MAPS







## PERMIT MAPS





## PERMIT MAPS

PROC  
136 → STAC  
Z136

PROC  
139 → STAC  
Z139

PROC  
141 → STAC  
Z141

PROC  
142 → STAC  
Z01

PROC  
146 → STAC  
Z146

PROC  
148 → STAC  
Z148

PROC  
149 → STAC  
Z149

PROC  
150 → STAC  
Z150

PROC  
151 → STAC  
Z151

PROC  
177 → STAC  
Z177

PROC  
178 → STAC  
Z178

PROC  
179 → STAC  
Z179

PROC  
180 → STAC  
Z180

PROC  
182 → STAC  
Z182

PROC  
188 → STAC  
Z188

**PERMIT MAPS**

PROC 190 → STAC Z190

PROC 192 → STAC Z192

PROC 202 → STAC Z202

PROC 204 → STAC Z204

PROC 212 → STAC Z212

PROC 225 → STAC Z225

PROC 300 → STAC Z300

PROC 302 → STAC Y302

PROC 357 → STAC Z357

PROC 358 → STAC Z358

PROC 368 → STAC Z368

PROC 402 → STAC Y402

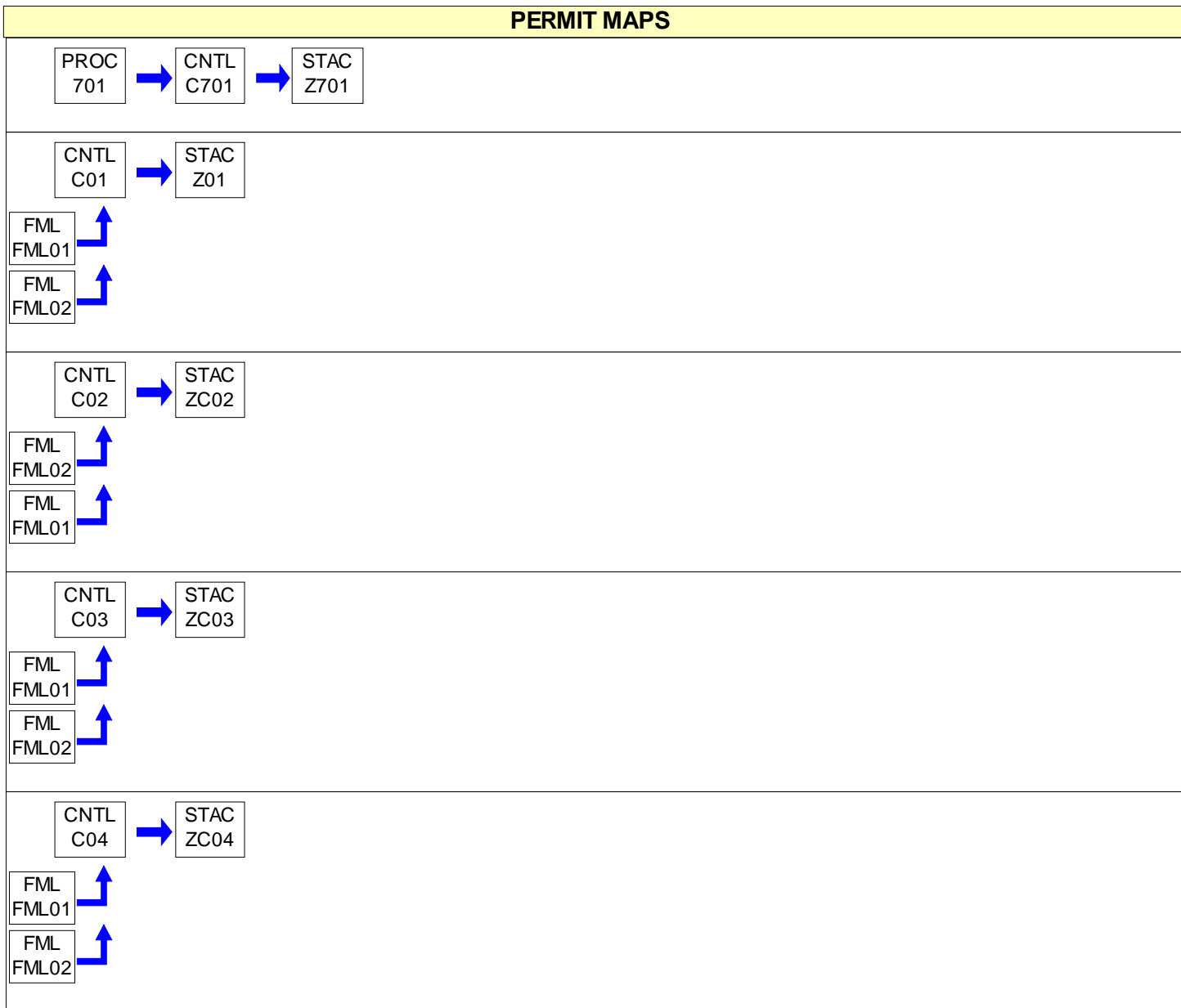
PROC 403 → STAC S403

PROC 404 → STAC S404

PROC 405 → STAC S405



**PERMIT MAPS**



**SECTION B. General Title V Requirements****#001 [25 Pa. Code § 121.1]****Definitions**

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

**#002 [25 Pa. Code § 121.7]****Prohibition of Air Pollution**

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

**#003 [25 Pa. Code § 127.512(c)(4)]****Property Rights**

This permit does not convey property rights of any sort, or any exclusive privileges.

**#004 [25 Pa. Code § 127.446(a) and (c)]****Permit Expiration**

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

**#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e), 127.503 & 127.704(b)]****Permit Renewal**

(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. The fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" and submitted with the fee form to the respective regional office.

(c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).

(d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

**#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]****Transfer of Ownership or Operational Control**

(a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:

- (1) The Department determines that no other change in the permit is necessary;
- (2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,
- (3) A compliance review form has been submitted to the Department and the permit transfer has been approved by

**SECTION B. General Title V Requirements**

the Department.

(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

**#007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]****Inspection and Entry**

(a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:

- (1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;
- (2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;
- (3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;
- (4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

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

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

**#008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]****Compliance Requirements**

(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:

- (1) Enforcement action
- (2) Permit termination, revocation and reissuance or modification
- (3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

**#009 [25 Pa. Code § 127.512(c)(2)]****Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**SECTION B. General Title V Requirements****#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]****Duty to Provide Information**

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.

(b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

**#011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]****Reopening and Revising the Title V Permit for Cause**

(a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.

(b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:

(1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.

(2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.

(3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

(4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.

(d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

**#012 [25 Pa. Code § 127.543]****Reopening a Title V Permit for Cause by EPA**

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

**#013 [25 Pa. Code § 127.522(a)]****Operating Permit Application Review by the EPA**

The applicant may be required by the Department to provide a copy of the permit application, including the compliance plan, directly to the Administrator of the EPA. Copies of title V permit applications to EPA, pursuant to 25 PA Code §127.522(a), shall be submitted, if required, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

**SECTION B. General Title V Requirements****#014 [25 Pa. Code § 127.541]****Significant Operating Permit Modifications**

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with 25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

**#015 [25 Pa. Code §§ 121.1 & 127.462]****Minor Operating Permit Modifications**

The permittee may make minor operating permit modifications (as defined in 25 Pa. Code §121.1), on an expedited basis, in accordance with 25 Pa. Code §127.462 (relating to minor operating permit modifications). Notifications to EPA, pursuant to 25 PA Code §127.462(c), if required, shall be submitted, to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

**#016 [25 Pa. Code § 127.450]****Administrative Operating Permit Amendments**

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code §127.450(a). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3\_Air\_Apps\_and\_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

(b) Upon final action by the Department granting a request for an administrative operating permit amendment covered under §127.450(a)(5), the permit shield provisions in 25 Pa. Code § 127.516 (relating to permit shield) shall apply to administrative permit amendments incorporated in this Title V Permit in accordance with §127.450(c), unless precluded by the Clean Air Act or the regulations thereunder.

**#017 [25 Pa. Code § 127.512(b)]****Severability Clause**

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board or a court of competent jurisdiction, or US EPA to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

**#018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]****Fee Payment**

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.

(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.

(c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.



**SECTION B. General Title V Requirements**

(d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).

(e) The permittee shall pay an annual operating permit maintenance fee according to the following fee schedule established in 25 Pa. Code § 127.704(d) on or before December 31 of each year for the next calendar year.

(1) Eight thousand dollars (\$8,000) for calendar years 2021—2025.

(2) Ten thousand dollars (\$10,000) for calendar years 2026—2030.

(3) Twelve thousand five hundred dollars (\$12,500) for the calendar years beginning with 2031.

**#019 [25 Pa. Code §§ 127.14(b) & 127.449]****Authorization for De Minimis Emission Increases**

(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

The Department may disapprove or condition de minimis emission increases at any time.

(b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NO<sub>x</sub> from a single source during the term of the permit and 5 tons of NO<sub>x</sub> at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM<sub>10</sub> from a single source during the term of the permit and 3.0 tons of PM<sub>10</sub> at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:

(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

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(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.

(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

**#020 [25 Pa. Code §§ 127.11a & 127.215]****Reactivation of Sources**

(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

**#021 [25 Pa. Code §§ 121.9 & 127.216]****Circumvention**

(a) The owner of this Title V facility, 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

**SECTION B. General Title V Requirements**

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 permit, 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.

**#022 [25 Pa. Code §§ 127.402(d) & 127.513(1)]****Submissions**

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

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

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Enforcement & Compliance Assurance Division  
Air, RCRA and Toxics Branch (3ED21)  
Four Penn Center  
1600 John F. Kennedy Boulevard  
Philadelphia, PA 19103-2852

The Title V compliance certification shall be emailed to EPA at R3\_APD\_Permits@epa.gov.

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

**#023 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]****Sampling, Testing and Monitoring Procedures**

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

**#024 [25 Pa. Code §§ 127.511 & Chapter 135]****Recordkeeping Requirements**

(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:

- (1) The date, place (as defined in the permit) and time of sampling or measurements.
- (2) The dates the analyses were performed.
- (3) The company or entity that performed the analyses.
- (4) The analytical techniques or methods used.

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(5) The results of the analyses.

(6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

**#025 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]****Reporting Requirements**

(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.

(c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.

(d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

**#026 [25 Pa. Code § 127.513]****Compliance Certification**

(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:

- (1) The identification of each term or condition of the permit that is the basis of the certification.
- (2) The compliance status.
- (3) The methods used for determining the compliance status of the source, currently and over the reporting period.
- (4) Whether compliance was continuous or intermittent.

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3\_APD\_Permits@epa.gov.

**SECTION B. General Title V Requirements****#027 [25 Pa. Code § 127.3]****Operational Flexibility**

The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

- (1) Section 127.14 (relating to exemptions)
- (2) Section 127.447 (relating to alternative operating scenarios)
- (3) Section 127.448 (relating to emissions trading at facilities with federally enforceable emissions caps)
- (4) Section 127.449 (relating to de minimis emission increases)
- (5) Section 127.450 (relating to administrative operating permit amendments)
- (6) Section 127.462 (relating to minor operating permit amendments)
- (7) Subchapter H (relating to general plan approvals and operating permits)

**#028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 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 Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
  - (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 EPA 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 permit 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.

(d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

- (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
- (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

**SECTION B. General Title V Requirements**

(e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:

(1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Section B, Condition #026 of this permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

**#029 [25 Pa. Code § 127.512(e)]****Approved Economic Incentives and Emission Trading Programs**

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

**#030 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]****Permit Shield**

(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:

(1) The applicable requirements are included and are specifically identified in this permit.

(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.

(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.

(4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

**#031 [25 Pa. Code §135.3]****Reporting**

(a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

**#032 [25 Pa. Code §135.4]****Report Format**

Emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.

**SECTION C. Site Level Requirements****I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

The permittee may not permit the emission into the outdoor atmosphere of a fugitive air contaminant from a source other than the following:

- (a) construction or demolition of buildings or structures;
- (b) grading, paving, and maintenance of roads and streets;
- (c) use of roads and streets. Emissions from material in or on trucks, railroad cars, and other vehicular equipment are not considered as emissions from use of roads and streets;
- (d) clearing of land;
- (e) stockpiling of materials;
- (f) open burning operations (see 25 PA Code Section 129.14 for restrictions on open burning); and
- (g) sources, and classes of sources, other than those identified in (a) - (f) above, for which the operator has obtained a determination from the Department, in accordance with 25 Pa. Code § 123.1(b), that fugitive emissions from the source, after appropriate controls, meet the following requirements:
  - (1) the emissions are of minor significance with respect to causing air pollution; and
  - (2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

**# 002 [25 Pa. Code §123.2]****Fugitive particulate matter**

The permittee may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a)(1) - (9) (relating to prohibition of certain fugitive emissions) if the emissions are visible at the point the emissions pass outside the property.

**# 003 [25 Pa. Code §123.31]****Limitations**

The permittee may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property boundary on which the source(s) is being operated.

**# 004 [25 Pa. Code §123.41]****Limitations**

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

- (a) equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour; or
- (b) equal to or greater than 60% at any time.

**# 005 [25 Pa. Code §123.42]****Exceptions**

The visible emission limitations, of this Section, shall not apply to a visible emission in either of the following instances:

- (a) when the presence of uncombined water is the only reason for failure to meet the limitations; or
- (b) when the emission results from the sources specified in Condition #001, of this Section.

**# 006 [25 Pa. Code §129.14]****Open burning operations**

The permittee may not permit the open burning of material in the Southeast Air Basin, except when the open burning results from:

- (a) a fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer;
- (b) any fire set for the purpose of instructing personnel in firefighting, when approved by the Department; or
- (c) a fire set for the prevention and control of disease or pests, when approved by the Department.



**SECTION C. Site Level Requirements****II. TESTING REQUIREMENTS.****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.512.]

- (a) If at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in Sections A and H, of this Permit, may be in excess of the limitations specified in this permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code, Part I, Subpart C, Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).
- (b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

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

As required by each individual source in this operating permit:

- (a) the permittee shall perform a stack test using the Department-approved procedures, every five (5) calendar years. Such testing shall be conducted at least 12 months prior to the expiration of this permit. The stack test results shall be submitted for review no later than 6 months before the permit expiration;
- (b) at least sixty (60) 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;
- (c) tests shall be conducted in accordance with the provisions of EPA Methodologies or other Department approved methodology and 25 Pa. Code, Chapter 139;
- (d) at least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test;
- (e) within sixty (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; and
- (f) 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.****# 009 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

- (a) a device approved by the Department and maintained to provide accurate opacity measurements; or
- (b) observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

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

If at any time the Department has cause to believe that air contaminant emissions from any source(s) listed in Section A, of this Permit, may be in excess of the limitations specified in this Permit, established pursuant to, any applicable rule or regulation contained in 25 Pa. Code, Part I, Subpart C, Article III, or additional information previously reported to the Department, the permittee shall be required to conduct monitoring and recordkeeping of parameters and at a frequency deemed necessary by the Department to determine the actual emission rate.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.511.]

- (a) The permittee shall monitor the facility, once per operating day, for the following:
- (1) odors which may be objectionable (as per 25 Pa. Code § 123.31).
  - (2) visible emissions (as per 25 Pa. Code §§ 123.41 and 123.42).
  - (3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).



**SECTION C. Site Level Requirements**

(b) Objectionable odors, which may cause annoyance or discomfort to the public noticed at the site property boundaries that are caused or may be caused by operations at the site, as well as fugitive particulate emissions that originated on-site and cross the property line, and visible emissions that originated on site shall:

- (1) be investigated;
- (2) be reported to the Environmental Department;
- (3) have appropriate corrective taken (for emissions that originate on-site); and
- (4) be recorded in the permanent written log.

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

The permittee shall maintain records for all de minimis source categories in order to demonstrate compliance with the de minimis limits for VOC of three pounds per hour, 15 pounds per day, and 2.7 tons per year for each category.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.511.]

- (a) The permittee shall record all spills/releases of petroleum liquids, of the following amounts, in a written file:
- (1) a release of more than 25 gallons to a containment area, structure or facility around an aboveground storage tank;
  - (2) a release of more than 5 gallons to a synthetic surface, such as asphalt or concrete; and
  - (3) a release of more than one gallon to surface soils.
- (b) Information to be recorded, at a minimum, shall be the following:
- (1) the quantity of substance involved;
  - (2) the date and time the release occurred; and
  - (3) interim remedial action planned, initiated, and/or completed.

(c) The permittee shall keep these records at the site location for a period of five (5) years and shall make them available to the Department upon request.

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

The permittee shall maintain records on all air pollution control system performance evaluations and records of calibration checks, adjustments, and maintenance performed on all sources identified in this permit.

**# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

A copy of all manufacturer's specifications shall be kept for all CEMS that are required by this operating permit.

**# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.511.]

The permittee shall maintain a daily record of all reports of fugitive emissions (except LDAR), visible emissions, and odor monitoring, including those that deviate from the terms and conditions of this permit. The report(s) shall contain, at a minimum, the following items:

- (a) date, time, and location of the incident(s);
- (b) to the extent known, identification of the primary cause of the event; and
- (c) a description of any response action taken, if necessary to address the situation.

**# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep a record of all stack tests and reports that are required by this operating permit.

**SECTION C. Site Level Requirements****# 018 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 40 CFR § 60.49b(i) and 25 Pa. Code §§ 123.51, 139.101(5), and 139.101(12).]

The permittee shall comply with the recordkeeping requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and the "Record Keeping and Reporting" requirements in the Department's Continuous Source Monitoring Manual, Revision No. 8 or latest revision, and the recordkeeping requirements established in 40 CFR 60, Subpart Db.

Records shall be retained for at least five (5) years and shall be made available to the Department upon request.

[Compliance with any subsequently issued revision to the Continuous Source Monitoring Manual will constitute compliance with this permit condition. Compliance with this permit condition assures compliance with 25 Pa. Code §§ 129.100(i) and 129.115(k).]

**# 019 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Unless specified elsewhere in this operating permit, all records shall be maintained and kept at the facility for a period of not less than five (5) years and shall be made available to the Department upon written or verbal request at a reasonable time.

[Compliance with this permit condition assures compliance with 25 Pa. Code §§ 129.100(i) and 129.115(k).]

**# 020 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) For storage tanks with a capacity greater than 40,000 gallons storing VOCs with a vapor pressure greater than 1.5 psia under actual storage conditions shall, on a monthly basis, maintain records of the following information for each storage tank:

- (1) the name of the petroleum liquid being stored in the tank;
- (2) the period of time over which the liquid was stored; and
- (3) the maximum true vapor pressure of the particular liquid stored during the term of its storage.

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

**# 021 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

For appliances normally containing fifty (50) or more pounds of refrigerant, the date and type of service and the quantity of refrigerant added shall be recorded. These records shall be kept for a minimum of five (5) years.

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

(a) The permittee shall notify the Department as soon as practicable of any release of gasoline or any other volatile organic compound that is not under control, not completely contained and not completely recovered within twenty-four (24) hours of its occurrence at (484) 250-5920. A release is defined as, but is not limited to a release of more than 25 gallons to an above ground surface.

(b) The permittee shall describe, to the extent information is available:

- (1) the quantity of substance involved;
- (2) date and time the release occurred;
- (3) actual or potential danger to public health; and
- (4) interim remedial actions planned, initiated, or completed.

**SECTION C. Site Level Requirements****# 023 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 40 CFR Part 60, Subpart Db; and 25 Pa. Code §§ 123.51, 139.101(5), and 139.101(12).]

The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), the "Record Keeping and Reporting" requirements as established in the Department's Continuous Source Monitoring Manual, Revision No. 8 or latest revision, and the reporting requirements established in 40 CFR 60, Subpart Db.

The permittee shall report emissions for all periods of unit operation, including startup, shutdown and malfunction.

Initial quarterly reports following system certification shall be submitted to the Department within thirty-five (35) days following the date upon which the Department notifies the permittee, in writing, of the approval of the continuous source monitoring system for use in determining compliance with applicable emission standards.

Subsequent quarterly reports shall be submitted to the Department within 30 days after the end of each calendar quarter.

Failure to submit required reports of continuous emission monitoring within the time periods specified in this Condition, shall constitute violations of this Permit, unless approved in advance by the Department in writing.

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

**# 024 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall submit the following reports:

(a) an annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under Condition # 024, Section B, of this permit. The annual certificate of compliance and any required semi-annual Title V reports shall be submitted to the Department in paper form, and EPA Region III in electronic form at the following email address:

R3\_APD\_Permits@epa.gov

(b) a semi-annual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the same year. Note: The annual compliance certification fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

Electronic copies to the EPA for the annual and semi-annual reports should be sent to the following email address:  
R3\_APD\_Permits@epa.gov

(c) The subject line in each electronic report shall contain the permittee's name and the TVOP number.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.511.]

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health,

**SECTION C. Site Level Requirements**

safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

- (1) name, permit or authorization number, and location of the facility;
- (2) nature and cause of the malfunction, emergency or incident;
- (3) date and time when the malfunction, emergency or incident was first observed;
- (4) expected duration of excess emissions;
- (5) estimated rate of emissions; and
- (6) corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

**# 026 [25 Pa. Code §135.21]****Emission statements**

The permittee shall submit by March 1, of each year, an annual emission statement for the preceding calendar year. Additionally, a description of the method used to calculate the emissions and the time period over which the calculation is based shall be included. The statement shall contain a certification by a responsible official that the information contained in the statement is true and accurate.

**# 027 [40 CFR Part 61 NESHAPs §40 CFR 61.145]****Subpart M--National Emission Standard for Asbestos Standard for demolition and renovation.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall provide the Department with notification prior to any demolition/renovation in accordance with the provisions of 40 CFR Part 61, Subpart M.

**VI. WORK PRACTICE REQUIREMENTS.****# 028 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

The permittee shall take all reasonable actions to prevent particulate matter from becoming airborne from sources listed under condition #001 of this section. These actions shall include, but not be limited to, the following:

- (a) use, where possible, of water or suitable chemicals, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land;
- (b) application of asphalt, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts;
- (c) paving and maintenance of roadways; and
- (d) prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.

**# 029 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

**SECTION C. Site Level Requirements**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.512, 129.97(c) and (d), and 129.112(c) and (d).]

The permittee shall ensure that the sources and air pollution control devices, listed in Sections A and H, of this permit, are operated and maintained in a manner consistent with good engineering and maintenance practices, competent air pollution control practices, and in accordance with manufacturers specifications.

**# 030 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall reduce emissions of Class I and class II refrigerants during the service, maintenance, repair, and disposal of equipment in accordance with the requirements of 40 CFR 82, Subpart F, Recycling and Emissions Reduction.

**# 031 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.512.]

The permittee shall immediately implement measures to reduce the air contaminant emissions to within applicable limitations if at any time the operation of the source(s) identified in Section A, of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code, Part I, Subpart C, Article III, or any other applicable rule promulgated under the Clean Air Act.

If necessary, the permittee shall file an application for the installation of an air cleaning device(s).

**# 032 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 40 CFR Part 60, Subpart Db; and 25 Pa. Code §§ 123.51, 139.101(5), and 139.101(12).]

Continuous Emission Monitoring Systems and components must be operated and maintained in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and the "Quality Assurance" requirements in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-005.

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

**# 033 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Wastewater separators. No person may permit the use of a compartment of a single or multiple compartment volatile organic compound wastewater separator which compartment receives effluent water containing 200 gallons a day or more of any volatile organic compound from equipment processing, refining, treating, storing, or handling volatile organic compounds unless the compartment is equipped with one of the following vapor loss control devices--properly installed, in good working order, and in operation--as follows:

- (1) a container having all openings sealed and totally enclosing the liquid contents. Gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place; and
- (2) a container equipped with a floating roof--consisting of a pontoon-type roof, double-deck-type roof, or internal floating cover--which will rest on the surface of the contents and be equipped with closure seal or seals to close the space between the roof edge and container wall. Gauging and sampling devices shall be gas tight except when gauging or sampling is taking place.

(b) Pumps and compressors. All pumps and compressors handling volatile organic compounds with a vapor pressure of greater than 1.5 psi (10.3 kilopascals) at actual conditions shall have mechanical seals. For the purpose of determining vapor pressure, a temperature no greater than 100°F (37.8°C) shall be used.

(c) Vacuum-producing systems. Vacuum producing systems shall conform with the following:

- (1) the permittee of any vacuum-producing system at the facility may not permit the emission of any volatile organic compounds from the condensers, hot wells, or accumulators of the system; and
- (2) the emission limit under (c)(1), above shall be achieved by one of the following:

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- (i) piping the vapors to a firebox or incinerator;
- (ii) compressing the vapors and adding them to the facility fuel gas system; and
- (iii) any method approved by the Department which recovers no less than 90% by weight of uncontrolled volatile organic compounds that would otherwise be emitted to the atmosphere.

(d) Process unit turnarounds. Purging of volatile organic compounds during depressurization of reactors, fractionating columns, pipes, or vessels during unit shut-down, repair, inspection, or startup shall be performed in such a manner as to direct the volatile organic vapors to a fuel gas system, flare, or vapor recovery system until the internal pressure in such equipment reaches 19.7 psia (136 kilopascals).

**# 034 [40 CFR Part 82 Protection of Stratospheric Ozone §40 CFR 82.154]****Subpart F--Recycling and Emissions Reduction Prohibitions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

Any person operating appliances for maintenance, service, or repair, will use a certified recovery system. Any person who performs maintenance or who services or repairs appliances and who dispose of appliances, except for small appliances, room air conditioners, and motor vehicle air conditioners, will be certified by an approved technician certified program.

Note: Appliance means any device which contains and uses a class I substance or class II substances as a refrigerant and which is used for household or commercial purposes, including air conditioners, refrigerators, chillers, or freezers. Small appliance means any of the following products that are fully manufactured, charged, and hermetically sealed in a factory with five (5) pounds or less of refrigerant: refrigerators and freezers designed for home use, room air conditioners (including window units and packaged terminal air conditioners), packaged terminal heat pumps, dehumidifiers, under-the-counter ice makers, vending machines, and drinking water coolers.

**VII. ADDITIONAL REQUIREMENTS.****# 035 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The following areas of the facility (some of which are found in Source 701) have carbon canisters: East Process Sump, West Process Sump, 15 Plant Separator, Crude Tank Drainage Area, and Slop Off-Loading Area.

(a) Limitation on use of single carbon canister systems:

- (1) New unit or installation. Except as expressly provided in (a)(3) and (4), below, the permittee shall not use a single carbon canister system for any new unit or installation that requires control;
- (2) Existing units or installation. Except as expressly provided in (a)(3) and (4), below, the permittee shall not use a single carbon canister system for any existing unit or installation that requires control;
- (3) Temporary applications. The permittee may operate a properly sized single canister system to control benzene emissions from a short-term operation, such as a temporary storage tank. For any single canister system, benzene "breakthrough" shall be defined for the purposes of this condition as any benzene reading above background as measured at the outlet of the canister. The permittee shall monitor for breakthrough from a single carbon canister system at least once every twenty-four (24) hours. The permittee shall replace any single carbon canister with a fresh carbon canister immediately after a benzene reading above background is detected at the outlet of the canister, unless the permittee chooses to discontinue flow to the carbon canister or route the stream to an alternative control device. For the purpose of this condition, "immediately" shall mean within twenty-four (24) hours;
- (4) Permanent Applications. The permittee may continue to operate a properly sized single canister system on those applications that existed prior to March 23, 2006 where data over the past five (5) years demonstrate that breakthrough has not occurred in less than six (6) months. The permittee shall monitor for "breakthrough" by monitoring for benzene on a biweekly basis at the outlet of the canister. "Breakthrough" shall be defined for the purpose of this condition as any reading equal to or greater than one (1) ppm benzene. The permittee shall replace any single carbon canister with a fresh carbon canister immediately after breakthrough is detected. For the purpose of this condition, "immediately" shall mean within twenty-four (24) hours.

(b) Installation and Use of Dual Canisters Operated in Series. Except as provided in (a)(3) and (4), above, the permittee shall add a secondary carbon canister to each single carbon canister system on an existing unit or installation to convert the single canister system to a dual carbon canister system with the dual canisters operated in series, and shall at each

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location utilize the dual canister system to control benzene emissions.

