City of Philadelphia
Department of Public Health
Air Management Services

Title V/State Operating Permit No. OP20-000052

Philadelphia Energy Solutions Refining and Marketing LLC/ Former Refinery

NorthStar Contracting Group, Inc.

3144 Passyunk Avenue
Philadelphia, PA 19145

Issuance Date: October 7, 2022
Effective Date: October 7, 2022
Expiration Date: October 7, 2027

City of Philadelphia
Department of Public Health
Air Management Services

Effective Date: October 7, 2022

Expiration Date: October 7, 2027

Replaces: 20-000051

REPLACES PERMIT NO. V06-016 AND OP20-000051

SECTION A. SOURCE IDENTIFICATION

In accordance with the provisions of the Pennsylvania Code Title 25, Philadelphia Code Title III, and Air Management Regulation (AMR) XIII, the Permittee (Permittee) identified below is authorized by Philadelphia Air Management Services (AMS) to operate the air emission source(s) listed in Table A-1. 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.

Facility:	Philadelphia Energy Solutions Refining and Marketing LLC (Former Refinery)
Operator:	Northstar Contracting Group, Inc.
Owner:	Philadelphia Energy Solutions Refining and Marketing LLC 3144 Passyunk Avenue, Philadelphia, PA 19145
Location:	
Mailing Address:	Same
SIC Code(s):	1795
Plant ID:	01501
Facility Contact:	Robert J. Armstrong
Phone:	(440) 228-1524 rarmstrong@northstar.com
Permit Contact:	Robert J. Armstrong
Phone:	(440) 228-1524
Responsible Official:	Gary Bowman
Title:	President

10/7/22

Edward Wiener, Chief of Source Registration — Date

TABLE A1-FACILITY INVENTORY LIST

ID Group	Source Name	Capacity	Fuel/Material^	Construction Date
Group 08 – Equipment VOC Leak Components Not Subject to NSPS or NESHAP				
AMR V Section XIII A.]				
Group 13C – Internal Floating Roof Tanks Subject to 40 CFR 60, Subpart Kb				
P-135 (GP)	T-767, IFR	>40M Gal	Recovered Oil	1992
P-159 (GP)	T-1086	>40M Gal	Spent caustic	1954
P-160 (GP)	T-1087	>40M Gal	Spent caustic	1954
P-174 (GP)	T-1007	>40M Gal	Oily Wastewater	1990
P-012 (GP)	T-272, IFR	>40M Gal	Recovered Oil	1971
Group 14C – External Floating Roof Tanks Subject to 40 CFR 60 Subpart Kb Requirements (or equivalent)				
P-006 (GP)	T-228, EFR		Stormwater/Process Water	1991
P-155 (GP)	T-844	>40M Gal	#2 sep. water	1976
P-162 (GP)	T-1136	>40M Gal	#4 sep. water	1976
P-521 (PB)	Tank #117, EFR (also subject to NSPS Subpart Ka – less stringent)	>40M Gal	Recovered Oil	1981
P-546 (PB)	Tank #191, EFR	>40M Gal	Recovered Oil	1958
P-579 (PB)	Tank #826, EFR	>40M Gal	Crude Oil	2002
P-587 (PB)	Tank #840, EFR	>40M Gal	Crude Oil	1953
P-588 (PB)	Tank #841, EFR	>40M Gal	Crude Oil	1953
P-590 (PB)	Tank #843, EFR	>40M Gal	Crude Oil	1954
P-601 (PB)	Tank #883, EFR	>40M Gal	Crude Oil	1961

P-624 (PB)	Tank # 7300, EFR	NA	Stormwater/Process Water	1992
P-627 (PB)	Tank #7308, EFR	NA	Stormwater/Process Water	1972

Group 15A – Petroleum Liquids Storage Tanks

P-032 (GP)	T-273, Fixed Roof	>40M Gal	Resid	1941
P-036 (GP)	T-282, Fixed Roof	>40M Gal	Gas Oil or Cat Charge Stock	1947
P-037 (GP)	T-284, Fixed Roof	>40M Gal	Gas Oil or Cat Charge Stock	1948
P-039 (GP)	T-494, Fixed Roof	>40M Gal	Main Fract Bottoms	1965
P-144 (GP)	T-219	>40M Gal	Light Cycle Oil	1925
P-147 (GP)	T-227	>40M Gal	Main Fract Bottoms	1954
P-153 (GP)	T-794	>40M Gal	(Plant TEG) – tetra ethylene glycol	1990
P-154 (GP)	T-796	16.8M Gal	Fresh TEG	1962
P-175 (GP)	T-3000	500 gal	Lube Oil	NA
P-176 (GP)	T-3001	500 gal	Lube Oil	
P-177 (GP)	T-3002	1000 gal	Lube Oil	
P-178 (GP)	T-3004	1000 gal	Lube Oil	
P-179 (GP)	T-3005	500 gal	Lube Oil	
P-529 (PB)	Tank # 144, Cone Roof	>40M Gal	Main Fract Bottoms	1994
P-530 (PB)	Tank # 145, Cone Roof	>40M Gal	Main Fract Bottoms	1994
P-534 (PB)	Tank # 151, EFR	>40M Gal	Gas Oil	1979
P-582 (PB)	Tank #833, IFR	>40M Gal	Gas Oil	1950

Group 22 – Degreasing Vats

P-108 (GP)	Degreasing Vats		Degreaser	NA
(GP)	Garage – Model E3000	10 gal	SK Premium Solvent, Petroleum Distillates, 100 % VOC, 02 mmHg, MSDS 82658	
(GP)	Bundle Pad – 22 x 6 x 4 Bundle Cleaner	2960 gal	Diesel Fuel	

(GP)	Bundle Pad – 22 x 6 x 4 Bundle Cleaner	4578 gal	Diesel Fuel	

Group 25A –Wastewater

P-131 (GP)	4A API Separator – WWT			
P-132 (GP)	2B API Separator – WWT			
P-639 (PB)	API Separators A&B – Bio Plant			
P-114 (GP)	Wastewater –			
P-640 (PB)	Dissolved Nitrogen Floatation Unit A&B – Bio Plant			
P-641 (PB)	Bio Plant Sewer System – Refinery			
P-667 (PB)	Wastewater Sources			
P-142 (GP)	T-1142, T-1143	Oxidation Tanks at WWTP	Wastewater	NA