(c) Breakthrough Monitoring with Dual Canisters. By no later seven (7) days after the installation of each secondary carbon canister, the permittee shall start to monitor for breakthrough between the primary and secondary carbon canisters at times when there is actual flow to the carbon canister. Monitoring shall be performed on a daily basis or at intervals no greater than 20% of the design carbon replacement interval, whichever is greater. The permittee shall monitor for "breakthrough" by monitoring for benzene. For a dual carbon canister system, "breakthrough" shall be defined for the purpose of this condition as any reading equal to or greater than five (5) ppm benzene measured between the primary and secondary canister. In lieu of replacing the primary canister immediately, the permittee may elect to monitor the secondary canister the day breakthrough between the primary and secondary canister is identified and each calendar day thereafter. This daily monitoring shall continue until the primary canister is replaced. If either benzene or VOC is detected at the outlet of the secondary canister during this period of daily monitoring, the primary canister must be replaced within 24 hours. The original secondary carbon canister will become the new primary carbon canister and a fresh carbon canister will become the secondary canister.

(d) Canister Replacement With Dual Canister System. Except as otherwise provided in (c) above, immediately (within 24 hours) when breakthrough is detected, the permittee shall replace the original primary carbon canister with the secondary canister, and shall use a fresh canister as the new secondary canister.

(e) The permittee shall maintain a supply of fresh carbon canisters at all times.

(f) If a carbon canister that is not regenerated directly on-site is used the permittee shall maintain records of the dates and times when the control device is monitored, when breakthrough is measured, and the date and time when the existing carbon is replaced with fresh carbon.

**# 036 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from §§ 114(a)(3), 504(b) of the CAA Sampling, Testing, and Monitoring Procedures; and 25 Pa. Code § 127.441(c) & Chapter 139.]

The permittee shall perform the emissions monitoring analysis procedures or test methods required under an applicable requirement including procedures and methods under Sections 114(a)(3) (42 U.S.C. §§ 7414 (a)(3)) or 504(b) (42 U.S.C. §§ 7661c(b)) of the Clean Air Act.

Unless otherwise required by this permit, the permittee shall comply with applicable monitoring, quality assurance, recordkeeping and reporting requirements of the Air Pollution Control Act, 25 Pa. Code, Part I, Subpart C, Article III (relating to air resources), including Chapter 139 (relating to sampling and testing). The permittee shall also comply with applicable requirements related to monitoring, quality assurance, reporting and recordkeeping required by the Clean Air Act (including applicable monitoring requirements of 40 CFR Part 60, Subpart Db), including §§ 114(a)(3) and 504(b) and regulations adopted thereunder, unless otherwise required by this permit.

**# 037 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The air contaminant sources located in the permittee's Marcus Hook Terminal facility, which are permitted under Title V Operating Permit No. 23-00119, and the air contaminant sources located in the permittee's adjacent Delaware facility, which are permitted under Title V Operating Permit No. AQM-003/00021, shall be considered as a single facility for New Source Review (NSR), Prevention of Significant Deterioration (PSD), and Title V applicability purposes.

**# 038 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The following Plan Approvals are incorporated into Title V Operating Permit No. 23-00119 by reference:

(1) Plan Approval No. 23-0119E (revised), originally issued on February 21, 2021, including all subsequent extensions and modifications. This Plan Approval is for the reevaluation of all natural gas liquids (NGLs)-related authorizations issued for the facility up through that date, including the Plan Approval detailed in (a)(2), below, as a single aggregated project. Source IDs in this plan approval are: 031, 033, 034, 101, 102, 103, 104, 105, 106A, 111, 112, 115, 117, 118, 119, 120, 133, 136, 139, 178, 188, 190, 192, 204, 212, C01, C02, C031, C033, C034, C111, and C115. [Note: Source IDs 090–091 and 092, for two depropanizers and a debutanizer, respectively, were inadvertently omitted from Plan Approval No. 23-0119E (revised). These have also been incorporated into Title V Operating Permit No. 23-00119 by reference as if they were not omitted.]

**SECTION C. Site Level Requirements**

- (2) Plan Approval No. 23-0119J, originally issued on February 21, 2021, including all subsequent extensions and modifications. This Plan Approval is for the installation and temporary operation of the following sources and equipment:
- (i) Two new 600,000-bbl refrigerated ethane storage tanks.
  - (ii) One new amine treatment system to remove excess carbon dioxide (CO<sub>2</sub>) from ethane feedstock prior to fractionation.
  - (iii) One new dehydration train system to remove water from ethane feedstock prior to fractionation.
  - (iv) Two new refrigeration systems, each consisting of a closed-loop propane system followed by an open-loop ethane system, for the cooling of dry ethane.
  - (v) Two new fractionation towers (demethanizers) and associated equipment for the removal of methane from dry ethane.
  - (vi) Two new wet surface air cooling (WSAC) systems, one associated with each new refrigeration system, to process cooling water for the refrigeration systems.
  - (vii) One new elevated, air-assisted Project Phoenix Cold Flare equipped with high and low-pressure flare tips for flaring refrigerated streams that do not contain water.
  - (viii) All associated piping and components for the refrigerated ethane storage.

Source IDs in this plan approval are: 103, 124, 125, 141, and C04. [Note: Source ID 142 for the two demethanizers were inadvertently omitted from Plan Approval No. 23-0119J. These have also been incorporated into Title V Operating Permit No. 23-00119 by reference as if they were not omitted.]

(b) This list of plan approvals in this condition will be superseded as the plan approvals are incorporated into Title V Operating Permit No. 23-00119 via administrative amendment.

**# 039 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

All RACT-related permit conditions under 25 Pa. Code §§ 129.111–129.115 are to be SIP-approved and any future revisions to any of these will require a co-incident SIP revision.

**# 040 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6]****Subpart A--General Provisions****Compliance with standards and maintenance requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee has developed and implemented a written startup, shutdown, and malfunction plan that describes, in detail, procedures for operating and maintaining the source during periods of startup, shutdown, and malfunction and a program of corrective action for malfunctioning process and air pollution control equipment used to comply with the relevant standard. As required under 40 CFR § 63.8(c)(1)(i), the plan identifies all routine or otherwise predictable CMS malfunctions. The plan is incorporated by reference into the source's Title V permit.

The permittee shall follow the plan revised on December 9, 2015, or the most recently revised plan for the above.

**VIII. COMPLIANCE CERTIFICATION.**

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

**IX. COMPLIANCE SCHEDULE.**

No compliance milestones exist.

**\*\*\* Permit Shield In Effect \*\*\***



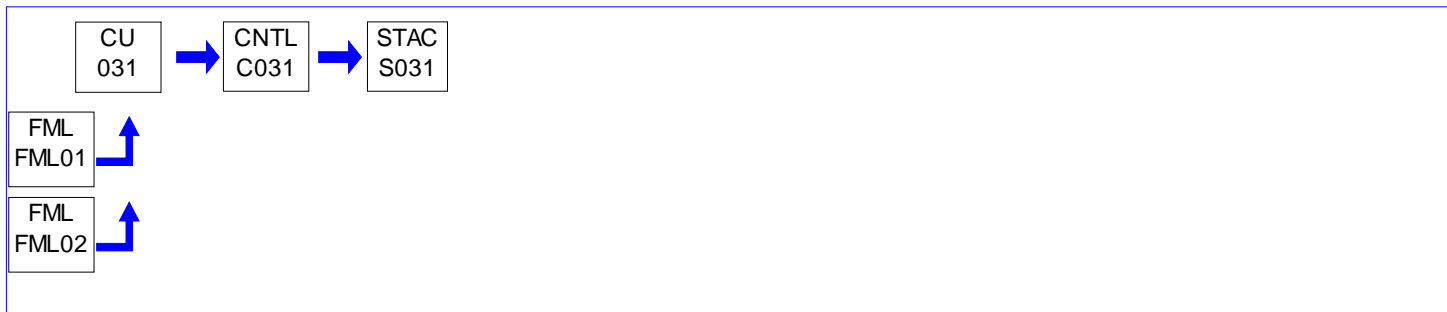
**SECTION D. Source Level Requirements**

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 permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**\*\*\* Permit Shield in Effect. \*\*\***

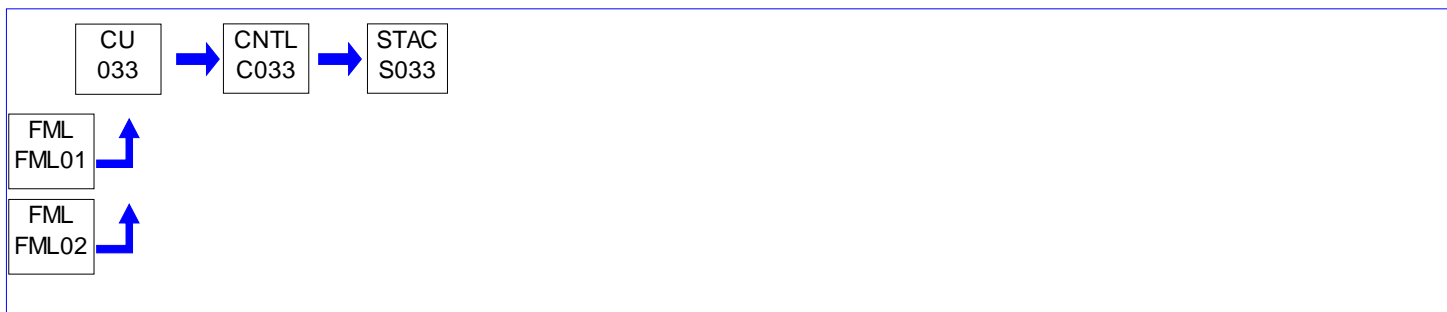
**SECTION D. Source Level Requirements**

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 permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**\*\*\* Permit Shield in Effect. \*\*\***

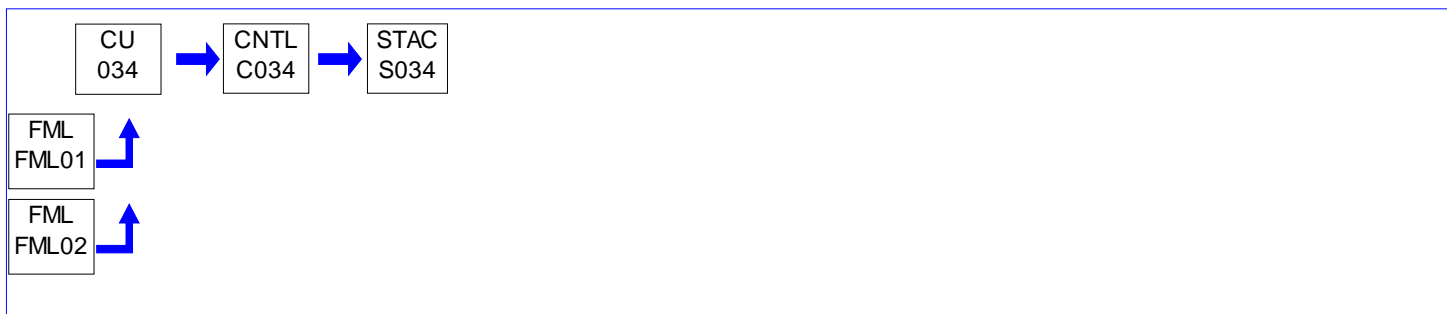
**SECTION D. Source Level Requirements**

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 permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

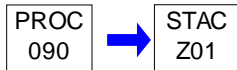
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 090

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

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

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

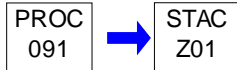
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 091

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

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

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

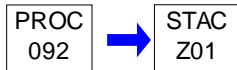
\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

Source ID: 092

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

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

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

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

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

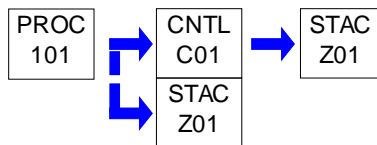
Source ID: 101

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 permit including Section B (Title V General Requirements).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V 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.**

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, 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 the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

**# 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 five (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 of the General Provisions and shall meet the

**SECTION D. Source Level Requirements**

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 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 percent 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.**

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, the permittee shall submit the following:

(a) a report containing the measurements required by 40 CFR § 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator and the Department as required by 40 CFR § 60.8. This report shall be submitted within six (6) months of the initial start-up date;

(b) records shall be kept of all periods of operation during which the flare pilot flame is absent; and

(c) 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 the storage vessel 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 § 60.485(b).

(b) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the 40 § CFR 60.18.

**VII. ADDITIONAL REQUIREMENTS.**

**# 007 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

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

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**



**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is derived from 40 CFR § 60.480a(d)(5).]

Additional applicable requirements for this source can be found in Source 103 (Fugitive Equipment Leaks), except that this tank storing non-VOCs is exempt from the requirements of 40 CFR §§ 60.482-1a through 60.482-11a.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

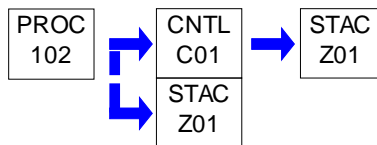
Source ID: 102

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 permit including Section B (Title V General Requirements).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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

**# 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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 five (5) years.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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 of the General Provisions 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 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 percent 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.**

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, the permittee shall submit the following:

(a) a report containing the measurements required by 40 CFR § 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator and the Department as required by 40 CFR § 60.8. This report shall be submitted within six (6) months of the initial start-up date;

(b) records shall be kept of all periods of operation during which the flare pilot flame is absent; and

(c) 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).**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

(a) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the storage vessel 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 § 60.485(b).

(b) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is

**SECTION D. Source Level Requirements**

used as the control device, it shall meet the specifications described in the 40 § CFR 60.18.

**VII. ADDITIONAL REQUIREMENTS.**

**# 007 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

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

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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

**\*\*\* Permit Shield in Effect. \*\*\***

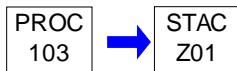
**SECTION D. Source Level Requirements**

Source ID: 103

Source Name: NSPS SUBPART VVA FUGITIVE EQUIPMENT LEAKS

Source Capacity/Throughput:

N/A

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V 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 of appendix A-7 of 40 CFR, Part 60. 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 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

**SECTION D. Source Level Requirements**

- (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 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) and (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. H<sub>2</sub>O 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. H<sub>2</sub>O at 68 °F) is equal to or greater than 20 percent 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 of appendix A-7 of 40 CFR 60, Part 60 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:  
$$V_{max} = K1 + K2HT$$
Where:  
 $V_{max}$  = 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 m<sup>4</sup>/(MJ-sec) = 0.087 ft<sup>4</sup>/(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 of appendix A-6 of 40 CFR Part 60 or ASTM D6420-99 (2004) (where the target compound(s) are those listed in Section 1.1 of ASTM D6420-99, and the target concentration is between 150 parts per billion by volume and 100 ppmv) and ASTM D2504-67, 77, or 88 (Reapproved 1993) 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 of appendix A-7 of 40 CFR 60, Part VVa, 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 thirty (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 Requirements****III. MONITORING REQUIREMENTS.****# 002 [25 Pa. Code §127.441]****Operating permit 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 seven (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 twelve (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) and (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 percent, then monitor within twelve (12) months (1 year);

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

(B) if the percent of leaking connectors calculated from the monitoring results in (b)(3)(iii)(A), above is greater than or equal to 0.35 percent of the monitored connectors, the permittee shall monitor as soon as practical, but within the next six (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 percent of the monitored connectors, the permittee shall monitor all connectors that have not yet been monitored within eight (8) years of the start of the monitoring period.

(iv) If during the monitoring conducted pursuant to (b)(3)(i) through (iii), above, a connector is found to be leaking, it shall be re-monitored once within ninety (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

**SECTION D. Source Level Requirements**

each process unit.

(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) through (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) and (b), above, it shall be repaired as soon as practicable, but not later than fifteen (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 five (5) calendar days after the leak is detected.

(e) Any connector that is designated, as described in (e)(1) and (2), below, as an unsafe-to-monitor connector is exempt from the requirements of (a) and (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) and (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) and (b), above, from the leak repair requirements of (d), above, and from the recordkeeping and reporting requirements of 40 CFR §§ 63.1038 and 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 five (5) days by the method specified in 40 CFR § 60.485a(b) and shall comply with the requirements of (b) through (d), below; or



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- (2) the permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within five (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 fifteen (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 five (5) calendar days after each leak is detected.
- (d) First attempts at repair include, but are not limited to, the best practices described under 40 CFR §§ 60.482-2a(c)(2) and 60.482-7a(e).

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.100(d) and 129.115(f).]

Records of this first attempt of 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.100(d) and 129.115(f).]

- (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 two (2) successive months as specified in 40 CFR § 60.482-7a(c) and no leak has been detected during those two (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 five (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 Method 21 of appendix A-7 of 40 CFR 60 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 fifteen (15) calendar days after discovery of the leak;
  - (6) the signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown;

**SECTION D. Source Level Requirements**

- (7) the expected date of successful repair of the leak if a leak is not repaired within fifteen (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 hr/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 hr/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) through (vi), below, for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 of 40 CFR 60 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 Method 21 of appendix A-7 of 40 CFR 60.
  - (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) and (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.

**SECTION D. Source Level Requirements**

- (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.
- (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 Vw.

**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 six (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 applicable, 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.

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- (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 ninety (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 of the General Provisions. The provisions of 40 CFR § 60.8(d) do not apply to affected facilities subject to the provisions of 40 CFR 60, Subpart VVa, except that the permittee must notify the Administrator and the Department of the schedule for the initial performance tests at least thirty (30) days before the initial performance tests.
- (f) The requirements of (a) through (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) through (c), above, provided that they comply with the requirements established by the state.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

All piping connections shall be welded or flanged, except that threaded connections are permissible on piping smaller than two-inch 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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

**SECTION D. Source Level Requirements**

When a leak is detected, it shall be repaired as soon as practical, but no later than fifteen (15) days after it is detected. A first attempt of repair shall be made no later than five (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.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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

**# 014 [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 percent 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 five (5) calendar days after the leak is detected.
- (2) repairs shall be completed no later than fifteen (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

**SECTION D. Source Level Requirements**

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 requirements of (c)(1) and (c)(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) and (c)(2), above, if they comply with the requirements specified in (g)(1) and (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) or (c)(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) and (c)(2), above, if they comply with the requirements specified in (h)(1) through (3), below:

(1) the permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters 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 percent 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.

**# 015 [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 hr/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) through (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;

**SECTION D. Source Level Requirements**

- (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 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) Semiannually - 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) Semiannually - 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) Semiannually - 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) Semiannually - 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) through (4), below:
- (1) when monitoring is conducted quarterly, monitoring events must be separated by at least thirty (30) calendar days;
  - (2) when monitoring is conducted semiannually (i.e., once every 2 quarters), monitoring events must be separated by at least sixty (60) calendar days;
  - (3) when monitoring is conducted in three (3) quarters per year, monitoring events must be separated by at least ninety (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 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 VVa, the storage vessel is assigned to any process unit subject to 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 three (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).



**SECTION D. Source Level Requirements****# 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2a]  
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals  
Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006  
Standards: Pumps in light liquid service.**

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), (e), and (f) of this condition, 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 thirty (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 (d), (e), and (f) of this condition, 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:

- (i) 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers; and
- (ii) 2,000 ppm or greater for all other 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 five (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 Detectoin.

(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (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 five (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) and (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) through (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.

(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 five (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 2,000 ppm or greater is measured, a leak is detected; or



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- (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 fifteen (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 fifteen (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) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of (a), (c), and (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) through (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 of (a) and (d)(4) through (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.

**# 017 [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.

- (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 (h), (i), and (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

**SECTION D. Source Level Requirements**

(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 fifteen (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 five (5) calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of (a) and (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) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of (a) through (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) through (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) through (e) and (h), above.

**# 018 [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 five (5) calendar days after the pressure release, except as provided in 40 CFR § 60.482-9a. No later than five (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) and (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) and (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 five (5) calendar days after each pressure release, except as provided in 40 CFR § 60.482-9a.

**# 019 [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;

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- (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 63, Subpart G, applicable to Group 1 wastewater streams;
  - (ii) a treatment, storage, or disposal facility subject to regulation under 40 CFR Part 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 through 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.

**# 020 [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 (d) and (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), (b), and (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) through (c), above, are exempted from those requirements.

**# 021 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7a]  
Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006  
Standards: Valves in gas/vapor service and in light liquid service.**

- (a) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR § 60.485a(b) and shall comply with (b) through (d), below, except as provided in (e), (f) and (g) (below), 40 CFR §§ 60.482-1a(c) and (f), and 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), and (f), below, 40 CFR §§ 60.482-1a(c), and 60.483-1a and 60.483-2a.
  - (2) The valve must be monitored for the first time within thirty (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 2.0 percent of the valves are leaking for that process unit, the valve must be monitored for the first time during the next scheduled monitoring event for existing valves in the process unit or within ninety (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 two (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 three (3) months. The permittee must keep records of the valves assigned to each subgroup.

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(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two (2) successive months.

(c) When a leak is detected, it shall be repaired as soon as practicable, but no later than fifteen (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 five (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 (a); 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 two (2) meters above a support surface;
- (2) the process unit within which the valve is located has less than 3.0 percent 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.

**# 022 [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 fifteen (15) days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown. Monitoring to verify repair must occur within fifteen (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 six (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 (2) consecutive monthly monitoring instrument readings are below the leak definition.

**SECTION D. Source Level Requirements**

**# 023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.483-1a]**  
**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**  
**Alternative standards for valves - allowable percentage of valves leaking.**

- (a) The permittee may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.
- (b) The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:
- (1) the permittee must notify the Administrator and Department that it has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 40 CFR § 60.487a(d).
  - (2) a performance test as specified in (c), below, shall be conducted initially upon designation, annually, and at other times as requested by the Administrator or the Department.
  - (3) if a valve leak is detected, it shall be repaired in accordance with 40 CFR § 60.482-7a(d) and (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 one (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 who elects to comply with this alternative standard shall not have a facility with a leak percentage greater than 2.0 percent, determined as described in 40 CFR § 60.485a(h).

**# 024 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.483-2a]**  
**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**  
**Alternative standards for valves - skip period leak detection and repair.**

- (a) The permittee may elect to comply with one of the alternative work practices specified in (b)(1) and (2), below. The permittee must notify the Administrator and the Department before implementing one of the alternative work practices, as specified in 40 CFR § 60.487(d)a.
- (b) 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 (2) consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip one (1) of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
  - (2) After five (5) consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip three (3) of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
  - (3) If the percent of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in 40 CFR § 60.482-7a, but can again elect to use this section.
  - (4) The percent 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.

**VII. ADDITIONAL REQUIREMENTS.**

**# 025 [25 Pa. Code §127.411]**  
**Content of applications.**

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

Source number:  
 090 - Depropanizer;  
 091 - Depropanizer;

**SECTION D. Source Level Requirements**

092 - Debutanizer;  
101 - Refrigerated Ethane Tank;  
102- Refrigerated Propane Tank;  
104 - Marine Vessel Loading (Refrigerated);  
106A - Demethanizer (components "in VOC service" as defined in 40 CFR § 60.481a);  
111 - Natural Gasoline Loading Rack;  
117 - Refrigerated Ethane Tank;  
118 - Refrigerated Butane Tank;  
119 - Refrigerated Propane Tank;  
120 - Refrigerated Propane Tank;  
124 - Refrigerated Ethane Tank;  
125 - Refrigerated Ethane Tank;  
133 - Tank 246;  
136 - Tank 250;  
142 - Two Project Phoenix Demethanizers (components "in VOC service" as defined in 40 CFR § 60.481a);  
178 - Tank 527;  
179 - Tank 528;  
188 - Tank 607;  
190 - Tank 609;  
192 - Tank 611;  
204 - Tank 253;  
212 - Tank 610;  
402 - Blind Changing;  
The H5 truck loading and unloading rack for butane and propane;  
The rail loading and unloading rack for propane, butane, and natural gasoline;  
C01 - Cold Flare (modified);  
C02 - Cold Flare (New Tanks Project);  
C03 - West Warm Flare;  
C04 - Project Phoenix Cold Flare;  
Two (2) 50,000 barrel spheres for C3+ storage;  
Three (3) spheres storing pentane: HS-16 (40,000 bbl), Sphere 3 (40,500 bbl) and Sphere 4 (40,500 bbl);  
Two (2) 20,000 barrel spheres for C3+ storage; and  
Process gas vessel V282 of the 15-2B gas plant unit indicated in Condition # 032, Section D (under Source ID 801), of this permit, and all associated piping and fugitive emissions components, including the gas chromatography (GC) shelter, leading to auxiliary boilers 1 and 3-4 (Source IDs 031 and 033-034).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

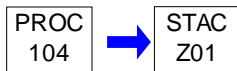
Source ID: 104

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 permit including Section B (Title V General Requirements).

**II. TESTING REQUIREMENTS.**

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

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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 permit including Section B (Title V General Requirements).

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

Prior to breaking the seal between the loading arm and the marine vessel, the permittee shall ensure that gaseous ethane

**SECTION D. Source Level Requirements**

and propane is sent to vapor recovery system.

**VII. ADDITIONAL REQUIREMENTS.**

**# 006 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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

**# 007 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Refrigerated loading is permitted as follows:

- (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 above refrigerated loading docks has two (2) identical loading arms and one (1) vapor return line.

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

Source ID: 105

Source Name: CAVERN

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.****# 001 [25 Pa. Code §127.441]****Operating permit 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 (relating to emissions of VOCs) 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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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-- for example: valve, seal;
- (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 owner for five (5) years after the date on which the record was made or

**SECTION D. Source Level Requirements**

the report was prepared.

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 §127.441]****Operating permit 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 §127.441]****Operating permit 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 fifteen (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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

Except for safety pressure relief valves and fittings on all valves one (1) inch or smaller, 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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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 fifteen (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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

(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 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.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

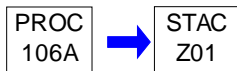
Source ID: 106A

Source Name: DEMETHANIZER

Source Capacity/Throughput:

N/A

ETHANE/PROPANE/METHANE

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

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

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

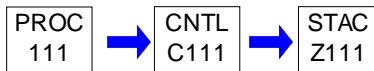
Source ID: 111

Source Name: NATURAL GASOLINE LOADING RACK

Source Capacity/Throughput:

N/A

PENTANE/NAPHTHA/NATURAL G

**I. RESTRICTIONS.****Fuel Restriction(s).**

# 001 [25 Pa. Code §127.441]

**Operating permit 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 permit including Section B (Title V General Requirements).

**III. MONITORING REQUIREMENTS.**

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

# 003 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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 permit including Section B (Title V General Requirements).

**VI. WORK PRACTICE REQUIREMENTS.**

# 004 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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 which close upon disconnection.

# 005 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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.

**# 006 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

(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 §127.441]**

**Operating permit terms and conditions.**

For the purpose of this operating permit, 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 §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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

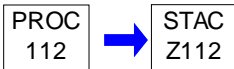
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 112

Source Name: NEW COOLING TOWERS

Source Capacity/Throughput: 1.800 MGal/HR WATER

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

Particulate matter (total PM) emissions 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 12 consecutive month;
- (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 12 consecutive month period.

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

VOC emissions shall not exceed the following:

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

**II. TESTING REQUIREMENTS.****# 003 [25 Pa. Code §127.441]****Operating permit 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 percent 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 the US 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) The monitoring frequency for VOC leaks shall be performed in accordance with the following:
  - (1) monthly for the first 6 months after being placed into operation (or after a leak is detected);
  - (2) quarterly thereafter as long as no leaks are detected; and
  - (3) the Department reserves the right to change this frequency back to monthly based on the results of the leak monitoring.

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

The permittee shall demonstrate compliance with the particulate matter emission limit on these cooling towers by performing a monthly analysis for specific conductivity in umhos (micro mhos), or other Department approved method.

**SECTION D. Source Level Requirements****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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 particulate matter and VOC, including VOCs from leaks (monthly and 12 consecutive month); and
- (f) results of the daily visual inspection of the cooling tower water basin.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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 ppm) to an equivalent liquid concentration, in 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 pounds per gallon;
  - (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 re-monitoring 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 Requirements****V. REPORTING REQUIREMENTS.**

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

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

- (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 subcondition (e) of the testing condition, above.
- (c) The first attempt to isolate the leak and perform the necessary repairs shall be made no later than fourteen (14) days after the second sample results indicating a leak is returned.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

The leak shall be repaired within forty-five (45) days after identifying the leak, except as outlined in the "Delay of Repair" condition for this source. 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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

The permittee may delay the repair of a leaking heat exchanger if (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 forty-five (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 thirty (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 thirty (30) days of the monitoring event in which the leak was shown to increase.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

- (a) The permittee shall not use chromium-based water treatment chemicals in this cooling tower.
- (b) The cooling tower and equipment shall be installed, maintained, and operated in accordance with manufacturer's specifications.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 014 [25 Pa. Code §127.411]****Content of applications.**

This sources consists of the following individual cooling towers:

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

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

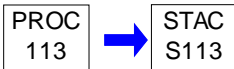
Source ID: 113

Source Name: (6) DIESEL ENGINE PUMPS

Source Capacity/Throughput:

N/A

#2 Oil

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.13]****Processes**

No person may permit the emission into the outdoor atmosphere of particulate matter from any of these engines in excess of 0.04 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(i).

**# 002 [25 Pa. Code §123.21]****General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from any of these engines in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 ppmvd.

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

The permittee shall ensure that the operation of these engines shall not result in aggregate atmospheric emissions in excess of the following:

- (a) particulate matter - 2.32 tons;
- (b) sulfur oxides - 2.74 tons;
- (c) nitrogen oxides - 23.79 tons;
- (d) carbon monoxide - 6.11 tons per year; and
- (e) volatile organic compounds - 0.91 tons.
- (f) All emissions shall be calculated on a 12-month rolling basis using manufacturer documentation or the engine specific CO emission factors derived from latest engine testing as follows:
  - (1) for the MPO5-2A and 2B engines - 3.95 ppm;
  - (2) for the MPO5-4A and 4B engines - 9.36 ppmv; and
  - (3) for the MPO5-6A and 6B engines - 3.50 ppm.

[Compliance with this permit condition assures compliance with 25 Pa. Code §§ 129.97(i) and 129.112(l).]

**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6600]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

CO emissions shall not exceed 23 ppmvd, corrected to 15% excess oxygen.

**Operation Hours Restriction(s).****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Each of these six (6) engines shall not operate more than 499 hours in any 12 consecutive month period.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code §§ 129.97(c)(8) and 129.112(c)(10).]

**SECTION D. Source Level Requirements****Throughput Restriction(s).****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.97(i) and 129.112(l).]

The aggregate diesel fuel consumption for all six (6) engines shall not exceed 105,851 gallons in any 12 consecutive month period.

**Control Device Efficiency Restriction(s).****# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6600]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall:

- (a) maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load +/-10%, from the pressure drop across the catalyst that was measured during the initial performance test; and
- (b) maintain the temperature of your stationary RICE exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F.

**II. TESTING REQUIREMENTS.****# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6615]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****When must I conduct subsequent performance tests?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

Subsequent performance testing in accordance with 40 CFR Part 63, Subpart ZZZZ, Table 4 (Item 3), shall be performed on each engine every 8,760 operating hours or three (3) years, whichever comes first.

**III. MONITORING REQUIREMENTS.****# 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6600]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What emission limitations and operating limitations must I meet if I own or operate a stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions?**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441, 129.100, and 129.115.]

The permittee shall monitor the following while each engine is operating:

- (a) pressure drop across the catalyst;
- (b) exhaust temperature; and
- (c) hours of operation.

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.97(i), 129.100(d), 129.112(l), and 129.115(f).]

The permittee shall maintain records of the following:

**SECTION D. Source Level Requirements**

- (a) the date and run time for each engine each operating day;
- (b) aggregate monthly and 12 consecutive month emissions of PM, VOC, CO, NOx, and SOx;
- (c) monthly, and 12 consecutive month, fuel usage for each engine; and
- (d) monthly, and 12-consecutive month, operating hours for each of these six (6) engines.

**# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The following must be recorded and retained for a minimum of five (5) years:

- (a) fuel supplier records, indicating that Ultra Low Sulfur Diesel (ULSD) was delivered;
- (b) a copy of each report and notification submitted;
- (c) the occurrence and duration of each malfunction of the control or monitoring equipment and the corrective action taken;
- (d) maintenance records on the engine and the monitoring equipment in accordance with the maintenance plan or the manufacturer's emission-related written instructions;
- (e) performance test results; and
- (f) records related to operation of the oxidation catalyst.

**# 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall record the following on a monthly basis while each engine is operating:

- (a) pressure drop across the catalyst;
- (b) exhaust temperature; and
- (c) hours of operation.

**V. REPORTING REQUIREMENTS.****# 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6650]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What reports must I submit and when?**

Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

- (a) Each semiannual Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. These reports shall be postmarked or delivered no later than July 31 or January 31, respectively.
- (b) Each annual compliance report shall cover a calendar year from January 1 through December 31. This report shall be postmarked or delivered no later than January 31 of the following calendar year.
- (c) The compliance report must contain the following:
  - (1) company name and address;
  - (2) statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
  - (3) date of report and beginning and ending dates of the reporting period;
  - (4) if you had a malfunction during the reporting period, the compliance 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 by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with 40 CFR § 63.6605(b), including actions taken to correct a malfunction;

**SECTION D. Source Level Requirements**

(5) if there are no deviations from any emission or operating limitations that apply to you, a statement that there were no deviations from the emission or operating limitations during the reporting period; and

(6) if there were no periods during which the CPMS, was out-of-control, as specified in 40 CFR § 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.

(d) For each deviation from an emission or operating limitation the compliance report must contain the information in (c)(1) through (4), above, and (d)(1) and (2), below:

(1) the total operating time of the stationary RICE at which the deviation occurred during the reporting period; and

(2) information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

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

The fuel limitation on the six (6) engines comprising this source 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 engines. Future applicability determinations must consider the baseline actual emissions of the all of unit(s) and not the cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider the two storage tanks as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all engines, e.g. should major NSR/PSD be triggered for any one engine, BACT/LAER is required for all engines.

**# 015 [25 Pa. Code §129.203]****Stationary internal combustion engines.**

(a) By October 31 of each year, the permittee shall calculate the difference between the actual emissions from each unit during the period from May 1 through September 30 and the allowable emissions for that period.

(b) The permittee shall calculate allowable emissions by multiplying the cumulative hours of operations for each unit for the period by the horsepower rating of the unit and by the applicable emission rate for a compression ignition stationary internal combustion engine firing diesel fuel or a combination of diesel fuel and natural gas (2.3 grams of NOx per brake horsepower-hour).

**# 016 [25 Pa. Code §129.204]****Emission accountability.**

(a) The permittee not required to monitor NOx emissions with a CEMS shall determine the actual emissions of NOx in accordance with one of the following:

(i) The 1-year average emission rate calculated from the most recent permit emission limit compliance demonstration test data for NOx.

(ii) The maximum hourly allowable NOx emission rate contained in the permit or the higher of the following:

(A) The highest rate determined by use of the emission factor for the unit class contained in the most up-to-date version of the EPA publication, "AP-42 Compilation of Air Pollution Emission Factors."

(B) The highest rate determined by use of the emission factor for the unit class contained in the most up-to-date version of EPA's "Factor Information Retrieval (FIRE)" data system.

(iii) CEMS data, if the owner or operator elects to monitor NOx emissions with a CEMS. The owner or operator shall monitor emissions and report the data from the CEMS in accordance with Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by the Department in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

(iv) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. In regard to obtaining the Department's approval for an alternate calculation method and recordkeeping procedure for actual emissions, the permittee may request an adjustment to the allowable emissions calculations set forth in 25 Pa. code §§ 129.201—129.203. An allowable emission adjustment may not overestimate a unit's allowable emissions and must be based upon the parameters and procedures proposed in the alternate calculation method for actual emissions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

**SECTION D. Source Level Requirements**

- (b) The permittee shall surrender to the Department one CAIR NOx allowance and one CAIR NOx Ozone Season allowance, as defined in 40 CFR § 96.102 and 96.302 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.
- (c) If the combined allowable emissions from the units from May 1 through September 30 exceed the combined actual emissions from units during the same period, the permittee may deduct the difference or any portion of the difference from the amount of actual emissions from units at the permittee's other facilities.
- (d) By November 1 of each year, the permittee shall surrender the required NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:
- (1) The serial number of each NOx allowance surrendered.
  - (2) The calculations used to determine the quantity of NOx allowances required to be surrendered.
- (e) If the permittee fails to comply with (d), above, the permittee shall by December 31 surrender three NOx allowances of the current or later year vintage for each NOx allowance that was required to be surrendered by November 1 of that year.
- (f) The surrender of NOx allowances under (e), 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.
- (1) 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.
  - (2) Each ton of excess emissions is a separate violation.

**# 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall minimize each engine's time spent at idle during startup, and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30) minutes, after which time the nonstartup emission limitations apply.

The permittee must either install a closed crankcase ventilation system or install an open crankcase filtration emission control system on each engine. Manufacturer specified maintenance requirements must be followed or an alternate maintenance program can be proposed and approved by the Administrator.

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

This source consists of six (6) diesel engines that are used to drive six (6) pumps to move storm water and process wastewater.

- (a) P-05A-06A: 1250 HP diesel pump;
- (b) P-05A-06B: 1250 HP diesel pump;
- (c) P-05A-04A: 2250 HP diesel pump;
- (d) P-05A-04B: 2250 HP diesel pump;
- (e) P-05A-02A: 1750 HP diesel pump; and
- (f) P-05A-02B: 1750 HP diesel pump.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

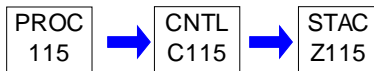
Source ID: 115

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 §127.441]  
Operating permit terms and conditions.**

All Volatile Organic Compound (VOC) vapors that result from loading 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 operating permit 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 which provide at least 98% destruction efficiency, 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 permit 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 HAP content greater than 0.5% total HAP 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 and 98% by weight, respectively. This VOC reduction could alternatively be met by reducing gasoline loading emissions to, at most, 1,000 ppm outlet VOC concentration.
- (c) The permittee shall limit marine tank vessel loading operations of commodities with greater than 0.5% HAP, 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 permit condition is derived from 40 CFR § 63.564.]



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- (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 §127.441]****Operating permit 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 fifteen (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 (PS) 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) through (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 twenty-four (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

**SECTION D. Source Level Requirements**

complete inspection in accordance with 40 CFR § 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 §127.441]****Operating permit terms and conditions.**

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

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

The permittee shall retain records of the actual monthly and 12 consecutive 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 five (5) years.

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

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

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

The permittee shall record on a monthly and 12 consecutive month 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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.100(d) and 129.115(f).]

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 §127.441]****Operating permit 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 forty-five (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 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 sixty (60) 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](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 §127.441]**  
**Operating permit terms and conditions.**

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

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

**# 015 [25 Pa. Code §127.441]**  
**Operating permit terms and conditions.**

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

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

**# 016 [25 Pa. Code §127.441]**  
**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.81(1)–(2), 129.99(d), 129.100, 129.114(i), and 129.115.]

- (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 at least 98% destruction efficiency, 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 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

**SECTION D. Source Level Requirements**

the open dock.

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

**# 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 which 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 two (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 forty-five (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 five (5) days by EPA Test 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 fifteen (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 fifteen (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

**SECTION D. Source Level Requirements**

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.

**VII. ADDITIONAL REQUIREMENTS.**

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

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

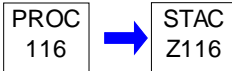
Source ID: 116

Source Name: MARINE VESSEL BALLASTING

Source Capacity/Throughput:

N/A

BALLAST WATER

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

The permittee shall limit the throughput of ballast water to 1,201,562 gallons in any 12-consecutive month period.

**II. TESTING REQUIREMENTS.**

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

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

During each ballasting operation, the permittee shall monitor the type and amount of ballast water being pumped from marine vessel storage vessels.

Any ballast water containing VOCs shall be monitored for content.

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

The permittee shall record the type and amount of ballast water being pumped from each marine storage vessel during ballasting operation.

The VOC content of any ballast water containing VOCs shall be recorded.

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

The permittee shall record the following on a monthly basis:

- (a) the total volume of receipts received;
- (b) the total volume of receipts received that are either in vessels that do not ballast or in vessels that do not emit VOCs when ballasted.

**# 005 [25 Pa. Code §129.81]****Organic liquid cargo vessel loading and ballasting**

The permittee shall record on a monthly and 12 consecutive month 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.

**SECTION D. Source Level Requirements****V. REPORTING REQUIREMENTS.**

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

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

While ballasting VOC-laden vapors, 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.

**# 007 [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 which do not emit VOCs when ballasted, such as tankers using segregated ballast tanks.

**VII. ADDITIONAL REQUIREMENTS.**

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

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

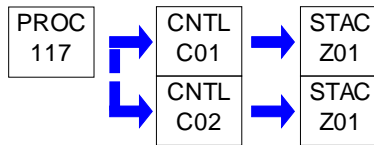
Source ID: 117

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 permit including Section B (Title V General Requirements).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V 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.**

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, 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 the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

**# 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 five (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 of the General Provisions and shall meet the



**SECTION D. Source Level Requirements**

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 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 percent 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.**

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, the permittee shall submit the following:

(a) a report containing the measurements required by 40 CFR § 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator and the Department as required by 40 CFR § 60.8. This report shall be submitted within six (6) months of the initial start-up date;

(b) records shall be kept of all periods of operation during which the flare pilot flame is absent; and

(c) 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 the storage vessel 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 § 60.485(b).

(b) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the 40 § CFR 60.18.

**VII. ADDITIONAL REQUIREMENTS.**

**# 007 [25 Pa. Code §127.411]**

**Content of applications.**

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

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is derived from 40 CFR § 60.480a(d)(5).]

Additional applicable requirements for this source can be found in Source 103 (Fugitive Equipment Leaks), except that this tank storing non-VOCs is exempt from the requirements of 40 CFR §§ 60.482-1a through 60.482-11a.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

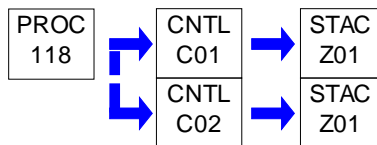
Source ID: 118

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 permit including Section B (Title V General Requirements).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V 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.**

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, 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 the storage vessel and an analysis showing the capacity of the storage vessel for the life of the source.

**# 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 five (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 of the General Provisions and shall meet the

**SECTION D. Source Level Requirements**

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 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 percent 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.**

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, the permittee shall submit the following:

(a) a report containing the measurements required by 40 CFR § 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator and the Department as required by 40 CFR § 60.8. This report shall be submitted within six (6) months of the initial start-up date;

(b) records shall be kept of all periods of operation during which the flare pilot flame is absent; and

(c) 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).**

Emissions from this tank shall be controlled by a closed vent system designed to collect all vapors and gases discharged from the storage vessel 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 § 60.485a(b).

Each of the two (2) cold flares shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements in 40 CFR § 60.18.

**VII. ADDITIONAL REQUIREMENTS.**

**# 007 [25 Pa. Code §127.411]**

**Content of applications.**

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

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

Additional requirements for this source are found in Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

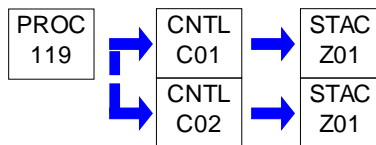
Source ID: 119

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 permit including Section B (Title V General Requirements).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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

**# 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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 five (5) years.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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 of the General Provisions 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 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 percent 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.**

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, the permittee shall submit the following:

(a) a report containing the measurements required by 40 CFR § 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator and the Department as required by 40 CFR § 60.8. This report shall be submitted within six (6) months of the initial start-up date;

(b) records shall be kept of all periods of operation during which the flare pilot flame is absent; and

(c) 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).**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

Emissions from this tank shall be controlled by a closed vent system designed to collect all vapors and gases discharged from the storage vessel 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 § 60.485a(b).

Each of the two (2) cold flares shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a

**SECTION D. Source Level Requirements**

flare is used as the control device, it shall meet the specifications described in the general control device requirements in 40 CFR § 60.18.

**VII. ADDITIONAL REQUIREMENTS.**

**# 007 [25 Pa. Code §127.411]**

**Content of applications.**

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

**# 008 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

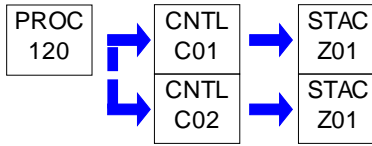
Source ID: 120

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 permit including Section B (Title V General Requirements).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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

**# 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.115(f).]

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 five (5) years.

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

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 of the General Provisions 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 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 percent 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.**

After installing a closed vent system and flare to comply with 40 CFR § 60.112b, the permittee shall submit the following:

(a) a report containing the measurements required by 40 CFR § 60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator and the Department as required by 40 CFR § 60.8. This report shall be submitted within six (6) months of the initial start-up date;

(b) records shall be kept of all periods of operation during which the flare pilot flame is absent; and

(c) 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).**

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.114(d).]

Emissions from this tank shall be controlled by a closed vent system designed to collect all vapors and gases discharged from the storage vessel 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 § 60.485a(b).

Each of the two (2) cold flares shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a



**SECTION D. Source Level Requirements**

flare is used as the control device, it shall meet the specifications described in the general control device requirements in 40 CFR § 60.18.

**VII. ADDITIONAL REQUIREMENTS.**

**# 007 [25 Pa. Code §127.411]**  
**Content of applications.**  
This source consists one 600,000 bbl refrigerated propane storage tank with a vapor recovery system. Propane vapors will be condensed to a liquid state by the vapor recovery system before being hard-piped back to the storage tank.

**# 008 [25 Pa. Code §127.441]**  
**Operating permit terms and conditions.**  
Additional requirements for this source are found in Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

Source ID: 121                      Source Name: TANK 139 INT FLOAT 6.5 MBBL  
Source Capacity/Throughput:                      N/A                      PETRO. LIQUIDS



**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001                      [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

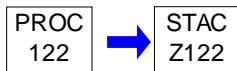
Source ID: 122

Source Name: TANK 130 EXT FLOAT 208.5 MBBL

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T001 (NSPS Kb External Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

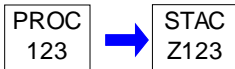
Source ID: 123

Source Name: TANK 131 EXT FLOAT 208.5 MBBL

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

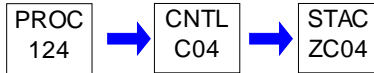
The applicable requirements for this source can be found in Source T001 (NSPS Kb External Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

Source ID: 124                      Source Name: REFRIGERATED ETHANE STORAGE TANK (600,000 BBL)  
 Source Capacity/Throughput:                      N/A                      ETHANE

Conditions for this source occur in the following groups: GROUP 1

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 125                      Source Name: REFRIGERATED ETHANE STORAGE TANK (600,000 BBL)  
 Source Capacity/Throughput:                      N/A                      ETHANE

Conditions for this source occur in the following groups: GROUP 1

**I. RESTRICTIONS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

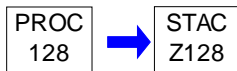
Source ID: 128

Source Name: TANK 234 INT FLOAT 70.1 MBBL

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

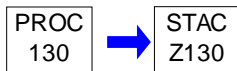
Source ID: 130

Source Name: TANK 132 INT FLOAT 14.6 MBBL

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

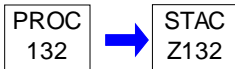
Source ID: 132

Source Name: TANK 242 INT FLOAT 69.2 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

VOC emissions from this tank shall not exceed 7.25 tons in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The permittee shall calculate and record the VOC emissions from this tank on a monthly and 12 consecutive month basis.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 003 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

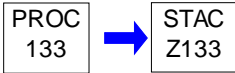
Source ID: 133

Source Name: TANK 246 INT FLOAT 54.4 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS



**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

**# 001 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Additional requirements for this source can be found in:

- (a) Source T002 (NSPS Kb Internal Floating Roof Tanks); and
- (b) Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

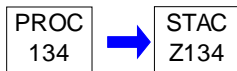
Source ID: 134

Source Name: TANK 248 INT FLOAT 52.4 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

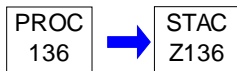
Source ID: 136

Source Name: TANK 250 INT FLOAT 80.4 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

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

Additional requirements for this source can be found in:

- (a) Source T002 (NSPS Kb Internal Floating Roof Tanks); and
- (b) Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

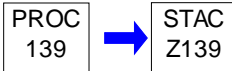
Source ID: 139

Source Name: EXISTING COOLING TOWERS

Source Capacity/Throughput:

N/A

RECYCLE WATER

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.99(d) and 129.114(i).]

VOC emissions from the 15-2B cooling tower shall not exceed 4.60 tons VOC/year.

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.97(i), 129.100(d), 129.112(l), and 129.115(f).]

Using the average monthly flow, the permittee shall calculate monthly and 12 consecutive month VOC emissions for the 15-2B cooling tower.

**V. REPORTING REQUIREMENTS.**

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

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.97(i), 129.100(d), 129.112(l), and 129.115(f).]

(a) To minimize VOC emissions from the 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 (I&M) program 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.

**SECTION D. Source Level Requirements**

(b) The permittee shall not use chromium-based water treatment chemicals in the 15-2B cooling tower.

**VII. ADDITIONAL REQUIREMENTS.**

**# 004 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

This source identification number represents the 15-2B Plant Cooling Tower, having a capacity of 1,710,000 gal/hr cooling water.

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

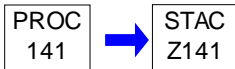
Source ID: 141

Source Name: WSAC SYSTEMS (2)

Source Capacity/Throughput:

N/A

WATER

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 123.13(c)(1)(iii).]

(a) The permittee shall ensure that particulate matter (PM) emissions from each of these WSAC systems occurs in such a manner that the concentration of PM in the exhaust gas does not exceed 0.02 grains per dry standard cubic foot (gr/dscf).

(b) The permittee shall ensure that emission into the outdoor atmosphere of PM from these WSAC systems does not exceed 0.55 tons/yr, calculated monthly as a 12-month rolling sum.

**II. TESTING REQUIREMENTS.**

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

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

The permittee shall demonstrate compliance with the PM emission restrictions specified in Condition # 001(a)–(b), Section D (under Source ID 141), of this permit, for these WSAC systems by performing a monthly analysis for total dissolved solids (ppm, by weight) and/or conductivity (µmhos), or another Department-approved method.

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

The permittee shall inspect the high-efficiency drift eliminators of each of these WSAC systems on a 3-year (preventative maintenance cycle) basis.

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

The permittee shall monitor the average cooling water circulation flow rate (gals/min) through each of these WSAC systems on a monthly basis.

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

The permittee shall maintain records of the following information for any delay of repair of leaks for these WSAC systems:

- Identification of the affected WSAC system.
- Identification of the location of the leak.
- The reason(s) for the delay of repair.

**SECTION D. Source Level Requirements**

(d) A schedule for completing the repair as soon as practical, but no later than the next shutdown.

(e) 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.

(f) An estimate of the VOC emissions from the leak for each required delay of repair monitoring interval using the following procedures:

(1) Determine the leak concentration by converting the stripping gas leak concentration (ppm) to an equivalent liquid concentration (ppm, by weight).

(2) Determine the mass flow rate of the cooling water circulated through the affected WSAC system at the monitoring location where the leak was detected. If the monitoring location is an individual 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 a default density of water of 8.32 lbs/gal.

(3) For delay of repair monitoring intervals prior to repair of the leak, calculate the potential VOC emissions from the leak for the monitoring interval by multiplying the leak concentration and mass flow rate of cooling water determined in (d)(1)–(2), above, respectively, 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 of the current monitoring event.

(4) For delay of repair monitoring intervals ending with a repaired leak, calculate the potential VOC emissions by multiplying the leak concentration and mass flow rate of cooling water determined for the last monitoring event prior to the re-monitoring event used to verify the leak was repaired by the duration of the final delay of repair monitoring interval. 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 re-monitoring to verify the leak was repaired and ending at the time of the re-monitoring event that verified that the leak was repaired.

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

(a) The permittee shall maintain records of the following operating parameters for each of these WSAC systems on a monthly basis:

(1) The average cooling water circulation flow rate (gals/min) through the WSAC system.

(2) The total dissolved solids (ppm, by weight) and/or conductivity ( $\mu$ mhos) of the cooling water.

(b) The permittee shall maintain records of the following for the WSAC systems:

(1) The results of the 3-year (preventative maintenance cycle) inspections of the high-efficiency drift eliminators.

(2) The manufacturer's specifications for the design drift rate.

(c) The permittee shall maintain records of the PM emissions from the WSAC systems on a monthly and 12-month rolling basis, calculated using a Department-approved method.

**V. REPORTING REQUIREMENTS.**

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

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall collect samples of the cooling water circulated through each of these WSAC systems at the locations where it enters and exits the heat exchangers, and analyze the cooling water for VOCs to enable the early detection of leaks. Using a one-sided statistical procedure at the 0.05 level of significance, each instance where the exit mean concentration of VOCs is at least 1 ppm, by weight, or 10% greater than the entrance mean concentration of VOCs, whichever is greater, constitutes a leak.

(b) The concentration of VOCs in the cooling water shall be determined using any EPA-approved method listed in 40 CFR Part 136, as long as the method is sensitive to concentrations as low as 10 ppm, by volume. The same method shall be used for both the entrance and exit samples. Alternative methods may be used upon approval by the Administrator.

(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) The monitoring for VOC leaks shall be performed in accordance with the following schedule:

- (1) Weekly for 6 months, both initially (i.e., after first being placed into operation) and following completion of a leak repair.
- (2) Monthly thereafter until a leak is detected.

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

The permittee shall repair any leaks in these WSAC systems within 45 days after first identifying the leak, except as indicated in Condition # 009(a)–(b), Section D (under Source ID 141), of this permit. Actions that may 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.
- (e) Isolating, bypassing, or otherwise removing the leaking heat exchanger from service until it is repaired.

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

The permittee shall repair any leaks in these WSAC systems as soon as practicable, but no later than 45 days after first identifying the leak, except that the repair may be delayed as follows:

(a) If the repair is technically infeasible without a shutdown of the affected WSAC system, 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 affected WSAC system. If the VOC concentration increases over successive monitoring periods, the permittee shall repair the leak within 30 calendar days.

(b) If the necessary equipment, parts, or personnel are not available, 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 the VOC concentration increases over successive monitoring periods, the permittee shall repair the leak within 30 calendar days.

**SECTION D. Source Level Requirements****# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee shall not use chromium-based water treatment chemicals in these WSAC systems.
- (b) The WSAC systems shall be installed, operated, and maintained in accordance with the manufacturer's specifications.

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

This source grouping shall consist of two 21,000-gpm WSAC systems, each equipped with a high-efficiency drift eliminator. The WSAC systems shall provide cooling water to the ethane and propane refrigeration systems of Project Phoenix.

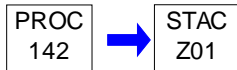
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 142

Source Name: PROJECT PHOENIX DEMETHANIZERS (2)

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

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

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

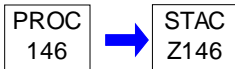
Source ID: 146

Source Name: TANK 344 FIXED ROOF 190.3 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

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

The permittee shall only store volatile organic liquids having a vapor pressure less than 5.2 kPa (0.75 psia) in this storage tank.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

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

The permittee shall record the throughput amount, type, and vapor pressure of the volatile organic liquids stored in this tank each month to assure compliance with Condition #001.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

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

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

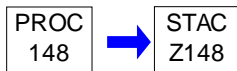
Source ID: 148

Source Name: TANK 352 INT FLOAT 179.7 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

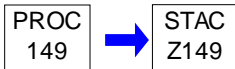
Source ID: 149

Source Name: TANK 353 INT FLOAT 189.7 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*



**SECTION D. Source Level Requirements**

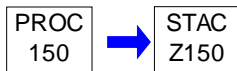
Source ID: 150

Source Name: TANK 354 INT FLOAT 182.2 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

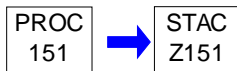
Source ID: 151

Source Name: TANK 355 INT FLOAT 189.7 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

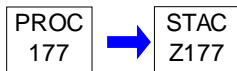
Source ID: 177

Source Name: TANK 524 INT FLOAT 75.7 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*



**SECTION D. Source Level Requirements**

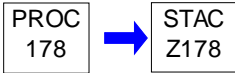
Source ID: 178

Source Name: TANK 527 INT FLOAT 69.7 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS



**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

**# 001 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Additional requirements for this source can be found in:

- (a) Source T002 (NSPS Kb Internal Floating Roof Tanks); and
- (b) Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

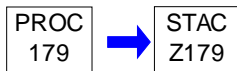
Source ID: 179

Source Name: TANK 528 EXT FLOAT 149.2 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T001 (NSPS Kb External Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

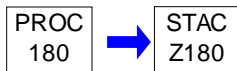
Source ID: 180

Source Name: TANK 529 EXT FLOAT 149.2 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T001 (NSPS Kb External Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

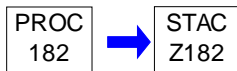
Source ID: 182

Source Name: TANK 594 EXT FLOAT 81.3 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T001 (NSPS Kb External Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

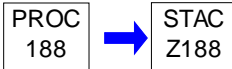
Source ID: 188

Source Name: TANK 607 INT FLOAT 100 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

VOC emissions from this tank shall not exceed 6.75 tons in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

VOC emissions shall be calculated monthly and on a 12 consecutive month basis to demonstrate compliance with the VOC limit.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 003 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

Additional requirements for this source can be found in:

- (a) Source T002 (NSPS Kb Internal Floating Roof Tanks); and
- (b) Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

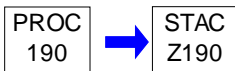
Source ID: 190

Source Name: TANK 609 INT FLOAT 98.17 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

VOC emissions from this heated tank shall not exceed 5.40 tons in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

VOC emissions shall be calculated monthly and on a 12 consecutive month basis to demonstrate compliance with the VOC limit.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 003 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

Additional requirements for this source can be found in:

- (a) Source T002 (NSPS Kb Internal Floating Roof Tanks); and
- (b) Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

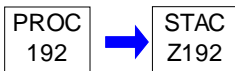
Source ID: 192

Source Name: TANK 611 INT FLOAT 87.8 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.****Emission Restriction(s).**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

VOC emissions from this heated tank not exceed 6.05 tons in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

VOC emissions shall be calculated monthly and on a 12 consecutive month basis to demonstrate compliance with the VOC limit.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 003 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

Additional requirements for this source can be found in:

- (a) Source T002 (NSPS Kb Internal Floating Roof Tanks); and
- (b) Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

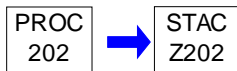
Source ID: 202

Source Name: TANK 3 INT FLOAT 41.0 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

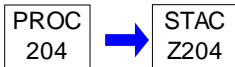
Source ID: 204

Source Name: TANK 253 INT FLOAT 90.5 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

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

The use of the following tanks shall not result in aggregate VOC emissions in any 12 consecutive 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 permit including Section B (Title V General Requirements).