Group 27 – Emergency Generator and Fire Pump

EM-001	Caterpillar (model 3412DITTA) Emergency Generator	896 HP	Diesel	2004
FP-010	24PEN4 Fire Pump #4	211 Hp	Diesel	2011
FP-011	24P1 Fire Engine (Haenn's Wharf)	210 Hp	Diesel	2012
FP-012	Fire Pump (1st and Wharf #8)	475 bhp	ULSD	

FP-013	24P2 North Fire Pump (Haenn's Wharf)	210 bhp	ULSD	
FP-014	24P3 South Fire Pump (Short Pier)	350	ULSD	
FP-015	24PEN5 Fire Pump (North Yard)	250 bhp	ULSD	
FP-016	24PEN6 Fire Pump (North Yard Wharf)	250 bhp	ULSD	
FP-019	Belmont Firehouse Williams Pump (fire pump) affixed to a trailer	750 bhp	ULSD	

Group 28 – Internal Combustion Engines

IC-002	53P-800C pump	200 bhp	Diesel	
IC-005	FE-5(2) Flood Control Pump Driver	28 bhp	Diesel	
IC-006	Godwin 894572/4 Flood Control Pump Driver	115 bhp	Diesel	
IC-007	B-2623 Flood Control Pump Driver	102 bhp	Diesel	
IC-008	Engine Set 1290 (northside of 8 Sep)	214 bhp	Diesel	
IC-009	Flood Control RICE For flood control at GP 2nd and J	147 HP	Diesel	
IC-010	Flood Control RICE For flood control at Girard point 2-separtor	275 HP	Diesel	
rIC-001	Rental back-up pump (2nd &1st, 3BH sump)	≤ 14 bh	Diesel	
rIC-006	Rental back-up air compressor (small	≤ 101 bhp	Diesel	

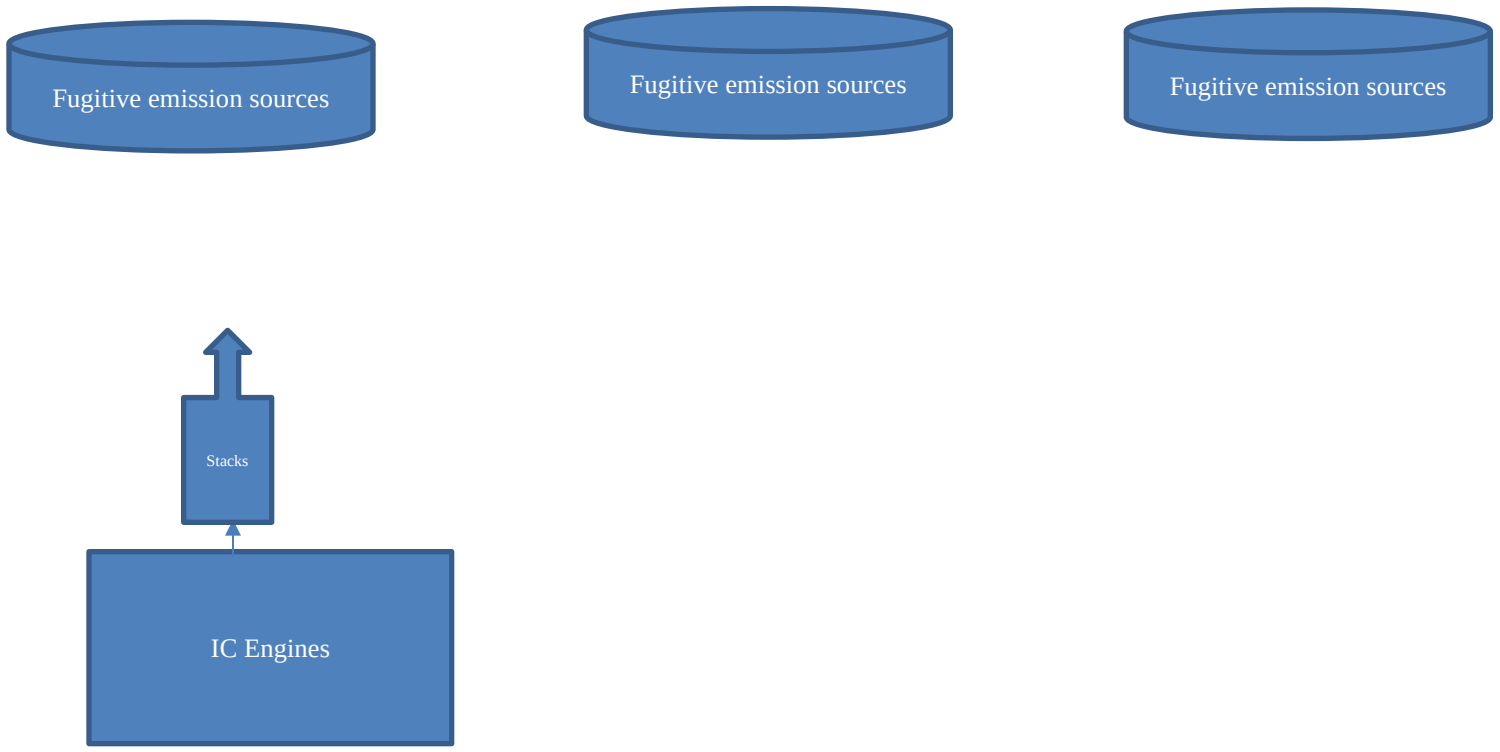
	maintenance air compressors)			
rIC-007	Rental back-up pump (WW pump 270 Tk to WWTP)	≤ 144 bhp	Diesel	

Group 29 - Stacks

S-131 (GP)	Used by P-131, 4A API Separator Unit – WWT			
S-132 (GP)	Used by P-132, 2B API Separator Unit – WWT			
S-144 (GP)	Used by P-108 Degreasing Vats			
S-150 (GP)	Used by P-114,			
S-205 (GP)	Used by P-006, T-228			
S-211 (GP)	Used by P-012, T-272			
S-231 (GP)	Used by P-032, T-273			
S-235 (GP)	Used by P-036, T-282			
S-236 (GP)	Used by P-037, T-284			
S-238 (GP)	Used by P-039, T-494			
S-246 (GP)	Used by P-135, T-767			
S-253 (GP)	Used by P-142, Two oxidation tanks (101 and 102)			
S-856 (PB)	Used by P-521, Tank #117			
S-864 (PB)	Used by P-529, Tank #144			
S-865 (PB)	Used by P-530, Tank #145			
S-869 (PB)	Used by P-534, Tank #151			
S-881 (PB)	Used by P-546, Tank #191			
S-914 (PB)	Used by P-579, Tank #826			
S-917 (PB)	Used by P-582, Tank #833			
S-922 (PB)	Used by P-587, Tank #840			
S-923 (PB)	Used by P-588, Tank #841			