**III. MONITORING REQUIREMENTS.**

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

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

VOC emissions shall be calculated monthly and on a 12 consecutive month basis to demonstrate compliance with the VOC limit.

**V. REPORTING REQUIREMENTS.**

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

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

The emission limit on Sources 204, 212, and 225 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 storage tanks. Future applicability determinations must consider the baseline actual emissions of the emissions unit(s) and not the cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider the three storage tanks as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all three tanks, e.g. should major NSR/PSD be triggered for any one tank, BACT/LAER is

**SECTION D. Source Level Requirements**

required for all three tanks.

**VII. ADDITIONAL REQUIREMENTS.**

**# 004 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Additional requirements for this source can be found in:

- (a) Source T002 (NSPS Kb Internal Floating Roof Tanks); and
- (b) Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

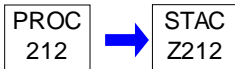
Source ID: 212

Source Name: TANK 610 INT FLOAT 96.0 MBBL

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

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

The use of the following tanks shall not result in aggregate VOC emissions in any 12 consecutive 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 permit including Section B (Title V General Requirements).

**III. MONITORING REQUIREMENTS.**

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

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

VOC emissions shall be calculated monthly and on a 12 consecutive month basis to demonstrate compliance with the VOC limit.

**V. REPORTING REQUIREMENTS.**

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

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

The emission limit on Sources 204, 212, and 225 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 storage tanks. Future applicability determinations must consider the baseline actual emissions of the emissions unit(s) and not the cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider the three storage tanks as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all three tanks, e.g. should major NSR/PSD be triggered for any one tank, BACT/LAER is

**SECTION D. Source Level Requirements**

required for all three tanks.

**VII. ADDITIONAL REQUIREMENTS.**

**# 004 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Additional requirements for this source can be found in:

- (a) Source T002 (NSPS Kb Internal Floating Roof Tanks); and
- (b) Source 103 (Fugitive Equipment Leaks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

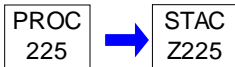
Source ID: 225

Source Name: TANK 638 INT FLOAT 61.13 MBBL

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

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

The use of the following tanks shall not result in aggregate VOC emissions in any 12 consecutive 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 permit including Section B (Title V General Requirements).

**III. MONITORING REQUIREMENTS.**

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

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

VOC emissions shall be calculated monthly and on a 12 consecutive month basis to demonstrate compliance with the VOC limit.

**V. REPORTING REQUIREMENTS.**

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

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

The emission limit on Sources 204, 212, and 225 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 storage tanks. Future applicability determinations must consider the baseline actual emissions of the emissions unit(s) and not the cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider the three storage tanks as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all three tanks, e.g. should major NSR/PSD be triggered for any one tank, BACT/LAER is



**SECTION D. Source Level Requirements**

required for all three tanks.

**VII. ADDITIONAL REQUIREMENTS.**

# 004 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

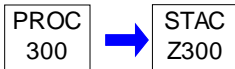
Source ID: 300

Source Name: MISC TANKS

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

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

These fixed roof tanks shall not store any VOCs having a vapor pressure greater than 1.5 psia.

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

These tanks storing VOC containing materials that are less than or equal to 40,000 gallons in capacity shall have pressure relief valves that are maintained in good operating condition and are set to release at no less than 0.7 psig of pressure or 0.3 psig of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association or other national consensus standards acceptable to the Department.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.****# 003 [25 Pa. Code §127.503]****Application information.**

This source consists of the following individual storage tanks: 5, 18, 20, 25, 133, 200, 202, 204, 205, 207, 209, 213, 247, 265, 339, 343, 347, 861, 870, V-13, and V-29.



**SECTION D. Source Level Requirements**

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

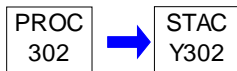
Source ID: 302

Source Name: TANK 2 INT FLOAT 59.5 MBBL

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

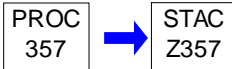
Source ID: 357

Source Name: TANK 357 INT FLOAT 182.9 MBBL

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

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

The VOC emissions, aggregated from Sources 357 and 358, shall not exceed 17.22 tons in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

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

VOC emissions shall be calculated monthly and on a 12 consecutive month basis to demonstrate compliance with the VOC limit.

**V. REPORTING REQUIREMENTS.**

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

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

The emission limit on Sources 357 and 358 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 storage tanks. Future applicability determinations must consider the baseline actual emissions of the emissions unit(s) and not the cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider the two storage tanks as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all both tanks, e.g. should major NSR/PSD be triggered for any one tank, BACT/LAER is required for both tanks.

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

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).



**SECTION D. Source Level Requirements**

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

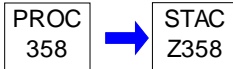
Source ID: 358

Source Name: TANK 358 INT FLOAT 182.9 MBBL

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

**I. RESTRICTIONS.****Emission Restriction(s).**

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

The VOC emissions, aggregated from Sources 357 and 358, shall not exceed 17.22 tons in any 12 consecutive month period.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

VOC emissions shall be calculated monthly and on a 12 consecutive month basis to demonstrate compliance with the VOC limit.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

The emission limit on Sources 357 and 358 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 storage tanks. Future applicability determinations must consider the baseline actual emissions of the emissions unit(s) and not the cap. The latter is true even if the company does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider the two storage tanks as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all both tanks, e.g. should major NSR/PSD be triggered for any one tank, BACT/LAER is required for both tanks.

**VII. ADDITIONAL REQUIREMENTS.**

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

The applicable requirements for this source can be found in Source T002 (NSPS Kb Internal Floating Roof Tanks).



**SECTION D. Source Level Requirements**

**\*\*\* Permit Shield in Effect. \*\*\***





**SECTION D. Source Level Requirements**

Source ID: 367

Source Name: VEHICLE REFUELING - DIESEL

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

# 001 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The permittee shall retain records of the date and amount of diesel delivered to this tank each month.

# 002 [25 Pa. Code §127.441]

**Operating permit terms and conditions.**

The permittee shall retain a record of the dimensions and capacity of this tank for its entire life.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

# 003 [25 Pa. Code §127.411]

**Content of applications.**

This source consists of one 10,000 gallon above ground fixed roof storage tank number 367, storing diesel fuel for fleet vehicles.

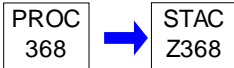
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 368

Source Name: VEHICLE REFUELING - GASOLINE

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §129.82]****Control of VOCs from gasoline dispensing facilities (Stage II)**

The permittee shall maintain records of monthly throughput, type and duration of any failures of the system and maintenance and repair records. The records shall be kept for at least five (5) years and shall be made available for inspection by the Department upon request.

[Compliance with this permit condition assures compliance with 25 Pa. Code §§ 129.100(i) and 129.115(k).]

**Control Device Efficiency Restriction(s).****# 002 [25 Pa. Code §129.82]****Control of VOCs from gasoline dispensing facilities (Stage II)**

The permittee may not transfer or allow the transfer of gasoline into a motor vehicle fuel tank unless the dispensing facility is equipped with a Department approved and properly operating Stage II vapor recovery or vapor collection system. This vapor collection system shall be capable of collecting at least 90% by weight, of the gasoline vapors that are displaced or drawn from a vehicle fuel tank during refueling and the captured vapors are returned to a vapor tight holding system or vapor control system.

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.****# 003 [25 Pa. Code §129.57]****Storage tanks less than or equal to 40,000 gallons capacity containing VOCs**

[Additional authority for this condition is derived from 25 Pa. Code §§ 129.96(a) and 129.111(a).]

This storage tank shall be equipped with pressure relief valves which are maintained in good operating condition and which

**SECTION D. Source Level Requirements**

are set to release at no less than 0.7 psig of pressure or 0.3 psig of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department.

**# 004 [25 Pa. Code §129.61]****Small gasoline storage tank control (Stage 1 control)**

[Additional authority for this condition is derived from 25 Pa. Code §§ 129.96(a) and 129.111(a).]

The permittee shall ensure that the gasoline storage tank is equipped with a submerged fill pipe which extends from the filling orifice to within six (6) inches of the bottom of the tank.

**# 005 [25 Pa. Code §129.82]****Control of VOCs from gasoline dispensing facilities (Stage II)**

The permittee shall:

- (a) operate and maintain the Stage II vapor collection and control systems, provide necessary maintenance, and make modifications necessary to comply with the requirements.
- (b) provide adequate training and written instructions to the operator of the affected gasoline dispensing facility to assure proper operation of the system.
- (c) immediately remove from service and tag any defective nozzle or dispensing system until the defective component is replaced or repaired. A component removed from service may not be returned to service until the defect is corrected. If the Department finds that a defective nozzle or dispensing system is not properly tagged during an inspection, the component may not be returned to service until the defect is corrected, and the Department approves its return to service.
- (d) conspicuously post operating instructions for the system in the gasoline dispensing area which, at a minimum, include:
  - (1) a clear description of how to correctly dispense gasoline with the vapor recovery nozzles utilized at the site.
  - (2) a warning that continued attempts to dispense gasoline after the system indicates that the vehicle fuel tank is full may result in spillage or recirculation of the gasoline into the vapor collection system.
  - (3) a telephone number established by the Department to report problems experienced with the system.

**# 006 [25 Pa. Code §129.82]****Control of VOCs from gasoline dispensing facilities (Stage II)**

The permittee shall comply with the functional testing and certification requirements specified in EPA's Stage II Enforcement and Technical Guidance Documents developed under Section 182 of the Clean Air Act to meet the Clean Air Act requirements.

**VII. ADDITIONAL REQUIREMENTS.****# 007 [25 Pa. Code §127.503]****Application information.**

This source consists of one 12,000 gallon above ground fixed roof storage tank number 368, storing gasoline for fleet vehicles.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

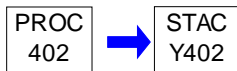
Source ID: 402

Source Name: BLIND CHANGING

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**V. REPORTING REQUIREMENTS.**

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

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

When opening process lines for the purpose of blinding, the permittee shall depressurize and evacuate the line from both ends prior to opening the system to be worked on. While the blind is in place, the permittee shall continue to adhere to the applicable LDAR requirements.

All emissions occurring from blind changing shall be included in the emission reports from the facility.

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.100(d) and 129.115(f).]

The applicable requirements for this source can be found in Source 103 (NSPS, Subpart VVa Fugitive Equipment Leaks) or Source 801 (NSPS, Subpart VV Fugitive Equipment Leaks), as appropriate.

\*\*\* **Permit Shield in Effect.** \*\*\*

**SECTION D. Source Level Requirements**

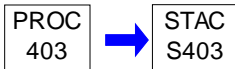
Source ID: 403

Source Name: NESHAP ZZZZ FIRE PUMPS (2)

Source Capacity/Throughput:

N/A

Diesel Fuel

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

**# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]**

**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The operating time shall be monitored using a non-resettable hour meter.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]**

**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

**What records must I keep?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall keep records of the following for each engine:

- (a) oil and filter changes;
- (b) air cleaner inspections;
- (c) hose inspections; and
- (d) the date and operating time each time the engine is operated.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6602]**

**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

**What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?**

[Additional authority for this permit condition is derived from 40 CFR § 63.6625 and 25 Pa. Code § 127.441.]

**SECTION D. Source Level Requirements**

The permittee shall, except during periods of startup ...

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first; \*
- (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

\* The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change. The extension of the oil change also applies to changing the oil filter.

**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6602]**

**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

**What emission limitations must I meet if I own or operate an existing stationary RICE with a site rating of equal to or less than 500 brake HP located at a major source of HAP emissions?**

[Additional authority for this permit condition is derived from 40 CFR § 63.6625 and 25 Pa. Code § 127.441.]

The permittee must minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed thirty (30) minutes, after which time the non-startup emission limitations apply.

**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]**

**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall:

- (a) operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or
- (b) develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

**VII. ADDITIONAL REQUIREMENTS.**

**# 006 [25 Pa. Code §127.411]**

**Content of applications.**

This source consists of the following diesel-driven fire pumps:

- (a) East Fire Pump – Detroit Diesel, model 8083, and Serial number BC565532; and
- (b) West Fire Pump – Detroit Diesel, Model 71247312, and Serial number 12VA078977.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

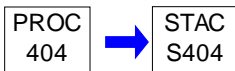
Source ID: 404

Source Name: NSPS III EMERGENCY GENERATOR

Source Capacity/Throughput:

N/A

Diesel Fuel

**I. RESTRICTIONS.****Emission Restriction(s).**

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]  
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines  
What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal co**

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4202 and 89.112 and 25 Pa. Code § 127.441.]

Emissions from each of these engines shall not exceed the following:

- (a) NO<sub>x</sub> – 6.4 g/kW-hr;
- (b) CO – 3.5 g/kW-hr; and
- (c) PM - 0.20 g/kW-hr.

**Fuel Restriction(s).**

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]  
Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines  
What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to**

[Additional authority for this permit condition is derived from 40 CFR § 80.510(b) and 25 Pa. Code § 127.441.]

Fuel specifications for this engine shall meet the following:

- (a) sulfur content of 15 ppm maximum; and
- (b) minimum cetane index of 40, or a maximum aromatic content of 35%, by volume.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 123.21(b).]

**Operation Hours Restriction(s).**

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

Non-emergency operation of this engine shall not exceed 500 hours in any 12-consecutive month period.

**II. TESTING REQUIREMENTS.**

**# 004 [25 Pa. Code §139.16]  
Sulfur in fuel oil.**

(a) The following are applicable for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation for this source:

- (1) the fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
- (2) test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).
- (3) results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for this generator.

(c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil

**SECTION D. Source Level Requirements**

supplier, a certification that all of the fuel oil delivered to the facility indicates the following minimum or maximum specifications, as applicable:

- (1) sulfur content to not exceed 15 ppm; and
- (2) cetane index or aromatic content as follows:
  - (A) cetane index – minimum of 40; or
  - (B) aromatic content – maximum of 35 volume%.

(3) If the permittee changes fuel oil supplier during the course of the calendar year, the above certifications shall be required from each new fuel oil supplier.

**III. MONITORING REQUIREMENTS.**

**# 005 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The operating time shall be continuously monitored using a non-resettable time totalizing meter.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 006 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall maintain records to demonstrate compliance with the fuel oil specifications and sulfur content for this engine.

**# 007 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The permittee shall record the following on a monthly, and 12-consecutive month, basis:

- (a) operating time and the reason for operation of this engine; and
- (b) NOx emissions from this engine.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]**

**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 CFR § 60.4211(f).
- (b) If the permittee does not operate the engine according to the requirements of 40 CFR § 60.4211(f), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII, and must meet all requirements for non-emergency engines.

**VII. ADDITIONAL REQUIREMENTS.**

**# 009 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

This source consists of one (1) Tier 2 diesel-driven emergency generator installed circa 2009. Manufactured by Caterpillar, Model C15, Serial number FSE02481, and rated at 619 hp with a generator capable of producing 400 kW at 1,800 rpm.

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

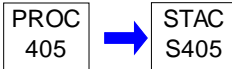
Source ID: 405

Source Name: NSPS IIII FIRE PUMPS (4)

Source Capacity/Throughput:

N/A

Diesel Fuel

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

Aggregate NOx emissions from these four (4) diesel-driven fire pumps shall not exceed any of the following:

- (a) 100 lbs/hr;
- (b) 1000 lbs/day;
- (c) 6.6 tons in any 12-consecutive month period; and
- (d) 2.75 tons during the ozone season.

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?**

[Additional authority for this permit condition is derived from 40 CFR §§ 60.4202 and 89.112 and 25 Pa. Code § 127.441.]

Emissions from each of these engines shall not exceed the following:

- (a) NMHC + NOx - 6.4 g/kW-hr; and
- (b) PM - 0.20 g/kW-hr.

**Fuel Restriction(s).****# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this permit condition?**

[Additional authority for this permit condition is derived from 40 CFR § 80.510(b) and 25 Pa. Code 127.441.]

Fuel specifications for this engine shall meet the following:

- (a) sulfur content of 15 ppm maximum; and
- (b) minimum cetane index of 40, or a maximum aromatic content of 35%, by volume.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 123.21(b).]

**Operation Hours Restriction(s).****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 40 CFR § 60.4211.]

The permittee shall operate each of these engines in accordance with 40 CFR § 60.4211(f).

**II. TESTING REQUIREMENTS.****# 005 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable for the analysis of commercial fuel oil to demonstrate compliance with the sulfur limitation for this source:

- (1) the fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample

**SECTION D. Source Level Requirements**

employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) test methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(3) results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The requirements in subpart (a), above, shall be waived in the event that a delivery receipt from the supplier, showing the percent sulfur in the fuel, is obtained each time a fuel oil delivery is made to demonstrate compliance with the sulfur limitation for this generator.

(c) In lieu of fuel oil analysis or fuel oil receipts with each delivery, the permittee shall receive annually from the fuel oil supplier, a certification that all of the fuel oil delivered to the facility indicates the following minimum or maximum specifications, as applicable:

(1) sulfur content to not exceed 15 ppm; and

(2) cetane index or aromatic content as follows:

(A) cetane index – minimum of 40; or

(B) aromatic content – maximum of 35 volume%.

(3) If the permittee changes fuel oil supplier during the calendar year, the above certifications shall be required from each new fuel oil supplier.

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

The operating time of this engine shall be continuously monitored using a non-resettable time totalizing meter.

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

The permittee shall record the operating time on a monthly, and 12-consecutive month, basis for each engine.

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

The permittee shall record the NOx emissions on a monthly, and 12-consecutive month, basis for each engine.

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

The permittee shall retain copies of the EPA certification for these engines.

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

The permittee shall retain the following:

- (a) the operating date and time for each of these engines and the reason for each operation; and
- (b) records demonstrating compliance with the fuel oil specifications and sulfur content required for these engines.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.****# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]****Subpart III - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

- (a) The permittee shall operate the emergency stationary R.I.C.E. according to the requirements in the most recent version of 40 C.F.R. Section 60.4211(f).

**SECTION D. Source Level Requirements**

(b) If the permittee does not operate the engine according to the requirements of 40 C.F.R. Section 60.4211(f), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart IIII and must meet all requirements for non-emergency engines.

**VII. ADDITIONAL REQUIREMENTS.**

**# 012 [25 Pa. Code §127.411]**

**Content of applications.**

This source consists of four (4) identical 2016 EPA certified diesel-driven emergency generators fire pumps installed in 2016, manufactured by Caterpillar, model number C18, rated at 800 horsepower (and generating 596.5 kW at 1750 RPM). Serial numbers are:

- (a) Fire Pump 1 (P653A) WJB00431
- (b) Fire Pump 2 (P653B) WJB00430
- (c) Fire Pump 3 (P653B) WJB00434
- (d) Fire Pump 4 (P653D) WJB00433

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

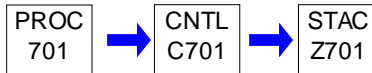
Source ID: 701

Source Name: WASTEWATER TREATMENT SYSTEM

Source Capacity/Throughput:

N/A

PETROL. LIQUIDS

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

The permittee shall limit the total VOC and Benzene emissions from the following sources to 0.21 lbs/hour, 0.9 tons/year, and 0.002 lbs/hour, 0.01 tons/year, respectively. The TPY limits are based on any 12 consecutive month periods.

- (a) conveyance channel, controlled by sealed piping;
- (b) east process sump, vent to carbon canister;
- (c) west process sump, vent to carbon canister;
- (d) 15 plant separator, vent to carbon canister;
- (e) DELCORA sump, vent to carbon canister;
- (f) cleaning 15 Separator, controlled by the cleaning process;
- (g) 2 process surge tanks, controlled with floating roof on each tank; and
- (h) slop oil tank, controlled with internal floating roof.

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

**Control Device Efficiency Restriction(s).****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The vapor recovery systems (carbon adsorbers) shall be operated at all times to recover the emissions vented to them according to the following:

- (a) VOCs - 95% or greater; and
- (b) benzene - 98% or greater.

Compliance with the above limitations shall be demonstrated through engineering calculations or performance tests approved by the Department.

**II. TESTING REQUIREMENTS.**

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

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

- (a) Each closed-vent system and control device shall be visually inspected quarterly. The visual inspection shall include inspection of ductwork and piping and connections to covers and control devices for evidence of visible defects such as holes in ductwork or piping and loose connections.
- (b) If visible defects are observed during an inspection, or if other problems are identified, or if detectable emissions are measured, a first effort to repair the closed-vent system and control device shall be made as soon as practicable but no later than five (5) calendar days after detection. Repair shall be completed no later than fifteen (15) calendar days after the emissions are detected or the visible defect is observed.

**SECTION D. Source Level Requirements****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the following to ensure the unit is properly operated and maintained by one of the following procedures:

- (a) for a carbon adsorption system that does not regenerate the carbon bed directly on site in the control device (e.g., a carbon canister), either the concentration level of the organic compounds or the concentration level of benzene in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20 percent of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, the permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.
- (b) the permittee using a closed-vent system that contains any bypass line that could divert a vent stream from a control device shall do the following:
  - (1) Visually inspect the bypass line valve at least once every month, checking the position of the valve and the condition of the car-seal or closure mechanism to ensure that the valve is maintained in the closed position and the vent stream is not diverted through the bypass line.
  - (2) Visually inspect the readings from each flow monitoring device at least once each operating day to check that vapors are being routed to the control device as required.

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

Each fixed-roof, seal, access door, and all other openings shall be checked by visual inspection quarterly to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.

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

Equipment shall be inspected as follows:

- (a) Each drain using water seal controls shall be checked by visual or physical inspection quarterly for indications of low water levels or other conditions that would reduce the effectiveness of water seal controls.
- (b) Each drain using a tightly sealed cap or plug shall be visually inspected quarterly to ensure caps or plugs are in place and properly installed.
- (c) Each junction box shall be visually inspected quarterly to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.
- (d) The unburied portion of each sewer line shall be visually inspected quarterly for indication of cracks, gaps, or other problems that could result in benzene emissions.
- (e) When a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than fifteen (15) calendar days after identification.

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

Wastewater treatment system:

- (a) Each cover seal, access hatch, and all other openings shall be checked by visual inspection quarterly to ensure that no cracks or gaps occur between the cover and oil-water separator wall and that access hatches and other openings are closed and gasketed properly.
- (b) When a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than fifteen (15) calendar days after identification.

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

The permittee shall monitor the following sources for breakthrough on a daily basis using a Department approved analyzer for VOC emissions, which are located on the following carbon adsorbers:

- (a) east process sump;

**SECTION D. Source Level Requirements**

- (b) west process sump; and
- (c) 15 plant separator (DELCORA sump).

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

The concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately (within 24 hours) when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20% of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, the permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and the organic concentration in the gas stream vented to the carbon adsorption system.

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

The permittee shall maintain a record of each emission recording. The record shall include the following information: date the test was performed, background level measured during test, and maximum concentration indicated by the instrument reading measured for each potential leak interface. If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and the leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

For each treatment process and wastewater treatment system unit, the permittee shall maintain documentation that includes the following information regarding the unit shutdown:

- (a) dates of startup and shutdown of the unit;
- (b) date each test is performed and all test results;
- (c) if a process parameter(s) is continuously monitored, the permittee shall maintain records that include a description of the operating parameter(s) to be maintained to ensure that the unit will be operated in conformance with these standards and the unit's design specifications, and an explanation of the criteria used for selection of that parameter(s). This documentation shall be kept for the life of the unit; and
- (d) periods when the unit is not operated as designed.

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

The permittee shall maintain monthly and 12 consecutive month records on the VOC emissions for this source.

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

- (a) For individual drain systems, the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions, as determined during the initial and periodic visual or physical inspection.
- (b) For junction boxes, the location, date, and corrective action shall be recorded for inspections required when a broken seal, gap, or other problem is identified that could result in VOC emissions.
- (c) For sewer lines, the location, date, and corrective action shall be recorded for inspections when a problem is identified that could result in VOC emissions.
- (d) For closed vent systems and completely closed drain systems, the location, date, and corrective action shall be recorded for inspections required during which detectable emissions are measured or a problem is identified that could result in VOC emissions.

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

- (a) All records shall be retained for a period of five (5) years after being recorded unless otherwise noted.
- (b) For oil-water separators, the location, date, and corrective action shall be recorded for

**SECTION D. Source Level Requirements**

inspections when a problem is identified that could result in VOC emissions.

(c) Repairs.

(1) If an emission point cannot be repaired or corrected without a process unit shutdown, the expected date of a successful repair shall be recorded.

(2) The reason for the delay shall be recorded if an emission point or equipment problem is not repaired or corrected in the specified amount of time.

(3) The signature of the permittee (or designee) whose decision it was that repair could not be effected without facility or process shutdown shall be recorded.

(4) The date of successful repair or corrective action shall be recorded.

(d) Life Records.

(1) A copy of the design specifications for all equipment shall be kept for the life of the source in a readily accessible location.

(2) The following information pertaining to the design specifications shall be kept:

- (i) detailed schematics, and piping and instrumentation diagrams; and
- (ii) the dates and descriptions of any changes in the design specifications.

(3) The following information pertaining to the operation and maintenance of closed drain systems and closed vent systems shall be kept in a readily accessible location.

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions shall be kept for the life of the facility. This documentation is to include a general description of the gas streams that enter 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.

(ii) A description of the operating parameter (or parameters) to be monitored to ensure that the control device will be operated in conformance with these standards and the control device's design specifications and an explanation of the criteria used for selection of that parameter(s) shall be kept for the life of the facility.

(iii) The dates of each measurement of detectable emissions shall be recorded and kept for five (5) years after the information is recorded.

(iv) The background level measured during each detectable emissions measurement shall be recorded and kept for five (5) years after the information is recorded.

(v) The maximum instrument reading measured during each detectable emission measurement shall be recorded and kept for five (5) years after the information is recorded.

(vi) The permittee using a carbon adsorber shall maintain continuous records of the VOC concentration level or reading of organics of the control device outlet gas stream or inlet and outlet gas stream and records of all 3-hour periods of operation during which the average VOC concentration level or reading of organics in the exhaust gases, or inlet and outlet gas stream, is more than 20 percent greater than the design exhaust gas concentration level, and shall keep such records for five (5) years after the information is recorded. For carbon adsorbers not regenerated on-site, the permittee shall maintain records of the dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time that the existing carbon in the control device is replaced with fresh carbon.

(vii) Periods when the closed vent systems and control devices are not operated as designed, including periods when a flare pilot does not have a flame shall be recorded and kept for five (5) years after the information is recorded.

(viii) Dates of startup and shutdown of the closed vent system and control devices shall be recorded and kept for five (5) years after the information is recorded.