S-924 (PB)	Used by P-590, Tank #843			
S-959 (PB)	Used by P-624, Tank #7300 – Bio Plant			
S-962 (PB)	Used by P-627, Tank #7308 – Bio Plant			
S-973 (PB)	Used by P-639, Bio Plant DNF Unit A&B			
S-974 (PB)	Used by P-640, Bio Plant Sewer System			
S-975 (PB)	Used by P-641, Bio Plant Sewer System			
S-990 (PB)	Used by P-667,			
S3412 (PB)	Used by EM-001			

PROCESS FLOW DIAGRAM



FACILITY INVENTORY INDEX

P-006 (GP)	T-228, EFR	Group 14C
P-012 (GP)	T-272, IFR	Group 13C
P-032 (GP)	T-273, Fixed Roof	Group 15A
P-036 (GP)	T-282, Fixed Roof	Group 15A
P-037 (GP)	T-284, Fixed Roof	Group 15A
P-039 (GP)	T-494, Fixed Roof	Group 15A
P-108 (GP)	Degreasing Vats	Group 22
P-114 (GP)	Wastewater –	Group 25A
P-131 (GP)	4A API Separator – WWT	Group 25A
P-132 (GP)	2B API Separator – WWT	Group 25A
P-135 (GP)	T-767, IFR	Group 13C
P-142 (GP)	T-1142, T-1143	Group 25A
P-144 (GP)	T-219	Group 15A
P-147 (GP)	T-227	Group 15A
P-153 (GP)	T-794	Group 15A
P-154 (GP)	T-796	Group 15A
P-155 (GP)	T-844	Group 14C
P-159 (GP)	T-1086	Group 13C
P-160 (GP)	T-1087	Group 13C
P-162 (GP)	T-1136	Group 14C
P-174 (GP)	T-1007	Group 13C
P-175 (GP)	T-3000	Group 15A
P-176 (GP)	T-3001	Group 15A
P-177 (GP)	T-3002	Group 15A
P-178 (GP)	T-3004	Group 15A
P-179 (GP)	T-3005	Group 15A
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P-530 (PB)	Tank # 145, Cone Roof	Group 15A
P-534 (PB)	Tank # 151, EFR	Group 15A
P-546 (PB)	Tank #191, EFR	Group 14C
P-579 (PB)	Tank #826, EFR	Group 14C
P-582 (PB)	Tank #833, IFR	Group 15A
P-587 (PB)	Tank #840, EFR	Group 14C
P-588 (PB)	Tank #841, EFR	Group 14C
P-590 (PB)	Tank #843, EFR	Group 14C
P-601 (PB)	Tank #883, EFR	Group 14C
P-624 (PB)	Tank # 7300, EFR	Group 14C
P-627 (PB)	Tank #7308, EFR	Group 14C

P-639 (PB)	API Separators A&B – Bio Plant	Group 25A
P-640 (PB)	Dissolved Nitrogen Floatation Unit A&B – Bio Plant	Group 25A
P-641 (PB)	Bio Plant Sewer System – Refinery	Group 25A
P-667 (PB)	Wastewater Sources	Group 25A

SECTION B. GENERAL REQUIREMENTS

1. Definitions

[25 Pa Code §121.1]

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

2. Property Rights

[25 Pa Code §127.512(c)(4)]

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

3. Permit Expiration

[25 Pa Code §127.446(a) and (c)]

This operating permit is issued for a fixed term of 5 years and shall expire on the date specified on the front page 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 §127, Subchapter I and AMS 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.

4. Permit Renewal

[25 Pa Code §§127.412, 127.413, 127.414, 127.446(e) & 127.503]

(a) The Permittee shall submit a complete application for renewal of the Title V permit at least 6 months and not more than 18 months before the expiration date of this permit. The Permittee shall submit to AMS a timely and complete application.

(b) The application for permit renewal shall include the current permit number, the appropriate 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 application for renewal of the Title V permit shall include submission of supplemental compliance review forms in accordance with 25 Pa Code §127.412(b) or (j).

(c) 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 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.

5. Transfer of Ownership or Operation

[25 Pa Code §§127.450(a)(4), 127.464(a) & AMR I Sec. II.A.5.c.]

(a) 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 AMS.

(b) 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) AMS determines that no other change in the permit is necessary;

(2) A written agreement has been submitted to AMS 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 AMS and the permit transfer has been approved by AMS.

6. Inspection and Entry

[25 Pa Code §127.513, 35 P.S. §4008, §114 of the Clean Air Act & Phila. Code §3-304]

(a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the Permittee shall allow AMS or authorized representatives of AMS 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, any 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, any substances or parameters for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Pennsylvania Air Pollution Control Act, the Philadelphia Air Management Code, or the regulations promulgated thereunder.

(b) Pursuant to 35 P.S. §4008, no person shall hinder, obstruct, prevent, or interfere with AMS or its personnel in the performance of any duty authorized under the Pennsylvania Air Pollution Control Act, Philadelphia Air Management Code, or regulations adopted thereunder.

(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.

7. Compliance Requirements

[25 Pa Code §§127.25, 127.444, 127.512(c)(1) & AMR I Sec. II.A.5.b.]

(a) The Permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act, the Pennsylvania Air

Pollution Control Act, and/or the Philadelphia Air Management Code and is grounds for one or more of the following:

(1) Enforcement action

(2) Permit termination, revocation and reissuance or modification

(3) Denial of permit renewal application.

(b) A person may not cause or permit the operation of a source subject to 25 Pa Code Article III or the Philadelphia Air Management Code, unless the source(s) and air cleaning devices identified in the application for the plan approval/ installation permit and operating permit and the plan approval/ installation permit issued to the source are operated and maintained in accordance with specifications in the application and conditions in the plan approval/ installation permit and operating permit issued by AMS. A person may not cause or permit the operation of an air contamination source subject to 25 Pa Code Chapter 127 or the Philadelphia Air Management Code 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/ installation permits and operating permits are the physical configurations and engineering design details which AMS determines are essential for the Permittee's compliance with the applicable requirements in this Title V permit.

(d) The Permittee shall not change any installation such that the registered information concerning it is no longer accurate without first notifying AMS.

8. Need to Halt or Reduce Activity Not A Defense

[25 Pa Code §127.512(c)(2)]

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.

9. Duty to Provide Information

[25 Pa Code §127.411(d), §127.512(c)(5) & AMR I Sec. II.B. and C.]

(a) The Permittee shall furnish to AMS, within a reasonable time, information that AMS 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 AMS 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 along with any claim of confidentiality.

10. Reopening and Revising The Title V Permit for Cause

[25 Pa Code §§127.463, 127.512(c)(3), & 127.542]

(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, 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 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, Pennsylvania Air Pollution Control Act, or Philadelphia Air Management Code become applicable to a Title V facility with a remaining permit term of 3 or more years prior to the expiration date of this permit. AMS 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. Excess emissions offset plans for an affected source shall be incorporated into the permit upon approval by the Administrator of EPA.

(3) AMS 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) AMS 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.

11. Reopening a Title V Permit for Cause by EPA

[25 Pa Code §127.543]

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.

12. Significant Operating Permit Modifications

[25 Pa Code §127.541]

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.

13. Minor Operating Permit Modifications

[25 Pa Code §§121.1, 127.462 & AMR I Sec. II.A.]

(a) The Permittee may make minor permit modifications (as defined in 25 Pa Code §121.1) in accordance with 25 Pa Code §127.462.

(b) 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 an operational flexibility change authorized by 25 Pa Code §127.462.

14. Administrative Operating Permit Modifications

[25 Pa Code §127.450]

(a) The Permittee may request administrative operating permit amendments, as defined in §127.450(a), according to the procedures specified in §127.450. Administrative amendments are not authorized for any amendment precluded by the Clean Air Act or the regulations thereunder from being processed as an administrative amendment.

(b) Unless precluded by the Clean Air Act or the regulations thereunder, AMS will, upon taking final action granting a request for an administrative permit amendment in accordance with §127.450(c), allow coverage by the permit shield in 25 Pa Code §127.516 (relating to permit shield) for administrative permit amendments which meet the relevant requirements of 25 Pa Code Article III.

15. Severability Clause

[25 Pa Code §127.512(b) & AMR I Sec. VIII]

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board (Department of Licenses and Inspections Review Board until the Environmental Hearing Board is approved) or a court of competent jurisdiction to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

16. Fee Payment

[25 Pa Code §§127.704, 127.705 & 127.707]

(a) The Permittee shall pay fees to AMS in accordance with the applicable fee schedules in 25 Pa Code Chapter 127 Subchapter I (relating to plan approval and operating permit fees).

(b) Emission fees. The Permittee shall, on or before September 1 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 Volatile Organic Compound, 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. Payment shall be made to AMS.

(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 per centum (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 administration fee according to the fee schedule established in 25 Pa Code §127.704(c) if the facility, identified in subparagraph (iv) of the definition of the term “Title V facility” in 25 Pa Code §121.1, is subject to Title V after the EPA Administrator completes rulemaking requiring regulation of those sources under Title V of the Clean Air Act.

(f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. §4006.3(f).

17. Authorization for De Minimis Emissions Increases

[25 Pa Code §§127.14(b), 127.449 & Phila. Code §3-306]

(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, Phila. Code §3-306 without the need for an installation permit, or prior issuance of a permit modification. The Permittee shall provide AMS with 7 days prior written notice before commencing any de minimis emission increase that would result from either: (1) a physical change of minor significance under 127.14.(c)(1) and Phila. Code §3-306; 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 increase.

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

AMS may disapprove or condition the de minimis emission increase 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 the following de minimis emission increases (expressed in tons per year), up to the following amounts without the need for a plan approval or installation permit 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_x from a single source during the term of the permit and five tons of NO_x at the facility during the term of the permit.

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

(4) Six-tenths of a ton of PM-10 from a single source during the term of the permit and three tons of PM-10 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 five 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) The Permittee is authorized to install the following minor sources without the need for a plan approval or installation permit:

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

(2) Combustion units rated at 250,000 or less Btu per hour of net load rating.

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

(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 the pollutant regulated under Section 112 of the Clean Air Act except as authorized in subparagraph (b)(4) & (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 Management Code, the Air Pollution Control Act, the Clean Air Act, or the regulations thereunder.

(4) Changes which are modifications under the provision of Title 1 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) applies to de minimis emission increases and the installation of minor sources made pursuant to this permit condition.

(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, 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. A City of Philadelphia Installation Permit is required if the activities are subject to the Philadelphia Air Management Code. In accordance with 25 Pa Code §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.

18. Reactivation of Sources

[25 Pa Code §§127.11, 127.11a, 127.215 & AMR I Sec. II.A.5.]

(a) The Permittee shall notify AMS of any source that is out of operation for more than a year in its semiannual monitoring report.

(b) 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 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.

(c) A source which has been out of operation or production for more than five 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).

19. Circumvention

[25 Pa Code §§121.9, 127.216 & AMR I Sec. VII]

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

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

20. Operational Flexibility

[25 Pa Code §127.3 & AMR I Sec. XII]

(a) The Permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa Code Chapter 127 and in Phila. Code §3-306 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Pennsylvania Air Pollution Control Act:

(1) Section 127.14 and Phila. Code §3-306, whichever is more stringent (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)

(b) Unless precluded by the Clean Air Act or the regulations adopted thereunder, the permit shield authorized under 25 Pa Code §127.516 shall extend to operational flexibility changes made at this Title V facility pursuant to this permit condition and other applicable operational flexibility terms and conditions of this permit.

21. Approved Economic Incentives and Emission Trading Programs

[25 Pa Code §127.512(e)]

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.

22. Permit Shield

[25 Pa Code §§127.516, 127.450(d), 127.449(f) & 127.462(g)]

(a) The Permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements 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) AMS specifically identifies in the permit other requirements that are not applicable to the permitted facility.