(ix) The design analysis for the non-regenerative carbon adsorption system shall have considered the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule. This design analysis documentation shall be maintained for the life of the control device.

(4) Periods when the closed-vent system and control device are not operated as designed including all periods and the duration when:

- (i) Any valve car-seal or closure mechanism is broken or the by-pass line valve position has changed; or
- (ii) The flow monitoring devices indicate that vapors are not routed to the control device as required.

**SECTION D. Source Level Requirements**

(5) If a carbon adsorber that is not regenerated directly on site in the control device is used, then the permittee shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time then the existing carbon in the control device is replaced with fresh carbon.

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

- (a) If the permittee elects to install a tightly sealed cap or plug over a drain that is out of active service, the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which indicate the location of such drains.
- (b) For storm water sewer systems, the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that no wastewater from any process units or equipment is directly discharged to the storm water sewer system.
- (c) For ancillary equipment, the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which demonstrate that the ancillary equipment does not come in contact with or store oily wastewater.
- (d) For non-contact cooling water systems, the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that the cooling water does not contact hydrocarbons or oily wastewater and is not recirculated through a cooling tower.
- (e) For oil-water separators, the location, date, and corrective action shall be recorded for inspections, and shall be maintained for the time period specified below:
- (1) for inspections on primary seal gaps, ten years after the information is recorded.
  - (2) for inspections on secondary seal gaps, two years after the information is recorded.

**V. REPORTING REQUIREMENTS.****# 015 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) The permittee may elect to comply with alternative provisions for the individual drain systems and the oil-water separators as approved by the Department and shall notify the Department of the alternative standard selected in the report.
- (b) The permittee shall submit to the Department semiannually a certification that all of the required inspections have been carried out in accordance with these standards.
- (c) A report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about the repairs or corrective action taken, shall be submitted semiannually to the Department.
- (d) As applicable, a report shall be submitted semiannually to the Department that indicates each 3-hour period of operation during which the average VOC concentration level or reading of organics in the exhaust gases from a carbon adsorber is more than 20 percent greater than the design exhaust gas concentration level or reading.
- (e) If compliance with the delay of repairs is delayed, the notification shall include the estimated date of the next scheduled shutdown after the date of notification and the reason why compliance with the standards is technically impossible without a shutdown.

**# 016 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall submit copies of all reports, requests, applications, submittals, and other communication to both EPA and the Department.

**VI. WORK PRACTICE REQUIREMENTS.****# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall install, operate, and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the individual drain system and/or oil-water separator to a control device.

- (a) The fixed-roof shall meet the following requirements:
- (1) The cover and all openings (e.g., access hatches, sampling ports, and gauge wells) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined annually using EPA method 21.



**SECTION D. Source Level Requirements**

(2) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the drain system and/or oil-water separator except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(3) If the cover and closed-vent system operate such that the drain system and/or oil-water separator is maintained at a pressure less than atmospheric pressure, then (a)(1)(i)(B), above, does not apply to any opening that meets all of the following conditions:

- (i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;
- (ii) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined annually using EPA Method 21; and
- (iii) The pressure is monitored continuously to ensure that the pressure in the drain system and/or oil-water separator remains below atmospheric pressure.

(b) The closed-vent system and control device shall be operated and maintained in accordance with good air pollution control practices.

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

(a) For each closed-vent system and control device, the permittee shall properly operate and maintain the closed-vent system and control device in accordance with the following requirements:

(1) be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined annually using EPA Method 21; and

(2) vent systems that contain any bypass line that could divert the vent stream away from a control device shall install, maintain, and operate according to the manufacturer's specifications a flow indicator that provides a record of vent stream flow away from the control device at least once every fifteen (15) minutes, except as provided in (a)(2)(ii), below.

(i) The flow indicator shall be installed at the entrance to any bypass line that could divert the vent stream away from the control device to the atmosphere.

(ii) Where the bypass line valve is secured in the closed position with a car-seal or a lock-and-key type configuration, a flow indicator is not required.

(iii) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(iv) For each closed-vent system complying with (a), above, one or more devices which vent directly to the atmosphere may be used on the closed-vent system provided each device remains in a closed, sealed position during normal operations except when the device needs to open to prevent physical damage or permanent deformation of the closed-vent system resulting from malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive, or other hazardous materials.

(b) Each closed-vent system and control device shall be operated at all times when waste is placed in the waste management unit vented to the control device except when maintenance or repair of the waste management unit cannot be completed without a shutdown of the control device.

**# 019 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The individual drain systems shall be installed, checked or inspected, and operated in accordance with the above conditions.

Each oil-water separator tank shall be equipped and operated with the required control devices in compliance with the above conditions.

**# 020 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall adhere to the manufacturer's recommended practices to ensure the process vapors transferred to the activated carbon absorbers meet the minimum control efficiency.

**# 021 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall operate the conveyance system in the following manner:

(1) the conveyance system shall be enclosed, and the wastewater from the separator shall be hard piped to enclosed sumps; and

**SECTION D. Source Level Requirements**

(2) process vapors shall be collected in a closed system and transferred through gas holders to activated carbon absorbers that have an efficiency of at least 90% for VOCs.

(b) The permittee shall ensure that the sources listed below are equipped with the applicable control devices:

- (1) conveyance channel, controlled by sealed piping;
- (2) east process sump, vent to carbon canister;
- (3) west process sump, vent to carbon canister;
- (4) 15-Plant separator, vent to carbon canister;
- (5) DELCORA sump, vent to carbon canister;
- (6) cleaning 15-Separator, controlled by cleaning process;
- (7) 2-Process surge tanks, controlled by floating roof on each tank; and
- (8) slop oil tank, controlled by internal floating roof.

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

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

(a) This source shall be equipped and operated with a fixed roof, which meets the following specifications, except for individual drains systems or oil-water separators:

- (1) the fixed roof shall be installed to completely cover the separator tank, slop oil tank, storage vessel, or other auxiliary equipment with no separation between the roof and the wall.
- (2) the vapor space under a fixed roof shall not be purged unless the vapor is directed to a control device.
- (3) if the roof has access doors or openings, such doors or openings shall be gasketed, latched, and kept closed at all times during operation of the separator system, except during inspection and maintenance.
- (4) roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps occur between the roof and wall and that access doors and other openings are closed and gasketed properly.
- (5) when a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than fifteen (15) calendar days after it is identified, except as for delays of repair.

(b) Each oil-water separator tank or auxiliary equipment with a design capacity to treat more than 16 liters per second (250 gpm) of wastewater shall, in addition to the requirements in paragraph (a) of this condition, be equipped and operated with a closed vent system and control device.

(c) Slop oil from an oil-water separator tank and oily wastewater from slop oil handling equipment shall be collected, stored, transported, recycled, reused, or disposed of in an enclosed system. Once slop oil is returned to the process unit or is disposed of, it is no longer within the scope of this subpart. Equipment used in handling slop oil shall be equipped with a fixed roof meeting the requirements of paragraph (a) of this section.

(d) Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment not having junction boxes, may be equipped with a pressure control valve as necessary for proper system operation. The pressure control valve shall be set at the maximum pressure necessary for proper system operation, but such that the valve will not vent continuously.

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

(a) The permittee shall manage and treat process wastewater to achieve a total annual benzene quantity from facility process wastewater less than 1 Mg/yr. Total annual benzene from facility process wastewater shall be determined by adding together the annual benzene quantity at the point of waste generation for each untreated process wastewater stream plus the annual benzene quantity exiting the treatment process for each process wastewater stream treated.

(b) Rather than treating the waste onsite, the permittee may transfer the waste offsite to another facility where the waste is treated in accordance with the applicable regulations. The permittee transferring the waste shall:

- (1) comply with the applicable standards for each waste management unit that receives or manages the waste prior to shipment of the waste offsite; and
- (2) include with each offsite waste shipment a notice stating that the waste contains benzene which is required to be managed and treated in accordance with the applicable regulations.

**# 024 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

**SECTION D. Source Level Requirements**

The permittee shall meet the following standards for each tank handling waste liquids. The standards to tanks apply to the treatment of the waste stream in a tank, including dewatering.

The permittee shall operate and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device.

(a) The fixed-roof tanks shall meet the following requirements:

- (1) the cover and all openings shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined annually;
- (2) each opening shall be maintained in a closed, sealed position at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance or repair; and
- (3) if the cover and closed vent-system operate such that the tank is maintained at a pressure less than atmospheric pressure, then the above does not apply to any opening that meets each of the following:
  - (i) the purpose of the opening is to provide dilution air to reduce the explosion hazard;
  - (ii) the opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined using EPA Method 21; and
  - (iii) the pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

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

- (a) Each drain shall be equipped with water seal controls or a tightly sealed cap or plug.
- (b) Each junction box shall be equipped with a cover and may have a vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.
  - (1) Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.
  - (2) One of the following methods shall be used to control emissions from the junction box vent pipe to the atmosphere:
    - (i) Equip the junction box with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation. An example of such a system includes use of water seal controls on the junction box. A flow indicator shall be installed, operated, and maintained on each junction box vent pipe to ensure that organic vapors are not vented from the junction box to the atmosphere during normal operation.
    - (ii) Connect the junction box vent pipe to a closed-vent system and control device.
- (c) Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.
- (d) When a broken seal, gap, crack, or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than fifteen (15) calendar days after identification.

**# 026 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- Closed vent systems and control devices shall be operated at all times when emissions may be vented to them.
- (a) Closed vent systems shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined during the initial and annual inspections.
  - (b) Closed vent systems shall be purged to direct vapor to the control device.
  - (c) A flow indicator installed on a vent stream to a control device shall be used to ensure that the vapors are being routed to the device.
  - (d) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
  - (e) When emissions from a closed system are detected, first efforts at repair to eliminate the emissions shall be made as soon as practicable, but not later than thirty (30) calendar days from the date the emissions are detected, except when approved as a delay of repair.

**# 027 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The closed vent system and control device shall use EPA Method 21 to measure the emission concentrations, using 500 ppm as the no detectable emission limit. The instrument shall be calibrated each day before using. The calibration gases shall be:

**SECTION D. Source Level Requirements**

- (a) zero air (less than 10 ppm of hydrocarbon in air), and  
 (b) a mixture of either methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

**VII. ADDITIONAL REQUIREMENTS.****# 028 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Limitation on use of single carbon canister systems:

(1) Except as expressly provided in (a)(2) and (3), below, the permittee shall not use a single carbon canister system for any new or existing unit or installation that requires control;

(2) Temporary applications. The permittee may operate a properly sized single canister system to control benzene emissions from a short-term operation, such as a temporary storage tank. For any single canister system, benzene "breakthrough" shall be defined for the purposes of this condition as any benzene reading above background as measured at the outlet of the canister. The permittee shall monitor for breakthrough from a single carbon canister system at least once every 24 hours. The permittee shall replace any single carbon canister with a fresh carbon canister immediately after a benzene reading above background is detected at the outlet of the canister, unless the permittee chooses to discontinue flow to the carbon canister or route the stream to an alternative control device. For the purpose of this condition, "immediately" shall mean within 24 hours;

(3) Permanent Applications. The permittee may continue to operate a properly sized single canister system on those applications that existed prior to March 23, 2006, where data over the past five (5) years demonstrate that breakthrough has not occurred in less than six (6) months. The permittee shall monitor for "breakthrough" by monitoring for benzene on a biweekly basis at the outlet of the canister. "Breakthrough" shall be defined for the purpose of this condition as any reading equal to or greater than one (1) ppm benzene. The permittee shall replace any single carbon canister with a fresh carbon canister within twenty-four (24) hours after breakthrough is detected.

(b) Breakthrough Monitoring With Dual Canisters. On a daily basis or at intervals no greater than 20% of the design carbon replacement interval, the permittee shall monitor for breakthrough between the primary and secondary carbon canisters at times when there is actual flow to the carbon canister. The permittee shall monitor for "breakthrough" by monitoring for benzene. "Breakthrough" shall be defined for the purpose of this condition as any reading equal to or greater than 5 ppm benzene measured between the primary and secondary canister. In lieu of replacing the primary canister immediately, the permittee may elect to monitor the secondary canister the day breakthrough between the primary and secondary canister is identified and each calendar day thereafter. This daily monitoring shall continue until the primary canister is replaced. If either benzene or VOC is detected at the outlet of the secondary canister during this period of daily monitoring, the primary canister must be replaced within 24 hours. The original secondary carbon canister will become the new primary carbon canister and a fresh carbon canister will become the secondary canister.

(c) Canister Replacement With Dual Canister System. Except as otherwise provided in (b) above, immediately (within 24 hours) when breakthrough is detected, the permittee shall replace the original primary carbon canister with the secondary canister, and shall use a fresh canister as the new secondary canister.

(d) The permittee shall maintain a supply of fresh carbon canisters at all times.

(e) Records shall be maintained indicating the date and time of each carbon replacement.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 801

Source Name: NSPS SUBPART VV FUGITIVE LEAKS

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485]  
Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Test methods and procedures.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441, 129.99(d), and 129.114(i).]

(a) The permittee shall test each piece of equipment identified as within this Source, ID #801, unless the permittee demonstrates that a process unit is not in VOC service. EPA Method 21 shall be used to determine the presence of leaking sources, background levels, and for calibration of the instrument before each day of testing.

(b) The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determination of no detectable emissions.

(c) The permittee shall demonstrate that a piece of equipment is in light liquid service by showing either:

(1) All of the following conditions apply:

(i) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20° C (68°F) . Standard reference texts or ASTM D-2879 (incorporated by reference; see 40 CFR § 60.17 shall be used to determine the vapor pressures.

(ii) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20° C (68°F) is equal to or greater than 20% by weight; and

(iii) The fluid is a liquid at operating conditions;

or

(2) The percent evaporated is greater than 10% at 150°C ( 302°F) as determined by ASTM Method D-86, incorporated by reference as specified in 40 CFR § 60.18.

(d) Samples shall be representative of the process fluid that is contained in, or contacts with, the equipment.

**III. MONITORING REQUIREMENTS.**

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]  
Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Standards: Pumps in light liquid service.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(a) Pumps in light liquid service.

(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR § 60.485(b), except as provided in 40 CFR § 60.482-1(c) and subconditions (d), (e), and (f), below.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b) Leaks.

(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c) Repairs.

(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 § 60.482-9.

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

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the

**SECTION D. Source Level Requirements**

requirements of subcondition (a), above, provided the following requirements are met:

- (1) The 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 connected by a closed vent system to a control device that complies with the requirements of 40 CFR § 60.482-10; or
  - (iii) Equipped with a system that purges the barrier fluid into a process stream with zero (0) VOC emissions to the atmosphere.
- (2) The barrier fluid system is in heavy liquid service or is not in VOC service.
- (3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
- (4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
- (5) Each sensor as described in subcondition (d)(3), above, is checked daily or is equipped with an audible alarm, and 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.
- (6) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion determined in subcondition (d)(5), above, a leak is detected.
  - (i) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in 40 CFR § 60.482-9.
  - (ii) A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
- (e) Any designated pump, as described in 40 CFR § 60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subcondition (a), (c), and (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 § 60.485(c), and
  - (3) Is tested for compliance with subcondition (e)(2), above, initially upon designation, annually, and at other times requested by the Administrator.
- (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 control device that complies with the requirements of 40 CFR § 60.482-10, it is exempt from subconditions (a) through (e), of this condition.

**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4]**

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Standards: Pressure relief devices in gas/vapor service.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

No later than five (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 § 60.485(c).

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

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

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

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

- (a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within five (5) days, by the method specified in 40 CFR § 60.485(b), if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

**SECTION D. Source Level Requirements**

(c) When a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in 40 CFR § 60.482-9. The first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under 40 CFR § 60.482-7(e).

**IV. RECORDKEEPING REQUIREMENTS.****# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441, 129.100(d), and 129.115(f).]

When each leak is detected as specified in 40 CFR §§ 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following requirements apply:

- (a) a weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment;
- (b) the identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR § 60.482-7(c) and no leak has been detected during those 2 months; and
- (c) the identification on equipment, other than a valve, may be removed after it has been repaired.

**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441, 129.100(d), and 129.115(f).]

The following information pertaining to all equipment subject to the requirements in 40 CFR §§ 60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

- (a) a list of identification numbers for equipment subject to the requirements of 40 CFR 60, Subpart VV;
- (b) a list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR §§ 60.482-2(e), 60.482-3(i) and 60.482-7(f);
- (c) the designation of equipment as subject to the requirements of 40 CFR §§ 60.482-2(e), 60.482-3(i), or 60.482-7(f) shall be signed by the permittee;
- (d) a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR § 60.482-4;
- (e) the dates of each compliance test as required in 40 CFR §§ 60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f);
- (f) the background level measured during each compliance test;
- (g) the maximum instrument reading measured at the equipment during each compliance test; and
- (h) a list of identification numbers for equipment in vacuum service.

**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.511, 129.100(d), and 129.115(f).]

When each leak is detected as specified in 40 CFR §§ 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for a minimum of five (5) years in a readily accessible location:

- (a) the instrument and operator identification numbers and the equipment identification number;
- (b) the date the leak was detected and the dates of each attempt to repair the leak;
- (c) repair methods applied in each attempt to repair the leak;
- (d) "above 10,000" if the maximum instrument reading measured by the methods specified in 40 CFR § 60.485(a) after each repair attempt is equal to or greater than 10,000 ppm;

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- (e) "repair delayed" and the reason for the delay if a leak is not repaired within fifteen (15) calendar days after discovery of the leak.
- (f) the signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown;
- (g) the expected date of successful repair of the leak if a leak is not repaired within fifteen (15) days;
- (h) dates of process unit shutdown that occur while the equipment is unrepaired; and
- (i) the date of successful repair of the leak.

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]**  
**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**  
**Recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441, 129.100(d), and 129.115(f).]

The following information pertaining to all valves subject to the requirements of 40 CFR § 60.482-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:

- (a) a list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve is unsafe-to-monitor, and the plan for monitoring each valve.
- (b) 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.

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]**  
**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**  
**Recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441, 129.100(d), and 129.115(f).]

The following information shall be recorded for valves complying with 40 CFR § 60.483-2:

- (a) a schedule of monitoring; and
- (b) the percent of valves found leaking during each monitoring period.

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]**  
**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**  
**Recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee with more than one facility subject to the provisions of 40 CFR Part 60, Subpart VV, may comply with the recordkeeping requirements for these sources in one recordkeeping system if the system identifies each record by each facility.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]**  
**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**  
**Recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

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.

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]**  
**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**  
**Recordkeeping requirements.**



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[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

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 § 60.480(d):

- (a) an analysis demonstrating the design capacity of the affected facility;
- (b) 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;
- (c) an analysis demonstrating that equipment is not in VOC service; and
- (d) date of exemption analysis.

**# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]**

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR § 60.482-10 shall be recorded and kept in a readily accessible location:

- (a) detailed schematics, design specifications, and piping and instrumentation diagrams;
- (b) the dates and descriptions of any changes in the design specifications;
- (c) a description of the parameter or parameters monitored, as required in 40 CFR § 60.482-10(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;
- (d) periods when the closed vent systems and control devices required in 40 CFR §§ 60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame; and
- (e) dates of startups and shutdowns of the closed vent systems and control devices required in 40 CFR §§ 60.482-2, 60.482-3, 60.482-4, and 60.482-5.

**# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]**

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

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

**V. REPORTING REQUIREMENTS.**

**# 015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]**

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Reporting requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall report the results of all performance tests in accordance with 40 CFR § 60.8 of the General Provisions.

**# 016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]**

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Reporting requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The semi-annual reporting of 40 CFR § 60.487 shall remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Air Pollution Control Act, approves reporting requirements or an alternative

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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 the semi-annual reporting requirements of this subsection, provided that they comply with the requirements established by the State.

**# 017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Reporting requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The initial semi-annual report to the Administrator and Department shall include the following information:

- (a) process unit identification;
- (b) the number of valves subject to the requirements of 40 CFR § 60.482-7, excluding those valves designated for no detectable emissions under the provisions of 40 CFR § 60.482-7(f);
- (c) the number of pumps subject to the requirements of 40 CFR § 60.482-2, excluding those pumps designated for no detectable emissions under the provisions of 40 CFR § 60.482-2(e) and those pumps complying with 40 CFR § 60.482-2(f); and
- (d) the number of compressors subject to the requirements of 40 CFR § 60.482-3, excluding those compressors designated for no detectable emissions under the provisions of 40 CFR § 60.482-3(i) and those compressors complying with 40 CFR § 60.482-3(h).

**# 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Reporting requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall submit semi-annual reports to the Administrator and the Department.

**# 019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Reporting requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

All semi-annual reports to the Administrator and Department shall include the following information, summarized from the information in 40 CFR § 60.486:

- (a) process unit identification;
- (b) for each month during the semiannual reporting period:
  - (1) number of valves for which leaks were detected as described in 40 CFR §§ 60.482(7)(b) or 60.483-2;
  - (2) number of valves for which leaks were not repaired as required in 40 CFR § 60.482-7(d)(1);
  - (3) number of pumps for which leaks were detected as described in 40 CFR § 60.482-2(b) and (d)(6)(i);
  - (4) number of pumps for which leaks were not repaired as required in 40 CFR §§ 60.482-2(c)(1) and (d)(6)(ii);
  - (5) number of compressors for which leaks were detected as described in 40 CFR § 60.482-3(f);
  - (6) number of compressors for which leaks were not repaired as required in 40 CFR § 60.482-3(g)(1); and
  - (7) the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
- (c) dates of process unit shutdowns which occurred within the semiannual reporting period; and
- (d) revisions to items reported in the initial report, if changes have occurred that were not yet reported.

**# 020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Reporting requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

**SECTION D. Source Level Requirements**

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

**VI. WORK PRACTICE REQUIREMENTS.****# 021 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-10]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Standards: Closed vent systems and control devices.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441, 129.99(d), and 129.114(i).]

(a) Vapor recovery systems shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.

(b) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816°C (1500°F).

(c) Flares used to comply with 40 CFR Part 60, Subpart VV, shall comply with the requirements of 40 CFR § 60.18.

(d) Except as provided in subconditions (g) through (i), below, each closed vent system shall be inspected according to the following:

(1) if the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the following:

- (i) conduct an initial inspection according to procedures in 40 CFR § 60.485(b); and
- (ii) conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) if the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:

- (i) conduct an initial inspection according to procedures in 40 CFR § 60.485(b); and
- (ii) conduct annual inspections according to procedures in 40 CFR § 60.485(b).

(e) Leaks, as indicated by an instrument reading greater than 500 ppmv above background or by visual inspection, shall be repaired as soon as practicable, except as provided in (f), below.

- (1) a first attempt at repair shall be made no later than five (5) calendar days after the leak is detected; and
- (2) repair shall be completed no later than fifteen (15) calendar days after the leak is detected.

(f) 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 determined that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of the repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(g) If the vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of (d), of this condition.

(h) Any part of the closed vent system that is designated, as described in (j)(1), below, as unsafe to inspect is exempt from the inspection requirements of (d), above, if it complies with the following:

- (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 (d), above; and
- (2) the permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(i) Any parts of the closed vent system that are designated, as described in (j)(2), below, as difficult to inspect are exempt from the inspection requirements of (d), above if they comply with the following:

- (1) the permittee determines that the equipment cannot be inspected without elevating the inspection personnel more than two (2) meters above a support surface;
- (2) the process unit within which the closed vent system is located becomes a source through 40 CFR §§ 60.14 or 60.15, or, the permittee designates less than 3.0 percent of the total number of closed vent equipment as difficult to inspect; and
- (3) the permittee has a written plan that requires inspection of the equipment at least once every five (5) years. A closed vent system is exempt from inspection if it is operated under a vacuum.

**SECTION D. Source Level Requirements**

(j) The permittee shall record the following:

- (1) identification of all parts of the closed vent system that are designated unsafe to inspect, and the plan for inspecting the equipment;
- (2) identification of all parts of the closed vent 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) a record of the information specified in 40 CFR § 60.486(c), for each inspection during which a leak is detected;
- (4) for each inspection conducted in accordance with 40 CFR § 60.485(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 (d)(1)(ii), above, during which no leaks were detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(k) Closed vent systems and control devices used to comply with provisions of 40 CFR 60, Subpart VV, shall be operated at all times when emissions may be vented to them.

**# 022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]**

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Standards: Pumps in light liquid service.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(a) Repairs.

- (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 § 60.482-9.
- (2) A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(b) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of subcondition (a), above, provided the following requirements are met:

- (1) the 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 connected by a closed vent system to a control device that complies with the requirements of 40 CFR § 60.482-10; or
  - (iii) equipped with a system that purges the barrier fluid into a process stream with zero (0) VOC emissions to the atmosphere.
- (2) the barrier fluid system is in heavy liquid service or is not in VOC service;
- (3) each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both;
- (4) each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals;
- (5) each sensor as described in subcondition (d)(3), above, is checked daily or is equipped with an audible alarm, and 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; and
- (6) if there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion determined in subcondition (b)(5), above, a leak is detected.
  - (i) when a leak is detected, it shall be repaired as soon as practicable, but not later than fifteen (15) calendar days after it is detected, except as provided in 40 CFR § 60.482-9; and
  - (ii) a first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(c) Any designated pump, as described in 40 CFR § 60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subcondition (a), (c), and (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 § 60.485(c); and
- (3) is tested for compliance with subcondition (e)(2), above, initially upon designation, annually, and at other times requested by the Administrator.

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(d) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 40 CFR § 60.482-10, it is exempt from subconditions (a) through (d), of this condition, and condition #001, for this source.

**# 023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-3]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Compressors.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(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 § 60.482-1(c), in addition to subconditions (h) and (i), below.

(b) Each compressor seal system as required in subcondition (a), above, 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 that is connected by a closed vent system to a control device that complies with the requirements of 40 CFR § 60.482-10; 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 subcondition (a), above, shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in subcondition (d), above, shall be checked daily or shall be equipped with an audible alarm.

(2) 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 subcondition (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 fifteen (15) calendar days after it is detected, except as provided in 40 CFR § 60.482-9. A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of subconditions (a) and (b), above, if it is equipped with a closed vent system capable of capturing and transporting any leakage from the seal to a control device that complies with the requirements of 40 CFR § 60.482-10, except as provided in subcondition (i), below.

(i) Any compressor that is designated, as described in 40 CFR § 60.486(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of subconditions (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 § 60.485(c); and
- (2) is tested for compliance with (i)(1), above, initially upon designation, annually, and at other times as requested by the Administrator.

(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 40 CFR § 60.482-3(a), (b), (c), (d), (e), and (h), 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 subconditions (a)-(e) and (h), above.

(k)(1) compressors in hydrogen service are exempt from the requirements of this condition and 40 CFR § 60.592 (40 CFR § 60.482-3, by reference), if the permittee demonstrates that a compressor in hydrogen service.

(2) each compressor is presumed not to be in hydrogen service unless the permittee demonstrates that the piece of equipment is in hydrogen service. For a piece of equipment to be considered in hydrogen service, it must be determined that the percent hydrogen content can be reasonably expected always to exceed 50 percent by volume. For purposes of determining the percent hydrogen in the process fluid that is contained in or contacts a compressor, procedures that conform to the general method described in ASTM E-260, E-168, or E-169 (incorporated by reference as specified in 40 CFR § 60.17) shall be used.

(3)(i) the permittee may use engineering judgment rather than the procedures in subcondition (k)(2), above, to

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demonstrate that the percent content exceeds 50 percent by volume, provided the engineering judgment demonstrates that the content clearly exceeds 50 percent by volume. When the permittee and the Administrator do not agree on whether a piece of equipment is in hydrogen service, however, the procedures in subcondition (k)(2) shall be used to resolve the disagreement.

(ii) if the permittee determines that a piece of equipment is in hydrogen service, the determination can be revised only after following the procedures in subcondition in (k)(2), above.

**# 024 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Standards: Pressure relief devices in gas/vapor service.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(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 § 60.485(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 five (5) calendar days after the pressure release, except as provided in 40 CFR § 60.482-9.

(c) No later than five (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 § 60.485(c).

(d) Any pressure relief device that is 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 § 60.482-10 is exempted from the requirements of (a), (b), and (c), above.

**# 025 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-5]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Standards: Sampling connection systems.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in 40 CFR § 60.482-1(c). Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in (a), above, shall comply with the requirements specified in (b)(1) through (4), below:

(1) return the purged process fluid directly to the process line; or

(2) collect and recycle the purged process fluid to a process; or

(3) be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR § 60.482-10; 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 part 262, 264, 265, or 266; or

(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.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b), above.