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

(1) The provision 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 AMS on administrative amendments, minor and significant permit modifications, and operational flexibility changes shall be covered by the permit shield provided such amendments, modifications and changes meet the relevant requirements of 25 Pa Code Article III.

(d) The permit shield authorized under §127.516 is in effect for the permit terms and conditions in this Title V permit, including administrative operating permit amendments and minor operating permit modifications.

SECTION C. FACILITY WIDE REQUIREMENTS

1. Fugitive Emissions

[25 Pa Code §§123.1, 123.2, & AMR II Sec. VIII]

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

(1) Construction, or demolition of buildings or structures.

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

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

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Sources and classes of sources other than those identified in paragraphs 1(a)(1)-1(a)(5) for which the Permittee has obtained a determination from AMS that fugitive emissions from the source, after appropriate control, meet the following requirements:

(i) The emissions are of minor significance with respect to causing air pollution.

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

(b) The Permittee may not permit fugitive particulate matter from a source specified in paragraphs 1(a)(1)-1(a)(6) if the emissions are visible at the point the emissions pass outside the facility's property.

(c) The Permittee shall take all reasonable actions to prevent particulate matter emitted from a source identified in paragraphs 1(a)(1)-1(a)(6) from becoming airborne. These actions include, but are not limited to, the following:

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

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

(3) Paving and maintenance of roadways.

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

2. Odor Emissions Limitations

[25 Pa Code §123.31(b) & AMR V Sec. XX]

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

3. Visible Emissions Limitations

[25 Pa Code §§123.41, 123.42, 123.43, and AMR II Sec. IV]

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

(1) Equal to or greater than 20% for a period or periods aggregating more than 3 minutes in any one hour.

(2) Equal to or greater than 60% at any time.

(b) These emission limitations do not apply when: [25 Pa Code §123.42]

(1) The presence of uncombined water is the only reason for failure of the emission to meet the limitations.

(2) When the emission results from sources specified in 25 Pa Code §123.1(a)(1)-(9).

(3) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.

(c) The visible emissions may be measured using either of the following: [25 Pa Code §123.43]

(1) A device approved by AMS and maintained to provide accurate opacity measurements.

(2) Observers, trained and qualified to measure plume opacity with the naked eye or with the aid of devices approved by AMS.

(d) The emission limitations of 20% and 60% as stated above do not apply to facilities which have received a stricter emission limitation in a plan approval or operating permit as part of AMS's Best Available Technology determination, if that limitation is stated elsewhere in this permit.

4. Noise and Vibrations

[Philadelphia Code Chapter 10-400 (Noise and Excessive Vibration)]**

(a) The Permittee shall not create or cause, or permit the creation of sound, sound originating from a property used for a non-residential purpose shall not exceed the following:

(1) 5 decibels above background level measured at the property boundary of the nearest occupied residential property; or

(2) 10 decibels above background level measured at the property boundary of the nearest occupied non-residential property.

(b) Vibration levels shall not exceed 0.15 inches per second beyond any source property boundary.

5. Fuel Usage

[AMR III Sec. I & III. Compliance with the requirement specified in this streamlined permit condition assures compliance with the provisions specified in 25 Pa Code §123.22(e)]

(a) Unless specified in Section D, the Permittee shall use only natural gas, propane, or commercial fuel oil. The maximum sulfur content would be 0.2%, 0.3% and 0.5 % for number 2, 4, and 5 or 6 fuel oil, respectively.

(1) Beginning July 1, 2016, the maximum sulfur content of fuel oil, expressed as parts per million (ppm) by weight or percentage by weight, shall be: [25 Pa Code §123.22(e)(2)(i)]

Grades Commercial Fuel Oil (Consistent with ASTM 396)		
No. 2 and lighter oil	500 ppm	(0.05%)
No. 4 oil	2,500 ppm	(0.25%)
No. 5, No. 6 and heavier oil	5,000 ppm	(0.5%)

(2) Commercial fuel oil that was stored in this Commonwealth by the ultimate consumer prior to July 1, 2016, which met the applicable maximum allowable sulfur content for commercial fuel oil through June 30, 2016, in subparagraph (i) at the time it was stored, may be used by the ultimate consumer in this Commonwealth on and after July 1, 2016. [25 Pa Code §123.22(e)(2)(ii)]

(b) When it appears that the delivery of low sulfur fuel is, or is about to be, interrupted because of unavailability, accident, or other emergency conditions, AMS may authorize the use of an alternative fuel supply, involving the least adverse impact on air quality, for a period not to exceed 30 days. Longer periods of time of 120 days each may be authorized by AMS only after review and recommendation made by the Air Pollution Control Board for each extended period of time. Factors to be considered shall include the availability of alternate complying fuels, the availability of sulfur dioxide stack gas removal equipment, and the anticipated effect on air quality in the neighborhood, area and region. The Air Pollution Control Board, after a hearing, shall have the right to adjust, revoke, rescind, and make changes or modifications of any authorizations if there shall occur such change in the condition of availability of low sulfur fuel or the factors set forth in this subsection. [AMR III, Sec. III.C.]

6. Open Burning

[AMR II Sec. II]

The Permittee shall not permit the ignition or continuation of open burning of any materials.

7. Air Pollution Episode

[25 Pa Code Chapter 137 & AMR IV Sec. V, VI & VII]

The Permittee shall reduce its emission according to the approved curtailment plan, when the Philadelphia Health Commissioner or his designee declares an air pollution episode.

8. Modification of 112 Pollutants Which Are VOCs and PM-10

[25 Pa Code §127.512(j)]

Except when precluded by the Clean Air Act, the Permittee may modify the mixture of pollutants regulated under Section 112 of the Clean Air Act (42 U.S.C.A. §7412) which are VOCs or PM-10 if:

(a) The emission limitations of the permit are not violated, and

(b) The Permittee keeps a log which identifies the mixture of pollutants regulated under Section 112 and reports such changes to AMS in the next semiannual report.

9. Risk Management

[25 Pa Code §§127.441(d), 127.512(i) and 40 CFR Part 68]

(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 and 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) When a regulated substance listed in 40 CFR §68.130 is present in a process at the Title V facility in more than the listed threshold quantity, the Permittee shall prepare and implement a risk management plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act.