**# 026 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-6]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Standards: Open-ended valves or lines.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

**SECTION D. Source Level Requirements**

- (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 § 60.482-1(c). 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, at all other times.

**# 027 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Standards: Valves in gas/vapor service and in light liquid service.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

**Monitor**

- (a) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR § 60.485(b) and shall comply with (b) through (e), below, except as provided in subconditions (f), (g), and (h), below, 40 CFR § 60.483-1 and 2, and 40 CFR § 60.482-1(c).
- (b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (c) Leaks.
- (1) Any valve for which a leak is not detected for two (2) successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
  - (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two (2) successive months.
- (d) Leak repairs.
- (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than fifteen (15) calendar days after the leak is detected, except as provided in 40 CFR § 60.482-9.
  - (2) A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.
- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
- (1) tightening of bonnet bolts;
  - (2) replacement of bonnet bolts;
  - (3) tightening of packing gland nuts; and
  - (4) injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in 40 CFR § 60.486(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 subcondition (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 § 60.485(c), and
  - (3) is tested for compliance with subcondition (f)(2) initially upon designation, annually, and at other times requested by the Administrator.
- (g) Any valve that is designated, as described in 40 CFR § 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of subcondition(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 subcondition (a), and
  - (2) the permittee adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
- (h) Any valve that is designated, as described in 40 CFR § 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of subcondition (a), above, if:
- (1) the permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than two (2) meters above a support surface.



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- (2) the process unit within which the valve is located either becomes an affected source through 40 CFR §§ 60.14 or 60.15 or the permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
- (3) the permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

**# 028 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Standards: Delay of repair.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

- (a) Delay of repair of equipment for which leaks have been detected will be allowed if the repair is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
- (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 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 § 60.482-10.
- (d) Delay of repair for pumps will be allowed if:
- (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system; and
  - (2) Repair is completed as soon as practicable, but not later than six (6) months after the leak was detected.
- (e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than six (6) months after the first process unit shutdown.

**# 029 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.483-1]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Alternative standards for valves - allowable percentage of valves leaking.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

- (a) The permittee may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.
- (b) The following requirements shall be met if the permittee wishes to comply with an allowable percentage of valves leaking:
- (1) the permittee must notify the Administrator that the facility has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 40 CFR § 60.487(b).
  - (2) a performance test as specified in subcondition (c), below, shall be conducted initially upon designation, annually, and at other times requested by the Administrator or Department.
  - (3) if a valve leak is detected, it shall be repaired in accordance with 40 CFR § 60.482-7(d) and (e).
- (c) Performance tests shall be conducted in the following manner:
- (1) all valves in gas/vapor and light liquid service shall be monitored within one (1) week by the methods specified in 40 CFR § 60.485(b).
  - (2) if an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
  - (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.
- (d) A permittee who elects to comply with this alternative standard shall not have a leak percentage greater than 2.0 percent.

**# 030 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.483-2]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**



**SECTION D. Source Level Requirements****Alternative standards for valves-skip period leak detection and repair.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee may elect to comply with one of the alternative work practices specified in (b) and (c), below.

The permittee must notify the Administrator and Department before implementing one of the alternative work practices, as specified in 40 CFR § 60.487(b).

- (a) 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 § 60.482-7.
- (b) After two (2) consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin to skip one (1) of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
- (c) After five (5) consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, the permittee may begin annual leak detection periods for the valves in gas/vapor and light liquid service.
- (d) If the percent of valves leaking is greater than 2.0, the permittee shall comply with the requirements as described in 40 CFR § 60.482-7 but can again elect to use 40 CFR § 60.483-2.
- (e) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.
- (f) The permittee must keep a record of the percent of valves found leaking during each leak detection period.

**# 031 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.484]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Equivalence of means of emission limitation.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441, 129.99(d), and 129.114(i).]

- (a) The permittee may apply to the Administrator for a determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in 40 CFR 60, Subpart VV.
- (b) The permittee applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.
- (c) Determination of equivalence to the required work practices in 40 CFR 60, Subpart VV will be evaluated by the following guidelines:
  - (1) the permittee applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of the proposed means of emission limitation;
  - (2) the emission reduction achieved by the required work practice shall be demonstrated;
  - (3) the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated; and
  - (4) the permittee applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.
- (d) The permittee may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of Section 111(h)(1) of the Clean Air Act.

**VII. ADDITIONAL REQUIREMENTS.****# 032 [25 Pa. Code §127.503]****Application information.**

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

- 15-2B gas plant unit;
- Upper No. 1 tank area (Source ID 221 - Tank 023);
- Lower No. 1 tank area (Source ID 132 - Tank 242, Source ID 180 - Tank 529, and Source ID 182 - Tank 594);
- Docks 2 and 3 (components for loading petroleum products with a Reid Vapor Pressure greater than 4.0 psia);

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- C3 Rack (propylene loading, propane loading, and truck loading); and
- Ship loading/unloading.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: T001                      Source Name: NSPS KB EXT FLOAT TANKS  
Source Capacity/Throughput:                      N/A                      PETROL LIQUIDS

**I. RESTRICTIONS.****Emission Restriction(s).**

**# 001      [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 condition is derived from 25 Pa. Code §§ 129.56, 129.96(a), and 129.111(a).]

- (a) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently 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 soon as practical.
- (c) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device meets the following criteria:
- (1) consist of two seals, one above the other; or
  - (2) the primary seal shall be either a metallic shoe seal or a liquid-mounted seal.
- (d) Except during inspections required by Condition #002, for this source, both the primary and secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.
- (e) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, 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. Automatic bleeder vents 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. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.
- (f) The primary seal shall also meet the following requirements:
- (1) where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface; and
  - (2) there shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
- (g) The secondary seal shall also meet the following requirements:
- (1) the secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided by Condition #002(a).
  - (2) there shall be no holes, tears, or other openings in the seal or seal fabric
- (h) If during the inspections required in Condition #002(d), above, the primary seal has holes, tears or other openings in the seal or the seal fabric; or the secondary seal has holes, tears or other openings, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL.
- (i) The permittee shall repair conditions that do not meet the requirements in Conditions #001(b) and (c), above, or subconditions (f) and (g) of this condition no later than forty-five (45) calendar days after identification, or shall empty and remove the storage vessel from service no later than forty-five (45) calendar days after identification. If a failure is detected that cannot be repaired within forty-five (45) calendar days and if the vessel cannot be emptied within forty-five (45) calendar days, a thirty (30) day extension may be requested from the Administrator.

**Control Device Efficiency Restriction(s).**

**# 002      [25 Pa. Code §129.56]  
Storage tanks greater than 40,000 gallons capacity containing VOCs**

The permittee may not store volatile organic compounds that have a vapor pressure of 11 psia or greater under actual storage conditions in this source.

**SECTION D. Source Level Requirements**

[Compliance with this permit condition assures compliance with 40 CFR § 60.112b(a).]

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

**# 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.56, 129.96(a), and 129.111(a).]

(a) The permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the following frequency:

(1) measurements of gaps between the vessel wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within sixty (60) days of the initial fill with VOL and at least once every 5 years;

(2) measurements of gaps between the vessel wall and the secondary seal shall be performed within sixty (60) days of the initial fill with VOL and at least once per year thereafter; and

(3) if any storage vessel ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of subconditions (a)(1) and (a)(2), above.

(b) The permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the following procedures:

(1) seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports;

(2) seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 1/8 inch diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured; and

(3) the total surface area of each gap described in subcondition (b)(2), above, shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

(c) the permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum of each seal by the nominal diameter of the vessel.

(d) the permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(e) available data on the storage temperature may be used to determine the maximum true vapor pressure for Condition #004(b)(5), for this source, as determined below.

(1) for vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the 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.

(2) for crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s); or

(ii) the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if

**SECTION D. Source Level Requirements**

the estimated maximum true vapor pressure is greater than 0.51 psia.

**IV. RECORDKEEPING REQUIREMENTS.****# 004 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

Throughput type, vapor pressure, and amount, for each individual tank, shall be recorded on a monthly basis.

**# 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.**

[Additional authority for this condition is derived from 25 Pa. Code §§ 129.56, 129.96(a), and 129.111(a).]

(a) The permittee shall keep a record of each gap measurement performed as required by Condition #002(a), above. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

- (1) the date of measurement;
- (2) the raw data obtained in the measurement;
- (3) the identification of the storage tank, and
- (4) the calculations described in Conditions #002(b) and (c), above.

(b) The permittee shall keep records of the following for each storage vessel:

- (1) dimension of the storage vessel;
- (2) analysis showing the capacity of the storage vessel;
- (3) the VOL stored;
- (4) the period of storage; and
- (5) the maximum true vapor pressure of that VOL during the respective storage period.

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

Electronic reports to the EPA shall be submitted to the following email address: R3\_APD\_Permits@epa.gov.

The subject line for emailed reports shall include the TVOP number and the permittee's name.

**# 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(a) Except as provided in 40 CFR 60.113b, for all the inspections required by Condition # 002(d), above, the permittee shall notify the Administrator and the Department in writing at least thirty (30) calendar days prior to the refilling of each storage vessel with organic HAP to afford the Administrator and the Department the opportunity to inspect the storage vessel prior to refilling.

(b) If the inspection required by Condition # 002(d), above, is not planned and the permittee could not have known about the inspection thirty (30) calendar days in advance of refilling the vessel with VOL, the permittee shall notify the Administrator and the Department at least seven (7) calendar days prior to refilling of a storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator and the Department at least seven (7) calendar days prior to refilling.

(c) After each seal gap measurement that detects gaps exceeding the limitations specified in Conditions #001(b) or (c), above, the permittee shall submit a report to the Administrator and the Department within thirty (30) days of inspection. The

**SECTION D. Source Level Requirements**

report will identify the vessel and contain the following information:

- (1) the date of measurement;
- (2) the raw data obtained in the measurement;
- (3) the calculations described in Conditions # 002(b) and (c), above; and
- (4) the date the vessel was emptied or the repairs made and date of repair.

(d) The permittee shall notify the Administrator and the Department in writing thirty (30) calendar days in advance of any gap measurements required in the monitoring requirements to afford the Administrator and the Department the opportunity to have an observer present.

(e) To utilize the extension specified in Condition # 001(i), above, the permittee shall send a request to the Administrator and the Department which includes a demonstration of unavailability of alternate storage capacity and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

**VI. WORK PRACTICE REQUIREMENTS.**

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**VII. ADDITIONAL REQUIREMENTS.**

**# 008 [25 Pa. Code §127.503]**

**Application information.**

This source consists of the following individual external floating roof tanks:

- Source 122, Tank 130
- Source 123, Tank 131
- Source 179, Tank 528
- Source 180, Tank 529
- Source 182, Tank 594

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: T002

Source Name: NSPS KB INT FLOAT TANKS

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

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

The permittee may not store volatile organic compounds that have a vapor pressure of 11 psia or greater under actual storage conditions in this source.

[Compliance with this permit condition assures compliance with 40 CFR § 60.112b(a).]

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.****# 002 [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 permit condition is derived from 25 Pa. Code §§ 127.441, 129.96(a), and 129.111(a).]

(a) The permittee shall visually inspect the internal floating roof and the primary seal prior to filling the 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 twelve (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 ten (10) years.

**IV. RECORDKEEPING REQUIREMENTS.****# 003 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

Throughput type, vapor pressure, and amount, for each individual tank, shall be recorded on a monthly, and on a 12-consecutive month, basis.

**# 004 [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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall keep a record of each inspection performed as required by Condition #002, 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.

**# 005 [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.**

**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(a) The permittee shall keep records of the following for each storage vessel:

- (1) the dimensions of the storage vessel;
- (2) the capacity of the storage vessel;
- (3) the VOL stored;
- (4) the period of storage for which the VOL was stored in the vessel; and
- (5) the maximum true vapor pressure of that VOL during the respective storage period.

(b) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below:

- (1) 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,
- (2) for crude oil or refined petroleum products the vapor pressure may be obtained by the following:
  - (i) available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be samples, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s); or
  - (ii) the true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded of the estimated maximum true vapor pressure is greater than 0.51 psia.

**V. REPORTING REQUIREMENTS.**

**# 006 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

Electronic reports to the EPA shall be submitted to the following email address: R3\_APD\_Permits@epa.gov.

The subject line for emailed reports shall include the TVOP number and the permittee's name.

**# 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(a) Except as provided in (b), below, for inspections required by Condition #002(a) and (c), for this source, the permittee shall notify the Administrator and the Department in writing at least thirty (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 storage vessel prior to refilling.

(b) If the inspection is not planned and the permittee could not have known about the inspection thirty (30) days in advance of refilling the vessel with VOL, the permittee shall notify the Administrator and the Department at least seven (7) calendar days prior to refilling of a storage vessel. 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 the Department at least seven (7) calendar days prior to refilling.

**# 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(a) After each visual inspection that detects defects, the permittee shall submit a report to the Administrator and the



**SECTION D. Source Level Requirements**

Department within thirty (30) days of the inspection. The report shall contain the following information:

- (1) the identity of the storage vessel inspected;
- (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 forty-five (45) days and if the tank cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the Administrator and the Department in the inspection report required by subcondition (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 vessel will be emptied as soon as possible.

**# 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

If any of the conditions described in Condition # 002(b) or (c), above are detected during the inspection, a report shall be furnished to the Administrator of the EPA and the Department within thirty (30) days of the inspection. The report shall identify the following:

- (a) the storage vessel;
- (b) the nature of the defects; and
- (c) the date the storage vessel 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 condition is derived from 25 Pa. Code §§ 129.56, 129.96(a), and 129.111(a).]

- (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 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 ninety (90) percent of the opening.
- (g) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

**# 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 permit condition is derived from 25 Pa. Code §§ 129.56 and 129.96.]

**SECTION D. Source Level Requirements**

The internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel 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.
- (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 permit condition is derived from 25 Pa. Code § 129.56.]

- (a) The internal floating roof shall rest or float on the liquid surface, (but not necessarily in complete contact with it) inside the tank 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.

**# 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 permit condition is derived from 25 Pa. Code §§ 127.441, 129.96(a), and 129.111(a).]

- (a) If during the inspection required by Condition #002, for this source, 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 storage vessel with VOL.
- (b) If during the inspection required by Condition #002(b), for this source, 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 forth-five (45) days. If a failure cannot be repaired with in forty-five (45) days and if the vessel cannot be empties within forty-five (45) days, a thirty (30) day extension may be requested in accordance with the requirements specified in Condition #007(b) for this source.
- (c) If during the inspection required by Condition #002(c), of this source, the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or seal fabric, or the gaskets n longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than ten (10) percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this subcondition exist before refilling the tank with VOL.

**VII. ADDITIONAL REQUIREMENTS.****# 014 [25 Pa. Code §127.503]****Application information.**

This source consists of the following internal floating roof tanks:

- Source 121, Tank 139;
- Source 128, Tank 234;
- Source 130, Tank 132;
- Source 132, Tank 242;
- Source 133, Tank 246;

**SECTION D. Source Level Requirements**

- Source 134, Tank 248;
- Source 136, Tank 250;
- Source 148, Tank 352;
- Source 149, Tank 353;
- Source 150, Tank 354;
- Source 151, Tank 355;
- Source 177, Tank 524;
- Source 178, Tank 527;
- Source 188, Tank 607;
- Source 190, Tank 609;
- Source 192, Tank 611;
- Source 202, Tank 3;
- Source 204, Tank 253;
- Source 212, Tank 610;
- Source 225, Tank 638;
- Source 302, Tank 2;
- Source 357, Tank 357;
- Source 358, Tank 358; and
- Tank 97 (capacity is less than 40,000 gallons).

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: T003

Source Name: NESHAP SUBPART R TANKS

Source Capacity/Throughput:

N/A

PETROL LIQUIDS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.****# 001 [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 condition is derived from 25 Pa. Code §§ 129.56, 129.96(a), and 129.111(a).]

The following shall apply to tanks with a permanently affixed roof and internal floating roof:

- (a) At least once every 12 months, the permittee shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof. If the internal floating roof is not resting on the surface of the volatile organic liquid (VOL) inside the storage vessel, 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 storage vessel from service within forty-five (45) days. If a failure that is detected during inspections required in this paragraph cannot be repaired within forty (45) days and if the vessel cannot be emptied within forty-five (45) days, a 30-day extension may be requested from the Department in the inspection report required in 40 CFR § 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
- (b) Each time the storage vessel is emptied and degassed, the permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any). If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the 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 none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this paragraph occur at intervals greater than 10 years.
- (c) The permittee shall notify the Department in writing at least thirty (30) days prior to the filling or refilling of each storage vessel for which an inspection is required by (b), above, to afford the Department the opportunity to have an observer present. If the inspection required by (b), above, is not planned and the permittee could not have known about the inspection thirty (30) days in advance or refilling the tank, the permittee shall notify the Department at least seven (7) days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Department at least seven (7) days prior to the refilling.

**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.424]****Subpart R -- National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) SOURCE: 59 FR 64318, Dec. 14, 1994, unless otherwise noted. Standards**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

**SECTION D. Source Level Requirements**

The permittee shall perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. Each piece of equipment shall be inspected during the loading of a gasoline cargo tank.

**IV. RECORDKEEPING REQUIREMENTS.****# 003 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

The permittee shall maintain records of each of the inspections performed for each storage vessel.

These records shall include the following:

- (a) storage vessel number;
- (b) inspection date; and
- (c) all observed conditions for each component of the control equipment (seals, floating roof, fittings, etc...).

**# 004 [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.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 127.441 and 129.96.]

- (a) The permittee shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. These records shall be maintained for the life of each storage vessel.
- (b) The permittee shall notify the Department within thirty (30) days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.
- (c) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below:
  - (1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the 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;
  - (2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
    - (i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see 40 CFR § 60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s);
    - (ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
  - (3) For other liquids, the vapor pressure:
    - (i) May be obtained from standard reference texts, or
    - (ii) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR § 60.17);
    - (iii) Measured by an appropriate method approved by the Department; or
    - (iv) Calculated by an appropriate method approved by the Department.

**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.424]****Subpart R -- National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) SOURCE: 59 FR 64318, Dec. 14, 1994, unless otherwise noted.****Standards**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

- (a) A log book or odepartment approved equivalent system shall be used and shall be signed by the owner or operator at the completion of each inspection. A section of the above shall contain a list, summary description, or diagram(s) showing the location of all equipment in gasoline service at the facility.

**SECTION D. Source Level Requirements**

- (b) Each detection of a liquid or vapor leak shall be recorded in the log book or Department approved equivalent. When a leak is detected, an initial attempt at repair shall be made as soon as practicable, but no later than five (5) calendar days after the leak is detected. Repair or replacement of leaking equipment shall be completed within fifteen (15) calendar days after detection of each leak, except as provided in (c), below.
- (c) Delay of repair of leaking equipment will be allowed upon a demonstration to the Administrator that repair within 15 days is not feasible. The permittee shall provide the reason(s) a delay is needed and the date by which each repair is expected to be completed.
- (d) Initial compliance with the requirements in (a) through (c), above shall be achieved by existing sources as expeditiously as practicable, but no later than December 15, 1997. For new sources, initial compliance shall be achieved upon startup.
- (e) As an alternative to compliance with the provisions in (a) through (c), above, the permittee may implement an instrument leak monitoring program that has been demonstrated to the Administrator as at least equivalent.
- (f) The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
- (1) Minimize gasoline spills;
  - (2) Clean up spills as expeditiously as practicable;
  - (3) Cover all open gasoline containers with a gasketed seal when not in use; and
  - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

**# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.428]**

**Subpart R -- National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) SOURCE: 59 FR 64318, Dec. 14, 1994, unless otherwise noted.**

**Reporting and recordkeeping.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall record the following information in a log book or Department approved equivalent for each leak that is detected:

- (a) the equipment type and identification number;
- (b) the nature of the leak (i.e., vapor or liquid) and the method of detection (i.e., sight, sound, or smell);
- (c) the date the leak was detected and the date of each attempt to repair the leak;
- (d) repair methods applied in each attempt to repair the leak;
- (e) "repair delayed" and the reason for the delay if the leak is not repaired within 15 calendar days after discovery of the leak;
- (f) the expected date of successful repair of the leak if the leak is not repaired within 15 days; and
- (g) the date of successful repair of the leak.

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

Electronic reports to the EPA shall be submitted to the following email address: R3\_APD\_Permits@epa.gov.

The subject line for emailed reports shall include the TVOP number and the permittee's name.

**# 008 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

On an annual basis, the permittee shall compile a report of fugitive emissions from these sources for submittal to the Department.

**# 009 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

The permittee shall compile a report on each annual inspection of the floating roofs. Each report shall contain, but not be limited to, the following:

- (a) date of inspection;
- (b) name of product being stored in the tank at the time of the inspection;
- (c) the number of holes, tears, or other openings found in the tank roof, seals, and fittings during the inspection;

**SECTION D. Source Level Requirements**

- (d) whether or not the floating roof was resting atop of the stored product; and
- (e) whether or not any stored product is visible on the surface of the floating roof.

**# 010 [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.**

[Additional authority for this condition is derived from 25 Pa. Code §§ 129.56, 129.96(a), and 129.111(a).]

In addition to other requirements, reporting for internal floating roof tanks shall also include the following:

- (a) if any of the conditions described in the annual, or emptied and degassed, inspections are detected, a report shall be furnished to the Administrator and the Department within thirty (30) days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (b) after each inspection that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects, a report shall be furnished to the Administrator and the Department within thirty (30) days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications listed and list each repair made.

**# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.428]****Subpart R -- National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) SOURCE: 59 FR 64318, Dec. 14, 1994, unless otherwise noted.  
Reporting and recordkeeping.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall submit a semi-annual excess emissions report to the Administrator and the Department in accordance with 40 CFR § 63.10(e)(3), whether or not a CMS is installed at the facility. This report shall include the number of equipment leaks not repaired within five (5) days after detection. The following occurrences are excess emissions events, and the following information shall be included in the excess emissions report, as applicable:

- (a) Each exceedance or failure to maintain, as appropriate, the monitored operating parameter value determined under 40 CFR § 63.425(b). The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred, and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing systems or the CMS.
- (b) Each instance of a nonvapor-tight gasoline cargo tank loading at the facility in which the permittee failed to take steps to assure that such cargo tank would not be reloaded at the facility before vapor tightness documentation for that cargo tank was obtained.
- (c) Each reloading of a nonvapor-tight gasoline cargo tank at the facility before vapor tightness documentation for that cargo tank is obtained by the facility in accordance with 40 CFR § 63.422(c)(2).
- (d) For each occurrence of an equipment leak for which no repair attempt was made within five (5) days or for which repair was not completed within fifteen (15) days after detection:
  - (1) the date on which the leak was detected;
  - (2) the date of each attempt to repair the leak;
  - (3) the reasons for the delay of repair; and
  - (4) the date of successful repair.

**VI. WORK PRACTICE REQUIREMENTS.****# 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 condition is derived from 25 Pa. Code §§ 129.56, 129.96(a), and 129.111(a).]

**SECTION D. Source Level Requirements**

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

- (1) a closure seal, or seals, to close the space between the roof edge and tank wall is used;
- (2) there are no holes, tears, or other openings in the seal, seal fabric, or other materials; and
- (3) openings, except stub drains, are equipped with covers, lids, or seals such that:
  - (i) the cover, lid, or seal is in the closed position at all times, except when in actual use;
  - (ii) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and
  - (iii) rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at recommended the setting of the manufacturer.

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

- (1) which contain petroleum liquid with a true vapor pressure less than 4 psia (27.6 kPa) and which are of welded construction and which presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal, or other closure device of demonstrated equivalence approved by the Department; or
- (2) which are of welded construction, equipped with a metallic-type shoe primary seal and has a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal).

**# 013 [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 condition is derived from 25 Pa. Code §§ 129.56, 129.96(a), and 129.111(a).]

The permittee shall maintain on these storage vessels a fixed roof in combination with an internal floating roof meeting the following specifications:

- (a) the internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the 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.
- (b) each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
  - (1) 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; or
  - (2) 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.
- (c) each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- (d) each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- (e) 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.
- (f) rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
- (g) 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 percent of the opening.
- (h) each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.



**SECTION D. Source Level Requirements**

(i) each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

**# 014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.424]**

**Subpart R -- National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations) SOURCE: 59 FR 64318, Dec. 14, 1994, unless otherwise noted.**

**Standards**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:

- (a) minimize gasoline spills;
- (b) clean up spills as expeditiously as practicable;
- (c) cover all open gasoline containers with a gasketed seal when not in use; and
- (d) minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

**VII. ADDITIONAL REQUIREMENTS.****# 015 [25 Pa. Code §127.503]****Application information.**

This source consists of the following individual storage tanks, subject to 40 CFR, Subpart R requirements:

## Internal floating roof tanks:

- DEP Source number 121, Tank 139, capacity - 6.5 Mbarrels
- DEP Source number 128, Tank 234, capacity - 70.1 Mbarrels
- DEP Source number 130, Tank 132, capacity - 14.6 Mbarrels
- DEP Source number 133, Tank 246, capacity - 54.4 Mbarrels
- DEP Source number 134, Tank 248, capacity - 54.4 Mbarrels
- DEP Source number 136, Tank 250, capacity - 80.4 Mbarrels
- DEP Source number 148, Tank 352, capacity - 179.7 Mbarrels
- DEP Source number 149, Tank 353, capacity - 189.7 Mbarrels
- DEP Source number 150, Tank 354, capacity - 182.2 Mbarrels
- DEP Source number 151, Tank 355, capacity - 189.7 Mbarrels
- DEP Source number 177, Tank 524, capacity - 75.7 Mbarrels
- DEP Source number 179, Tank 528, capacity - 150.5 Mbarrels
- DEP Source number 180, Tank 529, capacity - 150.5 Mbarrels
- DEP Source number 187, Tank 599, capacity - 53.4 Mbarrels
- DEP Source number 212, Tank 610, capacity - 96.0 Mbarrels

## Fixed roof tanks:

- DEP Source number 146, Tank 344, capacity - 190.3 Mbarrels
- DEP Source number 300, Miscellaneous tanks

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

(b) As specified in 40 CFR § 63.10(b)(1), you must keep your files of all information (including all reports and notifications) for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You must keep each record on site for at least two (2) years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR § 63.10(b)(1). You may keep the records off site for the remaining three (3) years.

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

Electronic reports to the EPA shall be submitted to the following email address: R3\_APD\_Permits@epa.gov.

The subject line for emailed reports shall include the TVOP number and the permittee's name.

**# 006 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

On an annual basis, the permittee shall compile a report of fugitive emissions from these sources for submittal to the Department.

**# 007 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

The permittee shall compile a report on each annual inspection of the floating roofs. Each report shall contain, but not be limited to, the following:

- (a) date of inspection;
- (b) name of product being stored in the tank at the time of the inspection;
- (c) the number of holes, tears, or other openings found in the tank roof, seals, and fittings during the inspection;
- (d) whether or not the floating roof was resting atop of the stored product; and
- (e) whether or not any stored product is visible on the surface of the floating roof.

**VI. WORK PRACTICE REQUIREMENTS.****# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.2346]****Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)  
What emission limitations, operating limits, and work practice standards must I meet?**

Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

For each storage tank storing organic liquids that meets the tank capacity and liquid vapor pressure criteria for control in Table 2 of Subpart EEEE, Items 1–5, you must comply with (a), (b), (c), or (d), below. For each storage tank storing organic liquids that meets the tank capacity and liquid vapor pressure criteria for control in Table 2 of Subpart EEEE, Item 6, you must comply with (a), (b), or (d), below;

- (a) meet the emission limits specified in Table 2 of Subpart EEEE and comply with the applicable requirements specified in 40 CFR Part 63, Subpart SS, for meeting emission limits, except substitute the term “storage tank” at each occurrence of the term “storage vessel” in subpart SS;
- (b) route emissions to fuel gas systems or back into a process as specified in 40 CFR Part 63, Subpart SS;
- (c) comply with 40 CFR Part 63, Subpart WW (control level 2); or
- (d) use a vapor balancing system that complies with the requirements specified in 40 CFR § 63.2346(a)(4)(i) through (vii) and with the recordkeeping requirements specified in 40 CFR § 63.2390(e).

**# 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.2350]****Subpart EEEE - National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)  
What are my general requirements for complying with this subpart?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

For Organic Liquids Distribution (OLD) storage vessels and associated equipment, the permittee must always operate and

**SECTION D. Source Level Requirements**

maintain the affected sources, including air pollution controls and monitoring equipment, according to the provisions in 40 CFR § 63.6(e)(1)(i).

**VII. ADDITIONAL REQUIREMENTS.**

**# 010 [25 Pa. Code §127.503]**

**Application information.**

This source consists of the following individual tanks, subject to 40 CFR 63, Subpart EEEE requirements:

- DEP Source number 178, Tank 527, capacity - 69.7 Mbarrels
- DEP Source number 190, Tank 609, capacity - 98.17 Mbarrels
- DEP Source number 202, Tank 3, capacity - 41.0 Mbarrels
- DEP Source number 225, Tank 638, capacity - 61.13 Mbarrels
- DEP Source number 302, Tank 2, capacity - 59.5 Mbarrels

**\*\*\* Permit Shield in Effect. \*\*\***

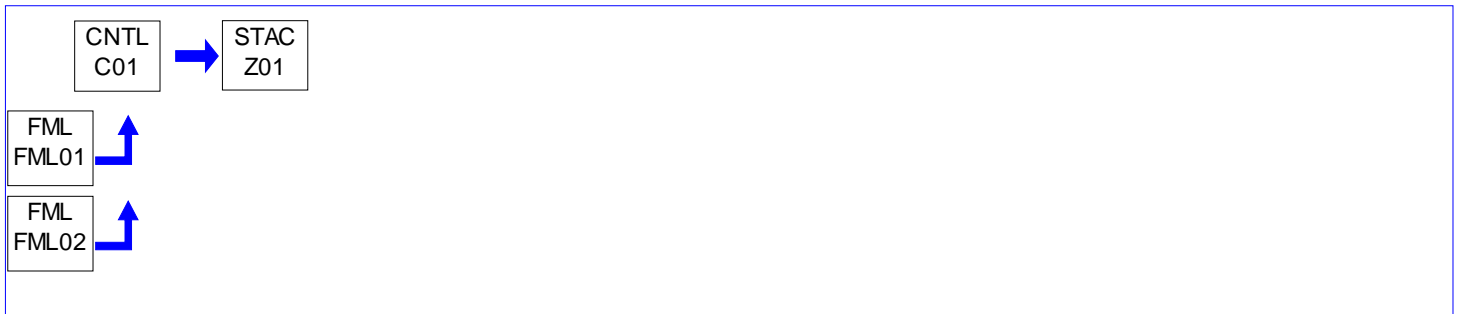
**SECTION D. Source Level Requirements**

Source ID: C01

Source Name: WEST COLD FLARE (MODIFIED)

Source Capacity/Throughput: 240.000 CF/HR

PURGE AND PILOT GAS

**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 permit condition is derived from 25 Pa. Code 127.441.]

The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (2) consecutive hours.

**# 002 [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 permit condition is derived from 25 Pa. Code 127.441.]

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 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); and
- (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.

**II. TESTING REQUIREMENTS.**

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

**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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

**SECTION D. Source Level Requirements**

- (a) The permittee shall continuously monitor the presence of a pilot flame for this flare 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 the flare 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

- (a) The permittee shall maintain records of the continuous presence of a pilot flame on this flare.
- (b) The permittee shall maintain daily records of the type and amount of fuel combusted in this flare.

**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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

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

**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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

The permittee shall ensure that the flare 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

- (a) The flare shall be operated with a flame present at all times.
- (b) The flare 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 flare shall be designed and operated with an exit velocity less than the maximum velocity, (V<sub>max</sub>), 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 permit including Section B (Title V General Requirements).

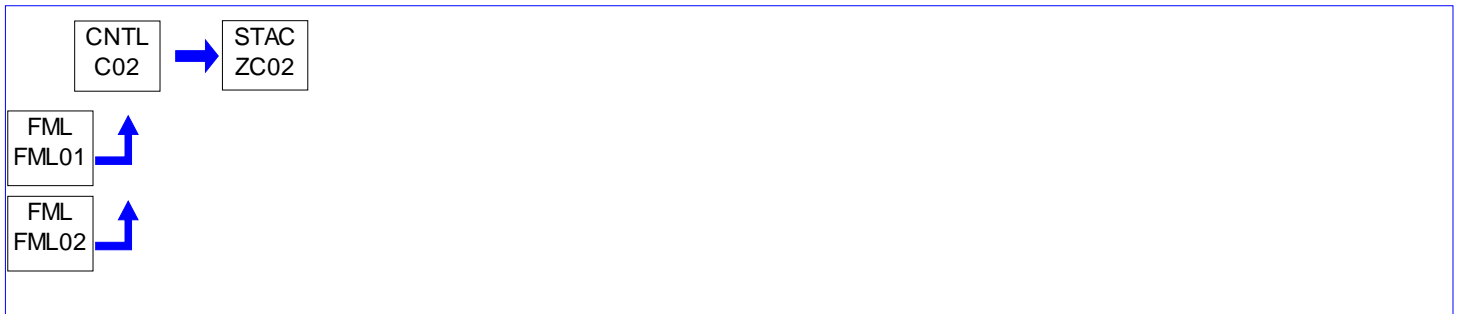
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: C02

Source Name: EAST COLD FLARE (NEW TANKS PROJECT)

Source Capacity/Throughput: 117.000 CF/HR PURGE AND PILOT

**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 permit condition is derived from 25 Pa. Code 127.441.]

The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

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:

- EPA 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;
- 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;
- EPA Method 3A for determining flue gas composition and molecular weight;
- EPA Method 18 for determination of Hydrocarbon constituents;
- the net heating value of the gas being combusted in the flare shall be combusted as stated in 40 CFR § 60.485a(g)(4);
- 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); and
- 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

- The permittee shall continuously monitor the presence of a pilot flame for this flare by using an infrared sensor or other device approved by the Department.
- The permittee shall monitor the type and amount of fuel combusted in the flare on a daily basis.

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

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

- (a) The permittee shall maintain records of the continuous presence of a pilot flame on this flare.
- (b) The permittee shall maintain daily records of the type and amount of fuel combusted in this flare.

**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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

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

**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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

The permittee shall ensure that the flare 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

- (a) The flare shall be operated with a flame present at all times.
- (b) The flare 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 flare shall be designed and operated with an exit velocity less than the maximum velocity, (V<sub>max</sub>), 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 permit including Section B (Title V General Requirements).

**\*\*\* Permit Shield in Effect. \*\*\***



**SECTION D. Source Level Requirements**

Source ID: C03

Source Name: WEST WARM FLARE

Source Capacity/Throughput: 4,833.330 CF/HR

PURGE AND PILOT GAS

**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 permit condition is derived from 25 Pa. Code § 127.441.]

The flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five (5) minutes during any two (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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

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:

- EPA 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;
- 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;
- EPA Method 3A for determining flue gas composition and molecular weight;
- EPA Method 18 for determination of Hydrocarbon constituents;
- the net heating value of the gas being combusted in the flare shall be combusted as stated in 40 CFR § 60.485a(g)(4);
- 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); and
- 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

- The permittee shall continuously monitor the presence of a pilot flame for this flare by using an infrared sensor or other device approved by the Department.
- The permittee shall monitor the type and amount of fuel combusted in the flare on a daily basis using a Emerson, Model

**SECTION D. Source Level Requirements**

1500XA gas chromatograph (GC) or equivalent.

(c) The permittee shall follow the manufacturer's specifications for the proper operation, maintenance, and calibration of this GC as provided in the West Warm Flare BTU Monitoring Protocol and approved by the Department on November 16, 2018.

(d) Any changes made to the West Warm Flare BTU Monitoring Protocol shall be submitted to the Department for approval.

**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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(a) The permittee shall maintain records of the continuous presence of a pilot flame on this flare. If the pilot flame is not present for any reason, the permittee shall keep records of the absence of the flame, including the date, reason, duration, and any corrective action.

(b) The permittee shall maintain daily records of the type and amount of fuel combusted in this flare.

**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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

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

**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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall ensure that the flare 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.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(a) The flare shall be operated with a flame present at all times.

(b) The flare 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)(3).

(c) The steam-assisted flare shall be designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR § 60.18(f)(4), less than 60 ft/sec, except as provided in (d) and (e), below;

(d) The steam-assisted flare shall be designed and operated with an exit velocity as determined by the methods specified in 40 CFR § 60.18(f)(4), equal to or greater than 60 ft/sec, but less than 400 ft/sec are allowed if the net heating value of the gas being combusted is greater than 1,000 Btu/scf.

(e) The steam-assisted flare designed for and operated with an exit velocity, as determined by the methods specified in 40 CFR § 60.18(f)(4), less than the velocity,  $V_{max}$ , as determined by 40 CFR § 60.18(f)(5), and less than 400 ft/sec is allowed.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

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

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

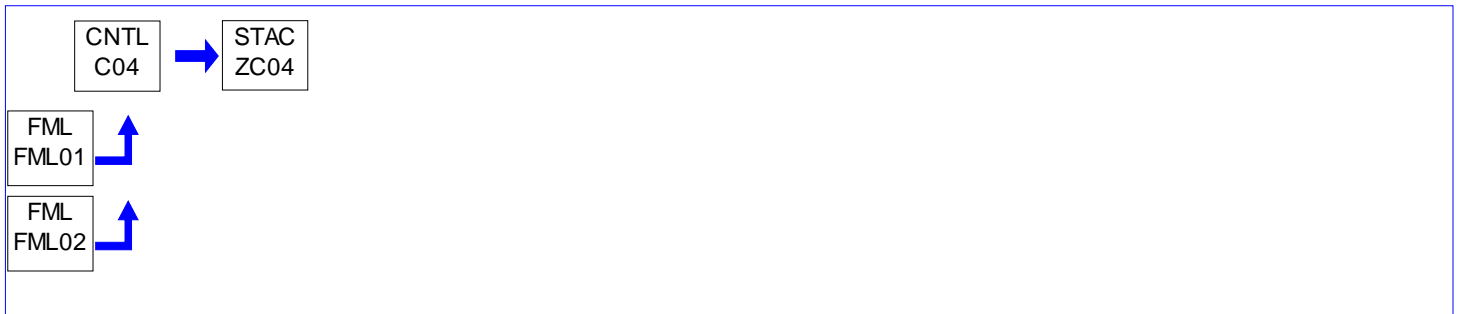
Source ID: C04

Source Name: PROJECT PHOENIX COLD FLARE

Source Capacity/Throughput:

9.452 MCF/HR

PILOT/PURGE/SWEEP GAS

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

[Additional authority for this permit condition is derived from 40 CFR §§ 60.18(b) and (c)(1), 60.112b(a)(3)(ii), and 60.482-10a(d); and 25 Pa. Code Chapter 122.]

This cold flare 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.

**Control Device Efficiency Restriction(s).****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit 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%.

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

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

[Additional authority for this permit condition is derived from 40 CFR §§ 60.18(b) and (f)(1) and (3)–(4), 60.112b(a)(3)(ii), 60.482-10a(d), and 60.485a(a) and (g)(1) and (5)–(7); and 25 Pa. Code Chapters 122 and 139.]

(a) Within 180 days after the commencement of operation of this cold flare, the permittee shall perform a stack test for the cold flare, as follows:

(1) In accordance with the provisions of 25 Pa. Code Chapter 139.

(2) While the flare is operating at maximum routine operating conditions, or under such other conditions within the capacity of the equipment as may be requested by the Department.

(3) Using the following test methods, or (an) other Department-approved test method(s), to determine compliance with the standards for flares for this cold flare:

(i) EPA Method 22 to determine compliance with the visible emission restriction specified in Condition # 001, Section D (under Source ID C04), of this permit. The observation period shall be 2 hours.

**SECTION D. Source Level Requirements**

- (ii) EPA Method 2, 2A, 2C, or 2D, as appropriate, to determine the volumetric flow rate (at standard temperature and pressure of 25 °C and 760 mm Hg, respectively) of the cold flare. The permittee shall divide this value by the unobstructed (free) cross-sectional area of the flare tip to obtain the actual exit velocity of the cold flare.
  - (iii) EPA Method 3A to determine the composition and molecular weight of the flue gas for the cold flare.
  - (iv) EPA Method 18 to determine the hydrocarbon components of the gas combusted in the cold flare.
  - (v) EPA Method 18 and ASTM D2504-88 (or the most recent revision) to determine the concentration of sample component "i" in the equation referenced in Condition # 008(a), Section D (under Source ID C04), of this permit.
  - (vi) ASTM D2382-88 (or the most recent revision) to determine the net heat of combustion of sample component "i" in the equation referenced in Condition # 008(a), Section D (under Source ID C04), of this permit, if published values are not available or cannot be calculated.
- (b) At least 90 days prior to the stack 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. A test protocol shall be approved by the Source Testing Section of the Department prior to the test.
- (c) At least 30 days prior to the stack test, the permittee shall inform the Regional Air Quality Program Manager of the Department of the date and time of the test.
- (d) Within 60 days after the stack test, the permittee shall submit two copies of the complete test report, including all operating conditions, to the Regional Air Quality Program Manager of the Department for approval.
- (e) The permittee may request an extension of time for any deadlines indicated in (a)–(d), above, with which it is unable to comply. The request must be in writing and include a justification for the extension. The Department may grant the extension for reasonable cause.

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

- (a) The permittee shall monitor this cold flare for the presence of a pilot flame on a continuous basis.
- (b) The permittee shall monitor the type and amount of fuel combusted in the cold flare on a daily basis.

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

- (a) The permittee shall maintain records of the presence of a pilot flame for this cold flare on a continuous basis.
- (b) The permittee shall maintain records of the type and amount of fuel combusted in the cold flare on a daily basis.

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

[Additional authority for this permit condition is derived from 40 CFR § 60.115b(d)(1) and (3) and 25 Pa. Code Chapter 122.]

The permittee shall submit, to the Department, the following reports for this cold flare:

- (a) A report containing the measurements required in Condition # 003(a)–(b) and (e)–(f), Section D (under Source ID C04), of this permit, within 60 days after the stack test.

**SECTION D. Source Level Requirements**

- (b) A semi-annual report indicating all periods of operation during which the pilot flame was absent.
- (c) The report indicated in (b), above, shall be submitted according to the following schedule:
- (1) By January 31, of each year, for the period covering July 1–December 31, of the previous year.
  - (2) By July 31, of each year, for the period covering January 1–June 30, of the same year.

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

[Additional authority for this permit condition is derived from 40 CFR §§ 60.18(b) and (f)(3), 60.112b(a)(3)(ii), 60.482-10a(d), and 60.485a(g)(4); and 25 Pa. Code Chapter 122.]

- (a) The permittee shall use the equation indicated in 40 CFR § 60.485a(g)(4) to calculate the net heating value of the gas combusted in this cold flare.
- (b) The permittee shall use the equation indicated in 40 CFR § 60.485a(g)(3) to calculate the maximum permitted velocity for the cold flare.

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

[Additional authority for this permit condition is derived from 40 CFR §§ 60.18(b) and (f)(2), 60.112b(a)(3)(ii), 60.482-10a(d), and 60.485a(g)(2); and 25 Pa. Code Chapter 122.]

The permittee shall use an infrared sensor, or other Department-approved device, to monitor this flare for the presence of a pilot flame.

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

[Additional authority for this permit condition is derived from 40 CFR §§ 60.18(b), (c)(2), (3)(ii), and (5), and (d), 60.112b(a)(3)(ii), and 60.482-10a(d)–(e); and 25 Pa. Code Chapter 122.]

The permittee shall ensure that this cold flare is operated and maintained in conformance with its design, and in accordance with the following requirements:

- (a) A flame shall be present at all times.
- (b) The gas combusted in the cold flare shall have a minimum net heating value of 300 Btu/scf. The net heating value of the gas combusted in the cold flare shall be determined as indicated in Condition # 007(a), Section D (under Source ID C04), of this permit.
- (c) The actual exit velocity of the low-pressure flare tip of the cold flare shall be less than the maximum permitted velocity for air-assisted flares. The maximum permitted velocity shall be determined as indicated in Condition # 007(b), Section D (under Source ID C04), of this permit.

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

This source shall consist of an elevated (Project Phoenix) cold flare equipped with low-pressure (air-assisted) and high-pressure (unassisted) flare tips. The cold flare shall be used to flare refrigerated ethane streams that do not contain water.

**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION E. Source Group Restrictions.**

Group Name: 0

Group Description: Aux Boilers

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 §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.99(d) and 129.114(i).]

Pursuant to the Best Available Control Technology (BACT) of the Prevention of Significant Deterioration (PSD) provisions in 40 CFR § 52.21 and 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) NO<sub>x</sub> - 0.05 lbs/MMBtu (based on a 30-day rolling average) and 92.71 tons in any 12 consecutive month period;
- (b) VOC (calculated as methane) - 0.004 lbs/MMBtu and 5.49 tons in any 12 consecutive month period;
- (c) CO - 0.06 lbs/MMBtu (based on a 30-day rolling average) and 27.23 tons in any 12 consecutive month period;
- (d) PM - 0.01 lbs/MMBtu and 21.94 tons in any 12 consecutive month period;
- (e) SO<sub>2</sub> - 0.008 lbs/MMBtu and 41.10 tons in any 12 consecutive month period; and
- (f) Sulfuric Acid Mist - 0.0006 lbs/MMBtu and 3.15 tons in any 12 consecutive month period.

[The above short-term emission limits apply individually to each auxiliary boiler and shall be calculated as one-hour averages (except for NO<sub>x</sub> and CO), while the long-term emission limits apply as an aggregate of all three (3) auxiliary boilers, calculated as 12 consecutive month totals.]

The above emissions cap on Sources 031, 033, and 034 is a compliance cap, imposed for the limited purpose of limiting emissions increases, for NSR/PSD purposes, related to the installation of Sources 031, 033, and 034. This cap 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 the boilers, or the addition or modification of any steam-consuming process(es) at the facility. Future applicability determinations must consider the baseline actual emissions of the emissions unit(s) and not the cap. The latter is true even if the permittee does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider the three boilers as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all three boilers (e.g., should major NSR/PSD be triggered for any one boiler or process change, BACT/LAER is required for all three boilers). If the permittee finds it necessary to relax the cap at some future date, the source obligation requirements of 40 CFR § 52.21(r)(4) and 25 Pa. Code § 127.203(e)(2) apply.

**Fuel Restriction(s).****# 002 [25 Pa. Code §127.441]****Operating permit 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 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 this boiler. 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 Restrictions.****II. TESTING REQUIREMENTS.****# 003 [25 Pa. Code §127.441]****Operating permit 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 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 five years for the following:

- (a) volatile organic compounds; and
- (b) particulate matter (total particulate and 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 §127.441]****Operating permit terms and conditions.**

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

(c) Any testing required by (a), above, shall begin to be conducted beginning 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 §127.441]****Operating permit terms and conditions.**

(a) At least sixty (60) 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 thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(d) Within sixty (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 §127.441]****Operating permit terms and conditions.**

The continuous monitoring system for NO<sub>x</sub>, CO, and oxygen 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).

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.100(a)(1) and 129.115(b)(1).]

Pursuant to the Best Available Control Technology (BACT) of the Prevention of Significant Deterioration (PSD) provisions in



**SECTION E. Source Group Restrictions.**

40 CFR § 52.21 and 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 nitrogen oxides, oxygen, and carbon monoxide on this auxiliary boiler.

The NO<sub>x</sub> 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 also follow the requirements found in Section C, pertaining to CEMS.

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

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.100(a)(1) and 129.115(b)(1).]

Continuous monitoring downstream of the air pollution control equipment shall be conducted for NO<sub>x</sub>, CO, and oxygen.

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.100(d) and 129.115(f).]

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 which is subject to this operating permit;
- (b) manufacturer's specifications for the four 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 four auxiliary boilers in order to demonstrate compliance with its limits; and
- (f) each start-up and shutdown of this auxiliary boiler. 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 §127.441]****Operating permit 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 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 five (5) years.

[Compliance with this permit condition assures compliance with 25 Pa. Code §§ 129.100(i) and 129.115(k).]

**# 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.**

[Additional authority for this permit condition is derived from 40 CFR § 60.49b(g) and 25 Pa. Code § 127.441.]

The permittee shall maintain the following records each operating day:

- (a) calendar date;
- (b) average hourly NO<sub>x</sub> emission rate (measured or predicted);
- (c) the 30-day NO<sub>x</sub> emission rate calculated at the end of each operating day from the measured or predicted hourly NO<sub>x</sub> emission rate;

**SECTION E. Source Group Restrictions.**

- (d) identification of operating days when the NOx 30-day 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;
- (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 § 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?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

For each boiler, you must also keep the following records:

- (a) monthly records of fuel use and type for each 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 seventy-five (75) percent 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 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.**

[Additional authority for this permit condition is derived from 40 CFR § 60.49b(h) and 25 Pa. Code § 127.441.]

The permittee shall submit excess emission reports for any calendar quarter that has excess emissions from this source, 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?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall submit compliance reports according to the following schedule:

Initial report covering the period between January 31, 2016, and June 30, 2016.

Subsequent reports shall cover the periods from July 1 through December 30 and from January 1 through June 30.

All reports shall be post marked (or electronically delivered) to the Department and the EPA no later than July 31 (for the period ending June 30) and January 31 (for the period ending December 31).

**SECTION E. Source Group Restrictions.**

The compliance report shall contain the following information:

(a) If the facility is subject to the requirements of a tune up they must submit a compliance report with the following information:

- (1) company and facility name and address;
- (2) process unit information, emissions limitations, and operating parameter limitations;
- (3) date of report and beginning and ending dates of the reporting period;
- (4) the total operating time during the reporting period; and
- (5) include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to 40 CFR § 63.7540(a)(10), (11), or (12), respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(b) If a facility is complying with the applicable emissions limit with performance testing they must submit a compliance report with the following information:

- (1) company and facility name and address;
- (2) process unit information, emissions limitations, and operating parameter limitations;
- (3) date of report and beginning and ending dates of the reporting period;
- (4) the total operating time during the reporting period;
- (5) the total fuel use by each individual boiler or process heater 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 your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure;
- (6) if you are conducting performance tests once every three (3) years consistent with 40 CFR § 63.7515(b) or (c), the date of the last two (2) performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions;
- (7) 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;
- (8) 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 boiler to minimize emissions in accordance with 40 CFR § 63.7500(a)(3), including actions taken to correct the malfunction;
- (9) if compliance is demonstrated 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
- (10) for each deviation from an emission limit or operating limit in this subpart that occurs at an individual boiler 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 (i) through (iii), below.
  - (i) a description of the deviation and which emission limit or operating limit from which you deviated;
  - (ii) information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken; and
  - (iii) if the deviation occurred during an annual performance test, provide the date the annual performance test was completed.

**# 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?**

[Additional authority for this permit condition is derived from 25 Pa. Code 127.441.]

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).

**SECTION E. Source Group Restrictions.****VI. WORK PRACTICE REQUIREMENTS.****# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The throughput limit on boilers 1, 3, and 4 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 the boilers, or the addition or modification of any steam-consuming process(es) at the facility. Future applicability determinations must consider the baseline actual emissions of the emissions unit(s) and not the cap. The latter is true even if the permittee does not request a change in the compliance cap. Furthermore, by accepting this cap and agreeing to consider the three boilers as one emissions unit for NSR/PSD purposes (to avoid NSR/PSD), any future applicability determinations must involve all three boilers (e.g., should major NSR/PSD be triggered for any one boiler or process change, BACT/LAER is required for all three boilers).

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

[Additional authority for this permit condition is derived from 25 Pa. Code §§ 129.99(d) and 129.114(i).]

The emissions of nitrogen oxides from this boiler shall be controlled by the use of low NO<sub>x</sub> burners and flue gas recirculation.

**# 019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7500]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What emission limits, work practice standards, and operating limits must I meet?**

[Additional authority for this permit condition is derived from 40 CFR Part 63, Subpart DDDDD, Table 3, and 25 Pa. Code § 127.441.]

The permittee must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001 that includes this boiler also satisfies the energy assessment requirement.

The energy assessment must include the following with extent of the evaluation for items (a) through (e) appropriate for the on-site technical hours listed in 40 CFR § 63.7575:

- (a) a visual inspection of the boiler system;
- (b) an evaluation of operating characteristics of the boiler systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;
- (c) an inventory of major energy use systems consuming energy from this boilers and which are under the control of the permittee;
- (d) a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;
- (e) a review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified;
- (f) a list of cost-effective energy conservation measures that are within the facility's control;
- (g) a list of the energy savings potential of the energy conservation measures identified; and
- (h) a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

**# 020 [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?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

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 Restrictions.****# 021 [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 permit condition is derived from 40 CFR 63, Subpart DDDDD, Table 4, and 25 Pa. Code § 127.441.]

The permittee shall maintain the operating load of each unit such that it does not exceed 110 percent 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.

**# 022 [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?**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

The permittee shall conduct an annual performance tune-up of this boiler, in accordance with § 63.7540(a)(10), no more than 13 months after the date of the previous tune-up.

**VII. ADDITIONAL REQUIREMENTS.****# 023 [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.

**# 024 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

**# 025 [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

**SECTION E. Source Group Restrictions.**

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, 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), 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, 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 X each unit's heat input

Where "Allowable emission rate" is equal to

3,438 tons of NOx

-----  
 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.

\*\*\* Permit Shield in Effect. \*\*\*

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 1

Group Description: Refrigerated Ethane Storage Tank Conditions

Sources included in this group

ID	Name
124	REFRIGERATED ETHANE STORAGE TANK (600,000 BBL)
125	REFRIGERATED ETHANE STORAGE TANK (600,000 BBL)

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

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

The permittee shall monitor the ethane throughput for this refrigerated ethane storage tank on a daily basis.

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

[Additional authority for this permit condition is derived from 40 CFR § 60.115b(d)(2) and 25 Pa. Code Chapter 122.]

The permittee shall maintain records of all periods of operation of this refrigerated ethane storage tank during which the pilot flame of the associated cold flare (Source ID C04) is absent.

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

[Additional authority for this permit condition is derived from 40 CFR § 60.116b(b) and 25 Pa. Code Chapter 122.]

The permittee shall maintain records of the dimensions of this refrigerated ethane storage tank, and an analysis showing the capacity of the storage tank, in a readily-accessible format for the life of the storage tank.

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

[Additional authority for this permit condition is derived from 40 CFR § 60.116b(c) and 25 Pa. Code Chapter 122.]

The permittee shall maintain records of the following operating parameters for the ethane stored in this refrigerated ethane storage tank:

- (a) The throughput, on a daily basis.
- (b) The starting and ending dates of storage (if not continuous).
- (c) The highest calendar-month average storage temperature.
- (d) The maximum true vapor pressure as stored.

**V. REPORTING REQUIREMENTS.**

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

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

[Additional authority for this permit condition is derived from 40 CFR § 60.112b(a)(3)(i) and 25 Pa. Code Chapter 122.]

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

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

Additional applicable requirements for this refrigerated ethane storage tank are specified in Section D (under Source ID 103), of this permit, except that, pursuant to 40 CFR § 60.480a(d)(5), the tank is exempt from the provisions of 40 CFR §§ 60.482-1a through 60.482-11a.

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

This source shall consist of a 600,000-bbl refrigerated ethane storage tank with vapor recovery system. Ethane vapors shall be condensed to a liquid state by the vapor recovery system before being hard-piped back to the storage tank.