(1) The Permittee shall submit the first RMP to AMS and EPA no later than the latest of the following:

(i) June 21, 1999;

(ii) Three years after the date on which a regulated toxic substance is first listed under §68.130; or

(iii) 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 AMS 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 and guidance developed by EPA, including a checklist addressing the required elements of a complete RMP.

(c) As used in this permit condition, and 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.

(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 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 AMS 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 certify 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).

10. Stratospheric Ozone Protection

[25 Pa Code §127.441(b) and 40 CFR Part 82]

The Permittee shall satisfy applicable requirements of 40 CFR Part 82, Subpart F, Recycling and Emissions Reduction, during the service, maintenance, repair and disposal of equipment containing Class I and Class II refrigerants regulated under such regulations.

11. Sampling, Testing and Monitoring Procedures

[25 Pa Code §§127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the Clean Air Act & AMR I Sec. III]

(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) Unless alternative methodology is required by the Clean Air Act (including §§114(a)(3) or 504(b)) and regulations adopted thereunder, the sampling, testing and monitoring required by or used by the Permittee to demonstrate compliance with any applicable regulation or permit condition shall be conducted in accordance with the requirements of 25 Pa Code Chapter 139.

12. Recordkeeping Requirements

[25 Pa Code §127.511 & Chapter 135]

(a) The Permittee shall maintain and make available, upon request by AMS, the following records of monitored information:

(1) The date, place (as defined in the permit) and time of sampling or measurements.

(2) The dates the analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of 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 calibration

and maintenance records and original strip-chart or electronic recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

(c) The Permittee shall maintain and make available to AMS 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 AMS 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.

13. Reporting Requirements

[25 Pa Code §§127.411(d), 127.442, 127.463(e) 127.511(c), & AMR I Sec. II]

(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, on or before the following January 31 or July 31, whichever date is earlier, and every six months thereafter, covering the immediately preceding six month periods of July 1 - December 31 and January 1 - June 30 respectively. 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 AMS for the source. The required reports shall be certified by a responsible official.

(c) Any records, reports or information obtained by AMS or referred to in a public hearing shall be made available to the public by AMS except for such records, reports or information for which the Permittee has shown cause that the documents could be considered confidential and protected from disclosure to the public under Section 4013.2 of the Pennsylvania Air Pollution Control Act and consistent with Section 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.

14. Philadelphia Toxic Notification

[AMR VI Sec. II & III]**

(a) The Permittee shall notify AMS of any changes to its “Notice of Toxic Air Contaminant Emissions” within 30 days of the changes.

(b) The requirements of this condition shall not apply to toxic air contaminants emitted from the following:

(1) Combustion process using only commercial fuel, including internal combustion engines;

(2) Retail dry cleaning operations;

(3) Retail and non-commercial storage and handling of motor fuels;

(4) Incineration of waste materials other than liquid, semi-liquid or solid by-product industrial wastes; and

(5) Incidental or minor sources including laboratory-scale operations, fireplaces and household appliances, cooking appliances, general comfort ventilation of occupied spaces, housecleaning operations, residential-scale solvent use and pesticide application, and such other sources or categories of sources which are determined by AMS to be of minor significance for the purposes of this Regulation, or which AMS determines to be more appropriately evaluated by special survey methods.

15. Emission Statement

[25 Pa Code §135.21 & AMR I Sec. II.B.2.]

On or before March 1 of each year, the Permittee shall provide AMS with a statement, in a form as AMS may prescribe, for classes or categories of sources, showing the actual emissions from each source for the previous calendar year and a description of the method used to calculate the emissions. The statement shall contain emission information for the following pollutants:

(1) Oxides of nitrogen and VOCs. The statement for these pollutants shall contain a certification by a company officer or plant manager that the information contained in the statement is accurate. [25 Pa Code 135.21]

(2) Total suspended particulate, PM-10, sulfur oxides, carbon monoxide, hazardous air pollutants, and any other pollutants or information requested by AMS. [Phila. Code Sec. 3-301]

16. Reporting Of Malfunctions

[25 Pa. Code §127.511 & AMR I Sec. II.A.5.]

(a) The Permittee shall, within two (2) hours of knowledge of any occurrence, notify AMS, at 215-685-7580 during business hours and 215-686-4514 during other times, of any malfunction of the source(s) or associated air pollution control devices listed in Table A1 of this permit, which results in, or may result in, the emission of air contaminants in excess of the limitations specified in this permit, or regulation contained in 25 Pa Code Article III or the Philadelphia Air Management Code.

(b) Malfunction(s) which occur at this Title V facility, and pose(s) an imminent danger to public health, safety, welfare and the environment, and would violate permit conditions if the source were to continue to operate after the malfunction, shall immediately be reported to AMS by telephone at the above number.

(c) A written report shall be submitted to AMS within two (2) working days following the (notification of the) incident, and shall describe, at a minimum, the following:

(1) The malfunction(s).
(2) The emission(s).
(3) The duration.
(4) Any corrective action taken.

17. Compliance Certification

[25 Pa Code §127.513]

(a) The Permittee shall submit to AMS and EPA Region III a certification of compliance with each term and condition of this permit including the emission limitations, standards or work practices. This certification shall be submitted by March 1 of each year for the period of the previous calendar year and 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 certifications shall be submitted to AMS and EPA in accordance with the Submissions requirement of this permit specified in Condition #17 of this section.

18. Submissions

[25 Pa Code §§127.402(d) and 127.513(1)]

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

Chief of Source Registration
Air Management Services
321 University Ave.
Philadelphia, PA 19104-4543

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

Associate Director
Office of Enforcement and Permits Review (3AP10)
U.S. EPA Region III
1650 Arch Street
Philadelphia, PA 19103-2029

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain a certification by a responsible official as to the truth, accuracy, and completeness as required under 25 Pa Code §127.402(d).

(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 documents are true, accurate, and complete.

SECTION D. SOURCE SPECIFIC REQUIREMENTS

1. Facility

(a) Work Practice Standards

(1) 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, , or vapor recovery system until the internal pressure in such equipment reaches 19.7 psia (136 kilopascals). [AMS letter dated 4/14/94]

(2) The Permittee may burn non-commercial fuels in accordance with Air Management Code Section 3-207(2), AMR III, Section 1.A and 25 PA Code §123.22(e)(3).

(3) All Processes must vent to control devices specified in the inventory table included in Section A. of this permit unless changes to the facility's configuration are made pursuant a valid plan approval or installation permit.

(b) Testing Requirements

[25 PA Code §139]

(1) If at any time AMS 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, or established pursuant to, any applicable rule or regulation contained in 25 PA Code Article III, the Permittee shall be required to conduct whatever test are deemed necessary by AMS to determine the actual emission rate(s).

(2) The following performance tests methods shall be used to demonstrate compliance with the emission limitations:

(i) U.S.E.P.A. Reference Method 7E shall be used for nitrogen oxides.

(ii) U.S.E.P.A. Reference Method 5 and 202 shall be used for particulate matter.

(iii) U.S.E.P.A. Reference Method 9 shall be used for opacity. At a minimum, opacity shall be determined as an average of 24 consecutive observations recorded at 15-second intervals.

(iv) U.S.E.P.A. Reference Method 10 shall be used for carbon monoxide.

(v) ASTM D1266, D129, D1552, D2622 or D270 shall be used for sulfur in fuel.

(3) Compliance determination shall consist of the arithmetic means of results of three separate runs for each source test using U.S.E.P.A. Reference Methods 5, 7E, and 10. The source test shall be consistent with U.S.E.P.A. designated test methods and 25 PA Code §139. The Permittee shall submit a test protocol to AMS for approval at least 30 days before the test date. The test report shall be submitted to AMS within 60 days of completing the stack test.

(4) The Permittee may use alternative test methods to those listed in this section if they are given prior approval by AMS in accordance with 25 Pa Code §139.3 and the Permittee shall only use test methods authorized in accordance with 25 Pa. Code §139.

(c) Monitoring Requirements

[25 PA Code §§127.511 & 139, §§114(a)(3) & 504(b) of Clean Air Act]

The Permittee shall monitor the following:

(1) visible and fugitive emissions during operation daily.

(2) All CEMs shall meet the requirements of 25 PA Code Chapter 139.

(d) Recordkeeping Requirements

[25 PA Code §§127.511, 135.21, 135.5, 139, and SO2 Operating Permit No. SO2-95-039]

The Permittee shall keep the following records:

(1) Records of the daily inspection for visible and fugitive emissions and any corrective actions taken.

(2) Baseline operating records, sampling data concurrent with any emission tests, and any supporting calculations used to determine emissions;

(3) Records of the occurrence or duration of each startup, shutdown, and malfunction of operation of a combustion unit;

(4) Records of the occurrence, duration, and cause (if known) of each malfunction of air pollution equipment or monitoring equipment used to comply with the restrictions or monitoring provisions of this permit;

(5) For monitoring equipment used to comply with the monitoring requirements of this permit, records documenting the completion of installation, calibration checks, and maintenance.

(e) Reporting Requirements

[25 Pa Code §127.511(c) & AMR I Section II]

(1) Annual compliance certification in accordance with Section C.16.

2. Group 08 - Equipment VOC Leak Components Not Subject to NSPS or NESHAP

[AMR V Section XIII.A & AMR X, Section XIII.D]

(a) Work Practice Standards

(1) No person shall cause, suffer, allow or permit volatile organic compounds (VOC) to be emitted from leaking flanges, gaskets, seals, connections, joints, fittings or other process equipment components not involving moving parts, nor shall any person cause, suffer, allow or permit VOC to be emitted from leaking valves, pumps, compressors, safety pressure relief devices or other process equipment components involving moving parts such that:

(i) The VOC emission from any leaking process equipment component results in a VOC in air concentration of 10,000 parts per million by volume (ppmv), or greater, when measured by test methods approved by the Department; or

(ii) The VOC emission is in a liquid state at the point(s) of discharge into the atmosphere.

(2) For Piping components associated with crude oil and recovered oil tanks (P-579, P-587, P-588, P-590, P-601, P-012, P-135, P-521, and P-546), the permittee shall comply with the following. For each pump, valve, and sampling connection that operates in organic liquids service for at least 300 hours per year, comply with 40 CFR 63.2346(l) and the applicable requirements under subpart TT of this part (control level 1), subpart UU of this part (control level 2), or subpart H of this part. Pumps, valves, and sampling connectors that are insulated to provide protection against persistent sub-freezing temperatures are subject to the “difficult to monitor” provisions in the applicable subpart selected by the owner or operator.[40 CFR 63.2346(c)]

(b) Testing Requirements

[25 PA Code §139, AMR X, Section XIII.D]

(1) For determining the magnitude of VOC leaks from former petroleum refinery equipment, test methods and procedures shall be equivalent to those specified in EPA Method 21 (40 CFR 60, Appendix A) or as specified in 25 PA §139.4(5). Methane and ethane may be excluded from this measurement. If methane and ethane are excluded, the measurement of methane and ethane together shall be reported. [25 PA §139.14(b)(4)]

(2) The Permittee shall utilize a fugitive emission LDAR program for all valves, pumps, flanges, and compressors in VOC service. For any source not covered under an existing LDAR program, monitoring shall be conducted on a quarterly basis for equipment in gaseous service and on an annual basis for equipment in liquid service. [AMR X, Section XIII.D]

(c) Monitoring Requirement [AMR X, Section XIII.D]

(1) The Permittee shall utilize a fugitive emission LDAR program for all valves, pumps, flanges, and compressors in VOC service. For any source not covered under an existing LDAR program, monitoring shall be conducted on a quarterly basis for equipment in gaseous service and on an annual basis for equipment in liquid service.

(d) Recordkeeping Requirement

(1) Records of the fugitive emission LDAR program required in Section D.2(c)(1)

3. Group 13C – Internal Floating Roof Tanks subject to 40 CFR 60, Subpart Kb

Girard Point Tanks, P-012, P135, P159, P160, and P174. [These streamlined permit conditions assure compliance with 25 Pa Code 129.56 and AMR V. Sec. II.]