\*\*\* **Permit Shield in Effect.** \*\*\*



**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Title V facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Descriptor		
031	AUXILIARY BOILER 1		
<b>Emission Limit</b>			
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
033	AUXILIARY BOILER 3		
<b>Emission Limit</b>			
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
034	AUXILIARY BOILER 4		
<b>Emission Limit</b>			
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 Descriptor		
112	NEW COOLING TOWERS		
<b>Emission Limit</b>		<b>Pollutant</b>	
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
113	(6) DIESEL ENGINE PUMPS		
<b>Emission Limit</b>		<b>Pollutant</b>	
6.110	Tons/Yr		CO
23.000	PPMV	per engine, corrected to 15% excess oxygen.	CO
23.790	Tons/Yr		NOX
2.740	Tons/Yr		SOX
500.000	PPMV	per engine	SOX
0.040	gr/DRY FT3	per engine	TSP
2.320	Tons/Yr		TSP
0.910	Tons/Yr		VOC
132	TANK 242 INT FLOAT 69.2 MBBL		
<b>Emission Limit</b>		<b>Pollutant</b>	
7.250	Tons/Yr		VOC
139	EXISTING COOLING TOWERS		
<b>Emission Limit</b>		<b>Pollutant</b>	
4.600	Tons/Yr	15-2B plant	VOC
141	WSAC SYSTEMS (2)		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.020	gr/DRY FT3	From Each WSAC System	TSP
0.550	Tons/Yr	12-Month Rolling Sum, Calculated Monthly	TSP
188	TANK 607 INT FLOAT 100 MBBL		
<b>Emission Limit</b>		<b>Pollutant</b>	
6.750	Tons/Yr		VOC
190	TANK 609 INT FLOAT 98.17 MBBL		
<b>Emission Limit</b>		<b>Pollutant</b>	
5.400	Tons/Yr		VOC
192	TANK 611 INT FLOAT 87.8 MBBL		
<b>Emission Limit</b>		<b>Pollutant</b>	
6.050	Tons/Yr		VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description
204	TANK 253 INT FLOAT 90.5 MBBL
<b>Emission Limit</b>	
40.400 Tons/Yr	group limit - Sources 204, 212, and 225
<b>Pollutant</b>	
VOC	
212	TANK 610 INT FLOAT 96.0 MBBL
<b>Emission Limit</b>	
40.400 Tons/Yr	group limit - Sources 204, 212, and 225
<b>Pollutant</b>	
VOC	
225	TANK 638 INT FLOAT 61.13 MBBL
<b>Emission Limit</b>	
40.400 Tons/Yr	group limit - Sources 204, 212, and 225
<b>Pollutant</b>	
VOC	
357	TANK 357 INT FLOAT 182.9 MBBL
<b>Emission Limit</b>	
17.220 Tons/Yr	group limit
<b>Pollutant</b>	
VOC	
358	TANK 358 INT FLOAT 182.9 MBBL
<b>Emission Limit</b>	
17.220 Tons/Yr	group limit
<b>Pollutant</b>	
VOC	
404	NSPS IIII EMERGENCY GENERATOR
<b>Emission Limit</b>	
3.500 gr/KW-Hr	
6.400 gr/KW-Hr	
0.200 gr/KW-Hr	
<b>Pollutant</b>	
CO	
NOX	
TSP	
405	NSPS IIII FIRE PUMPS (4)
<b>Emission Limit</b>	
2.750 Tons/OZNESEAS	aggregate
6.600 Tons/Yr	aggregate
100.000 Lbs/Hr	aggregate
1,000.000 Lbs/Day	aggregate
6.400 gr/KW-Hr	
0.200 gr/KW-Hr	
<b>Pollutant</b>	
NOX	
NOX	
NOX	
NOX	
NOx+NMHC	
TSP	
701	WASTEWATER TREATMENT SYSTEM
<b>Emission Limit</b>	
0.002 Lbs/Hr	
0.010 Tons/Yr	
0.210 Lbs/Hr	
0.900 Tons/Yr	
<b>Pollutant</b>	
Benzene	
Benzene	
VOC	
VOC	



**SECTION G. Emission Restriction Summary.**

**Site Emission Restriction Summary**

Emission Limit	Pollutant
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**SECTION H. Miscellaneous.**

The following is a list of historical data that form the basis for some of the conditions in this permit. These took place when these sources were permitted under Title V Operating Permit, number 23-00001 (through February 2014), which was issued to Sunoco, Inc (R&M). Since these sources were purchased by SPMT, the history has been retained here.

The following activities occur at this facility, which do not require any source specific monitoring, recordkeeping, or reporting requirements. Emissions from these sources still need to be accounted for. Certain requirements may be required under a group condition or may be found in Section B or C of the permit:

- Storage tanks that are not subject to other state of federal regulations, as listed below:

A-10, stores fresh acid, 63,000 gal cap.  
 A-11, stores fresh acid, 63,000 gal cap.  
 A-12, stores spent acid, 63,000 gal cap.  
 A-13, stores spent acid, 63,000 gal cap.  
 A-15, stores fresh acid, 2,000 gal cap.  
 S-10, stores spent caustic, 13,440 gal cap.  
 S-27, stores fresh caustic, 12,390 gal cap.  
 S-33, stores spent caustic, 21,084 gal cap.  
 S-36, stores fresh caustic, 18,900 gal cap.  
 S-39, stores fresh caustic, 3,000 gal cap.  
 S-8, stores fresh caustic, 8,736 gal cap.  
 S-9, stores fresh caustic, 8,736 gal cap.  
 V-34, stores caustic, 17,052 gallon cap.  
 Oily water storage tanks: 827, 829, 831, 832, 883, 891, and 897.  
 Lube tanks: 860, 862, 864, 865, 866, 867, 869, 871, 873, 874, and 875.  
 diesel storage tanks: 877 (252 gallon cap) and 879 (546 gallon cap).  
 Additive storage: 900, 940, and 941.  
 Water storage: T-101 (storm water), W-17 and W-24 (city water), W-26 (process water), W-27 (city water), 842, 843, and 844 (all brine storage).

- Storage tanks with capacities smaller than 40,000 gallons that store organic materials with vapor pressures below 1.5 psia: 1, 53, 127, 128, 129, 887, and 899.

- Tank truck loading of low vapor pressure materials such as lubricating oil & residual oil: includes LSC Lubricants at Second Street, lubricant loading at S-8 alleyway rack, lubricant loading at "B" pump house; and the bunker loading rack on Hewes Ave.

- Railcar loading of low vapor pressure materials such as lubricating oil and residual oil: includes LSC lubricants loading and unloading at East lubricants loading rack, unloading at spur 39 (Sundex area), loading and unloading at the West lubricants rack.

- General maintenance shops including; R & D mechanical shop, "A" group mechanical shop, "B" group mechanical shop, "C" group mechanical shop, & "D" group mechanical shop.

- Marine vessel loading of materials with vapor pressures lower than 4.0 psia.

- The following permits and/or plan approvals have been incorporated into the Title V operating permit:  
 PA-23-0001D, PA-23-0001E, PA-23-0001F, PA-23-0001H, PA-23-0001J, PA-23-0001K, PA-23-0001L, PA-23-0001N, PA-23-0001O, OP-23-0001, and 23-312-217GP.

November, 2003, APS - 346700, AUTH ID - 507623. The Department amended the Title V permit to incorporate the following plan approvals: PA-23-0001P and PA-23-0001R.

November 2004. APS: 346700, AUTH ID: 560048. The Department amended the permit to address agreed upon changes to the permit (as listed below), and to address an administrative amendment application for the toluene loading rack (Source ID 609). The following permits have been added to the TVOP amendment: 23-312-188 and 23-312-203. The following RFD's have been submitted to, and finalized by, the Department since the Title V permit was originally issued: 23-A01-784 and 23-A01-747.

This amendment also addresses the following changes:

- Tanks 132 (Tank 242) and 137 (Tank 137) have been created and added to the permit.

**SECTION H. Miscellaneous.**

- New recordkeeping requirements have been created for sources 040, 045, 046, 060, 075A, 078, 087, 088, 089, and 099 (Boilers and Heaters).
- Source 088 (Boiler 6). Typo corrected for Condition #011.
- Sources 104 and 105. Capacities for the two flares have been added to the permit.
- The typo in the cooling towers (source 111) has been corrected.
- Missing conditions were added for sources 115 (Marine Vessel Loading) and 401 (Benzene Barge Loading) from 40 CFR §§ 63.305(a)(3), (a)(5), and 61.302(f) and (g).
- Source 117 (Cam II Loading Rack). A new source (Source 119) was created and the two gasoline loading racks are now separate sources.
- Source 124 (Tank 169). New conditions were added to the permit.
- Source 171 has been removed from service and from the permit.
- Sources 185 (Tank 597), 205 (Tank 254), and 214 (Tank 615). The conditions for these sources have been clarified.
- Source 221 (Tank 23). New emission limit has been added.
- Source 245 (Tank 245). New conditions were added to the permit.
- Source 340 (Tank 340). This source was added to the permit.
- Source 349 (Tank F-23). Added new conditions from 40 CFR 63, Subpart CC, Group 1, and added to tanks group T001.
- Sources 350 (Tank F3) and 351 (Tank F4). Clarified several conditions for these two tanks.
- Source 401 (Benzene barge loading). Corrected the typos in this source.
- Source 609 (Organic Chemical Production). Added new requirement concerning maximum vapor pressure if 1.5 psia.
- Source 701 (Wastewater treatment facility). Added conditions from 40 CFR, Subpart QQQ for the wastewater system.
- Section G. Removed all tanks from the miscellaneous section of the permit and created a source.
- T001. Added conditions pertaining to external floating roof tanks that were converted to internal floating roof tanks.
- T003. Added the following tanks/sources to this tank group: M01, F01, F02, F05, 367, 368, and 460, and source numbers 205, and 213.
- T004. Removed this tanks group from the permit.
- T006. Clarified the allowable seal types for this source group.
- T007. Added conditions pertaining to external floating roof tanks that were converted to internal floating roof tanks.
- T008. Created SOCM Group 2 and added appropriate tanks.
- Source 214 (Tank 615). Clarified applicable requirements.
- Source 205 (Tank 254). Clarified applicable requirements.
- Source 127. Source removed from service and from permit.
- Source 146 (Tank 344). Clarified tank status.
- The following sources have been added to T001: 147, 148, 150, 155, 156, and 157.
- Sources 160, 161, 163, and 164 have been removed from service and the permit.
- Source 221 (Tank 23). Tank status changed from NSPS Kb to MACT Group 1 (T001).
- Sources 123 (Tank 131) and 130 (Tank 132) were added to the permit.
- Source 121 (tank 139). Tank status changed to MACT Group 1 (T001).
- Source 124 (Tank 169). This tank has an internal floating roof, but is also vented to the vapor recovery unit for the gasoline loading rack. The mapping has been changed, and the tank is now listed in T006.
- Source 368. Clarified that the diesel and gasoline tanks are subject to different requirements.
- Source 170 (Tank 452). Clarified the proper conditions.
- The following tanks have been moved to Source 300: 856, 861, and 863.
- The following storage tanks involved with the lube areas were removed from the facility (2003), and subsequently from this permit: 36, 37, 41, 43, 44, 45, 46, 47, 49, 50, 52, 59, 61, 68, 69, 70, 72, 73, 74, 81, 83, 180, 181, 183, 184, 190, 191, 192, 194, 198, 199, 400, 401, 402, 403, 404, 405, 406, 407, 409, 410, 411, 414, 415, 416, 445, and 448.
- Sources 221 (Tank 23), 172 (Tank 454), 188 (Tank 607), 192 (Tank 611), and 198 (Tank 619) now have a group emission limit, which has been added to the permit.
- Source 349 (Tank F-23): This source is newly added to the permit and is listed under T001.
- The following tanks have been removed from service at the refinery, and have been removed from the permit: 1, 151, 155, 157, 310, 312, 318, 326, 330, 495, 850, 851, and 853.
- Source 300. This source was created to address those previously insignificant tanks that were listed in the miscellaneous section of the permit.
- Source 124 (tank 169). New tank added to the permit.
- Source 218 (tank 166): New conditions were added to the source.

January 2005, APS: 346700, AUTH ID: 577533. The Department amended this permit for cause to address EPA and Department approval of a waiver for the Benzene destruction for Source 115.

November, 2005, APS: 346700, Auth ID: 574790. The Department amended this permit to address the following:

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- Incorporate Plan Approval No. PA-23-0001S.
- Source 103 (Benzene Waste NESHAPs) has been added to the permit, and the relative conditions removed from the site level.
- Source 114 has been removed from the permit.
- Corrected typographical errors to sources 101, 800, 801, 802, and 803.
- Added Small NOx Budget regulations from 25 Pa. Code, Chapter 129, to Sources 101 and 113.

April, 2006. APS: 346700, Auth: 619728. The Department amended this permit for cause to address the omission of several sources (623, 624, and 625) that were not carried over from the previously issued permit, creation of a new source (101A) - a pre-heater for the FCCU, and clarification that a group VOC emission limit (from PA-23-0001J) for 17 tanks does not apply as individual limits.

November 2006. APS: 346700, AUTH: 647940. Minor Permit Amendment to incorporate conditions from the federal consent decree (05cv02866) for source 103 (Benzene NESHAPs in permit number 23-00001) to address the installation of double carbon canisters. Sources 087, 088, 089, and 092 have been permanently shut down and have been removed from the permit. Sources 623, 624, and 625 have been removed as they are physically located in the state of Delaware.

Site condition #032, from the previous permit authorization has been deleted upon request by the permittee. An ERC application was submitted, then withdrawn and Sunoco was never eligible for the ERCs noted in this condition. GAE 12-8-2006.

April 2007. APS: 346700, AUTH: 696829. Renewal of the Title V permit. The following changes are note at this time:

- It is noted here that this facility is subject to a waste water discharge permit, number 1OT-03-02.
- 30 Still (Semi Works). The refinery conducts infrequent loading events involving high octane, alkylate product. These events are infrequent and are considered an insignificant emission source.
- The following tanks have been closed in place, though they have not been removed from the facility: 19, 29, 30, 31, 32, 33, 54, 55, 426, 427, 428, 429, 433, 510, 888, and 889.
- Source 619 (17-2A Reformer) has been added to the operating permit.

January 2008. APS: 346700, AUTH: 702946. Administrative amendment to incorporate plan approval 23-0003W, for low sulfur gasoline, into the Title V permit. Sources added to the operating permit were: 705 and 706. A cooling tower (12-4 HDS Plant) from this plan approval was also added to Source 111.

- Additionally, the Department created some milestones for the FCCU (Source 101), as outlined in a letter dated 10-31-2007, from Dave Brown (DEP) to Steve Martini (Sunoco).

November 2008. APS: 346700, AUTH: 696829. Administrative Amendment and permit renewal.

The facility has no sources subject to CAM. All possibly affected sources at the facility have been exempted from CAM as allowed under 40 CFR § 64.2(b).

- This renewal addresses an administrative amendment to incorporate plan approval, 23-0001X (for the FCCU and propane/propylene splitter) and the installation of an anhydrous ammonia injection system.
- The renewal/amendment corrected numerous typographical errors and clarifications to the tank capacities and throughputs, as well as changes made to Source 111 (Cooling Towers).
- Inclusion of the applicable parts of 40 CFR 63, Subpart GGGGG (Site Remediation MACT), is addressed in Section C of the permit.
- Changes to the conditions in Sources 117, and 119 (Loading Racks).
- Source 500 (Middle Creek Conveyence) has been removed from the operating permit and its conditions have been moved to source 701 (Wastewater Treatment System).
- Created Source, Number 619 (17-2A reformer), subject to 40 CFR 63, Subpart UUU.
- Source 101, FCCU. Removed a NOx emission limit of 0.0149 lbs NOx/barrel of crude oil. This limit was designed for refinery operation with one CO Boiler. After the second CO Boiler was installed, the limit became irrelevant as the flow from the FCCU to the CO Boilers cannot be directed to specific units.
- New federal regulation, 40 CFR 63, Subpart UUU - applies to Sources 101 and 619.
- Netting analysis that was erroneously carried through from plan approval 23-001K as an emission limit has been removed.
- Reduction in a group VOC emission limit from plan approval 23-0001J. Some tanks were previously removed from the TVOP, but the emission limit did not reflect this change.
- Various CEMs conditions throughout the operating permit changed to address new Central Office Guidance.
- Changed the semi-annual deviation and compliance certification reporting criteria.
- Removed an old ERC condition from Source 701 because it does not represent an accurate ERC picture.

August 2009, APS 346700: AUTH: 786098. Two separate Department actions under one Administrative Amendment that addresses the following:



**SECTION H. Miscellaneous.**

- incorporation of Plan Approval, Number 23-0001Z. The new sources are numbered 031, 032, 033, and 034. These boilers are exempted from CAM for NOx due to the use of CEMs for this air contaminant; and
- aggregated the cyclohexane and benzene throughput limitations and emission limit for source 609 to allow for operational flexibility in the production of these two chemicals.

May 2010. APS: 346700, Auth 814674. Minor Operating Permit Modification to address the following:

- Incorporation of applicable requirements from consent decree (5CV-02866) dealing with the NSPS, Subpart J regulation and the Alternative Monitoring Plan (AMP) for two flares (Sources 104 and 105 in permit number 23-00001).
- Changes to VOC emission limits due to heated storage tanks above ambient temperatures for the following source numbers: 172, 188, 192, 198, 221, 173, 193, 194, 203, 204, 205, 206, 212, 213, 214, 215, 223, 224, 225, 190, 197, 216, and 217. Emission limitations to these tanks were originally permitted using EPAs Tanks 3.0 program. The facility now uses the 4.09 version of the Tanks program. This version allowed companies to account for heated tanks. Actual emissions and throughput did not increase, except that now they could be accounted for.
- Clarification to the conditions pertaining to Department Certified CEMS (Sources 031, 032, 033, 034, 045, 060, 099, 101, 101A, 705, 706, and the Fuel Gas Mix Drum). These now refer to conditions located in Section C of the permit.
- Addition of two plant areas (10 and 12 plants) that were missing from the list of affected sources for the MACT LDAR requirements in Source 802.
- Address a change in federal regulations for Source 802. In the October 28, 2009 Federal Register (beginning on 74 FR 55656), it is noted that 40 CFR §§ 63.654 and 655 have been re-designated as 40 CFR §§ 63.655 and 656, respectively.

March 2011. APS: 346700, AUTH: 869507. Administrative amendment to incorporate plan approval, number 23-0001AA into the TVOP. One cooling tower (12-3 Plant) was replaced with a same size/capacity cooling tower. This cooling tower, along with the others in this source (exceptions noted), is subject to the heat exchanger regulations found in 40 CFR 63, Subpart CC, when they become effective on October 28, 2012.

July 2012. APS: 346700, AUTH: 934938. Administrative amendment to address a single source determination for Sunoco's Marcus Hook and Philadelphia refineries.

August 2012. APS: 346700, AUTH: 938378. Administrative amendment to remove permitted sources from the TVOP and to memorialize the creation of ERCs as follows:

NOx - 406.60 tons

SO<sub>2</sub> - 128.78 tons

VOC - 35.19 tons

CO - 564.71 tons

PM<sub>10</sub> - 346.27 tons

PM<sub>2.5</sub> - 346.27 tons

- Additionally, the Department has quantified the following actual emission from the Sunoco, Marcus Hook Refinery:

GHGs (CO<sub>2</sub>e) - 1,277,804.60 tons

Sulfuric Acid Mist ("SO<sub>3</sub>") as that term is used in the consent decree - 56.07 tons

- The above ERCs were generated from the permanent shutdown of the following sources: Source 040 (10-4 Feed Heater), Source 045 (12-3 Desulphurization Heater), Source 060 (15-1 Crude Heater), Source 075 (17-2A H-01, H-02, H-03 Heater), Source 078 (17-2A H-04 Heater), Source 099 (12-3 Crude Heater H-3006), Sources 101 and 101a (10-4 FCC Unit) and including CO Boilers (COB1 and COB3), Source 111 (Cooling towers), Source 705 (LSG HDS Heater), and Source 706 (LSG Stabilizer Heater). These sources shall not be started up without first obtaining a plan approval from the Department.
- Removal of source group conditions pertaining to the group NOx, SO<sub>2</sub>, and PM emission limits for three combustion turbines (owned and operated by Next Era, formerly FPL), four (4) auxiliary boilers, FCCU catalyst regenerator (Part of Source 101), CO Boilers COB1 and COB3, and the combustion turbine, MH50 (owned and operated by Next Era, formerly FPL).
- Creation of a new source (number 139) for the cooling towers which will remain in operation at this site.
- Clarification to the grab sample condition for the four (4) boilers that sampling and analysis only need to be performed when operating on RFG and/or RFG and natural gas.
- Removal of two (2) cooling towers (15-2S and 15-2Poly) that have been sold to Braskem America Inc., permit number 23-00012.

June 2013. APS: 346700, AUTH: 979365. Permit amendment to address the disaggregation of this former Sunoco Marcus Hook refinery and the former Sunoco Philadelphia Refinery (now Philadelphia Energy Solutions) as it pertains to NSR and PSD applicability.

- Additional changes include removal of several conditions that were overlooked at the last amendment when numerous sources were permanently shut down.
- Removal of Source 619 (17-2A reformer) that was shut down and the ERCs were generated in the August 2012 amendment, but

**SECTION H. Miscellaneous.**

was not removed from the TVOP.

- Change of SIC from 2911 to 4226.

- It is noted that the 12-3 Crude Vacuum Heater H-301 was permanently shut down in March 2002. The Department verified that it was decommissioned during its December 2003 inspection.

February 2014. APS: 823642, AUTH: 994392. Initial Title V operating permit issued (due to change of ownership from Sunoco Inc. (R&M) to an owner (Sunoco Partners Marketing & Terminals, L.P.)) that never had a previous operating permit.)

- Site Remediation MACT (40 CFR 73, Subpart GGGGG) has been removed from the permit as the facility is exempted under 40 CFR § 63.7881(b)(3).

- The following Emission Reduction Credits (ERCs) have been generated following the permanent shutdown on December 31, 2011 of the 10 Plant Flare (Source 105) and the 12 Plant Flare (Source 104) to be used for future offsetting or for sale:

- (a) NOx - 38.00 tons;
- (b) SO<sub>2</sub> - 2.54 tons;
- (c) VOC - 78.88 tons;
- (d) CO - 199.78 tons;
- (e) PM - 64.32 tons; and
- (f) PM<sub>2.5</sub> - 64.32 tons.

In accordance with 25 Pa. code § 127.207(f), these ERCs have a 10-year life and will expire on December 30, 2021.

December 2016. APS: 823642, Auth: 1131619. Major modification to incorporate five (5) plan approvals (23-0119, 23-0119A, 23-0119B, 23-0119C, and 23-0119D) into this Title V operating permit to allow the EPA their 45-day comment period.

- Plan approval 23-0001AD is being administratively amended into the TVOP at this time.

- GP2-23-0232 was issued on 1-21-2016 to convert a fixed roof storage tank (source number 206) to an internal floating roof tank.

The following RFDs have been approved by the Department since the TVOP was last issued:

- eRFD number 5944 to install a portable flare for use in venting pipelines for maintenance activities.
- eRFD number 5918 to install additional equipment for supplemental propane off-loading.
- eRFD number 5865 to install four (4) diesel-driven emergency fire pumps and associated fuel tanks
- eRFD number 5597 increased the cooling water capacity of the 15-2B cooling tower (Source 112) to 28,500 gallons/minute (1,710,000 gal/hr) and taking the 15-6 cooling tower out of service.
- eRFD number 5340 permitted a de minimus increase of 2.69 tons of VOC emissions for source ID number 190.
- eRFD number 5236 permitted the installation of two (2) 50,000 barrel spheres to store propane and butane materials (C3+). These spheres are not subject to any specific regulations as the stored materials are maintained at greater than the applicability thresholds.

The following sources have been removed from service: 032 (Aux Boiler #2, 131 (Tank 241), 154 (Tank 386); 155 (Tank 387); 156 (Tank 388); 157 (Tank 389), 170 (Tank 452), 176 (Tank 523); 181 (Tank 593); 183 (Tank 595); 185 (Tank 597); 193 (Tank 612), 194 (Tank 613); 197 (Tank 618); 198 (Tank 619); 203 (Tank 12), 210 (Tank 443), 211 (Tank 467), 213 (tank 614); 214 (Tank 615); 215 (Tank 616); 216 (Tank 617); 217 (Tank 620); 880 (Tank 880); 172 (Tank 454); 173 (Tank 455); 223 (Tank 634); 224 (tank 635), and 301 (Tank 491).

- Source 887 (Storage tank 887) ownership was transferred to Evergreen on 2-24-2014.

- Plan Approvals Incorporated by Reference -- As a result of EPA responses to the Sierra Club petitions on the Homer City and Mansfield Title V Operating Permits, the Department has incorporated certain applicable terms and conditions from Plan Approval Numbers 23-0119, 23-0119A, 23-0119B, 23-0119C, and 23-0119D under this major modification of a Title V operating Permit.

- Three (3) existing spheres storing pentane: HS-16 (40,000 bbl), Sphere 3 (40,500 bbl) and Sphere 4 (40,500 bbl) were placed into service.

January 2017. APS: 823642, Auth Id: 1157332.

Major modification to address RACT II requirements found in 25 Pa. Code §§ 129.96-100. Affected sources are as follows: 031, 033, 034, 113, 115, 116, 139, 367, 402, and 801.

January 2017. APS: 823642, Auth: 1164901.

Administrative amendment to incorporate four plan approvals (23-0119A, 23-0119B, 23-0119C, and 23-0119F) into the Title V operating permit.

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January 2018. APS: 832642, Auth: 1208580.

- Administrative amendment to incorporate two plan approvals (23-0119 and 23-0119G) and one general plan approval/permit, Number GP2-23-0232.
- Change to the particulate matter monitoring for the new cooling towers (Source No. 112) to allow the use of conductivity readings or total dissolved solid sampling.
- Created Source 403 (NESHAP, Subpart ZZZZ Fire Pumps (2)). Two existing diesel-driven fire pumps installed circa 1996.
- Created Source 404 (NSPS, Subpart IIII Generator (1)), an existing source that was never in the TVOP and installed in 1999.
- Created Source 405 (NSPS, Subpart IIII Fire pumps (4)), which were installed under RFD Number 5865.

September 2019. Minor Operating Permit Modification ( APS: 823642, AUTH: 1284511) to change the aggregate long-term CO emission limit on the three Auxiliary Boilers (Sources 031, 033, and 034), and Administrative Amendment (APS: 823642, AUTH: 1258703) to incorporate Plan Approval Number 23-0119H into the TVOP.

The following RFDs have been approved by the Department since the last time they were noted in December 2016:

- eRFD Number 6484. Methanol removal that could to be added to the pipeline product to keep it from freezing during the winter months;
- eRFD Number 6969. Temporary portable flare required for US Coast Guard testing of the Unloading Arms;
- eRFD Number 6991. Revised application to RFD number 6969;
- eRFD Number 7548. West Warm Flare connection list from Braskem; and
- eRFD Number 7944. Temporary portable flare related to activities associated with maintenance of the deethanizer.

March 2020. APS: 823642, Auth: 1279062. Permit Renewal. No new sources and no new applicable regulations.

- The following tanks have been removed from service: Source 135 (Tank 249), Source 175 (Tank 522), Source 184 (Tank 596), Source 246 (Tank 528A), Source 137 (Tank 137), Source 147 (Tank 351), Source 158 (Tank 390), Source 186 (Tank 598), Source 221 (Tank 23), Source 347, (Tank 347), Source 348 (Tank 348), Source 606 (Tank 244), Source 607 (Tank 243), Source 340, Tank 340), and Source 186 (Tank 598).
- Cooling tower 15-6 has been permanently removed from service.
- "Cryogenic" tank names changed to "Refrigerated" to more closely match those definition of those words.
- Corrected several typographical errors and deleted duplicative conditions.
- Authorized the Rail Rack found in Source 103 to load butane and propane into railcars.
- Group conditions for Source IDs 031 and 033–034 (auxiliary boilers) listed under source group in Section E instead of under the respective Source IDs in Section D.

August 2020. APS: 823642, Auth: 1311220.

Minor Operating Permit Modification. No new sources and no new applicable regulations.

- Source ID 106 (deethanizer) changed to Source ID 106A (demethanizer) to reflect physical changes to fractionation tower and change in material/feedstock processed (i.e., from ethane/propane mix to ethane with some propane and methane).

December 2023 (est.). APS: 823642, Auth: 1421251.

- Significant Operating Permit Modification to address RACT III requirements found in 25 Pa. Code §§ 129.111-129.115.
- Plan Approvals Incorporated by Reference: As a result of EPA responses to the Sierra Club petitions on the Homer City and Mansfield Title V Operating Permits, the Department has incorporated certain applicable terms and conditions from Plan Approval Nos. 23-0119E (revised) and 23-0119J under this significant modification of a Title V Operating Permit.
- Additional sources added to the Title V Operating Permit (subject to requirements under Source ID 103):
  - Source IDs 090–091 and 092 (two depropanizers and a debutanizer, respectively, authorized under (original) Plan Approval No. 23-0119E; inadvertently omitted from the Title V Operating Permit).
  - Source ID 142 (two demethanizers authorized under Plan Approval No. 23-0119J, but inadvertently omitted).
- Language added to the requirement to conduct an annual performance tune-up of the auxiliary boilers, as indicated in Condition # 022, Section E (under Source Group 0), of the Title V Operating Permit, to clarify that they be performed "no more than 13 months after the date of the previous tune-up."
- Permit map added for marine vessel loading (refrigerated) to reflect the fact that the piping components of the marine vapor recovery system are sources of fugitive VOC emissions.



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

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