(a) Work Practice Standards

(1) 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. [40 CFR 60.112b(a)(1)(i)]

(2) 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: [40 CFR 60.112b(a)(1)(ii)]

(i) 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. [40 CFR 60.112b(a)(1)(ii)(A)]

(ii) 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. [40 CFR 60.112b(a)(1)(ii)(B)]

(iii) 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. [40 CFR 60.112b(a)(1)(ii)(C)]

(3) 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. [40 CFR 60.112b(a)(1)(iii)]

(4) 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. [40 CFR 60.112b(a)(1)(iv)]

(5) 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. [40 CFR 60.112b(a)(1)(v)]

(6) 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. [40 CFR 60.112b(a)(1)(vi)]

(7) 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. [40 CFR 60.112b(a)(1)(vii)]

(8) 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. [40 CFR 60.112b(a)(1)(viii)]

(9) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(ix)]

(b) Testing Requirements

[25 PA Code §139]

(1) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below. [40 CFR 60.116b(e)]

(i) 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. [40 CFR 60.116b(e)(1)]

(ii) For crude oil or refined petroleum products the vapor pressure may be obtained by the following: [40 CFR 60.116b(e)(2)]

(A) 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 EPA Administrator and AMS specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)]

(B) 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. [40 CFR 60.116b(e)(2)(ii)]

(2) For other liquids, the vapor pressure: [40 CFR 60.116b(e)(3)]

(i) May be obtained from standard reference texts, or [40 CFR 60.116b(e)(3)(i)]

(ii) Determined by ASTM Method D2879-83; or [40 CFR 60.116b(e)(3)(ii)]

(iii) Measured by an appropriate method approved by the EPA Administrator and AMS; or [40 CFR 60.116b(e)(3)(iii)]

(iv) Calculated by an appropriate method approved by the EPA Administrator and AMS. [40 CFR 60.116b(e)(3)(iv)]

(c) Monitoring Requirements

[25 PA Code §§127.511 & 139, §§114(a)(3) & 504(b) of Clean Air Act]

The Permittee shall monitor the following:

(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the Permittee shall repair the items before filling the storage vessel. [40 CFR 60.113b(a)(1)]

(2) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, 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 at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the 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 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the EPA Administrator and AMS 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. [40 CFR 60.113b(a)(2)]

(3) For vessels equipped with a double-seal system: [40 CFR 60.113b(a)(3)]

(i) Visually inspect the vessel as specified in 40 CFR 60.113b(a)(4) at least every 5 years; or [40 CFR 60.113b(a)(3)(i)]

(ii) Visually inspect the vessel as specified in 40 CFR 60.113b(a)(2). [40 CFR 60.113b(a)(3)(ii)]

(4) 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) each time the storage vessel is emptied and degassed. 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 percent 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 provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in 40 CFR 60.113b(a)(2) and 40 CFR 60.113b(a)(3)(ii) and at intervals no greater than 5 years in the case of vessels specified in 40 CFR 60.113b(a)(3(i). [40 CFR 60.113b(a)(4)]

(d) Recordkeeping Requirements

[25 PA Code §§127.511, 135.21, 135.5 & 139]

The Permittee shall keep the following records:

(1) The Permittee of each storage vessel shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. The record will be kept for the life of the source. Each storage vessel with a design capacity less than 75 m^3 is exempt except for what is required in D.14(d)(2). [40 CFR 60.116b(a) and (b)]

(2) The Permittee of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa 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. [40 CFR 60.116b(c)]

(3) The Permittee of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the EPA Administrator and AMS within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40 CFR 60.116b(d)]

(4) Keep a record of each inspection performed as required by 40 CFR 60.113b (a)(1), (a)(2), (a)(3) and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 CFR 60.115b(a)(2)]

(e) Reporting Requirements

(1) Notify the EPA Administrator and AMS in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the EPA Administrator and AMS the opportunity to have an observer present. If the inspection is not planned and the Permittee could not have known about the inspection 30 days in advance or refilling the tank, the Permittee shall notify the EPA Administrator and AMS at least 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 EPA Administrator and AMS at least 7 days prior to the refilling. [40 CFR 60.113b(a)(5)]

(2) Furnish the EPA Administrator and AMS with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3). [40 CFR 60.115b(a)(1)]

(3) If any of the conditions described in 40 CFR 60.113b(a)(2) are detected during the annual visual inspection required by 40 CFR 60.113b(a)(2), a report shall be furnished to the EPA Administrator and AMS within 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. [40 CFR 60.115b(a)(3)]

(4) After each inspection required by 40 CFR 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 CFR 60.113b(a)(3)(ii), a report shall be furnished to the EPA Administrator and AMS within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the

specifications of 40 CFR 61.112b(a)(1) or 40 CFR 60.113b(a)(3) and list each repair made. [40 CFR 60.115b(a)(4)]

4. Group 14C – External Floating Roof Tanks subject to 40 CFR 60, Subpart Kb (or equivalent).

Girard Point Tanks P006, P155, and P162. Point Breeze Tanks P-521, P-546, P-579, P-587, P-588, P-590, P-601, P624, and P627. [These streamlined permit conditions assure compliance with 25 Pa Code 129.56 and AMR V. Sec. II.]

(a) Work Practice Standards

(1) An external floating roof means a pontoon-type or double-deck type cover that rests on the liquid surface in a vessel with no fixed roof. Each external floating roof must meet the following specifications: [40 CFR 60.112b(a)(2)]

(i) 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 is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal. [40 CFR 60.112b(a)(2)(i)]

(A) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. Except as provided in 40 CFR 60.113b(b)(4), the seal shall completely cover the annular space between the edge of the floating roof and tank wall. [40 CFR 60.112b(a)(2)(i)(A)]

(B) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion except as allowed in 40 CFR 60.113b(b)(4). [40 CFR 60.112b(a)(2)(i)(B)]

(ii) 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. [40 CFR 60.112b(a)(2)(ii)]

(2) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112b(a)(2)(iii)]

(b) Testing Requirements

[25 PA Code §139]

(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. [40 CFR 60.116b(e)(1)]

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following: [40 CFR 60.116b(e)(2)]

(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 EPA Administrator and AMS specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s). [40 CFR 60.116b(e)(2)(i)]

(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. [40 CFR 60.116b(e)(2)(ii)]

(3) For other liquids, the vapor pressure: [40 CFR 60.116b(e)(3)]

(i) May be obtained from standard reference texts, or [40 CFR 60.116b(e)(3)(i)]

(ii) Determined by ASTM Method D2879-83; or [40 CFR 60.116b(e)(3)(ii)]

(iii) Measured by an appropriate method approved by the EPA Administrator and AMS; or [40 CFR 60.116b(e)(3)(iii)]

(iv) Calculated by an appropriate method approved by the EPA Administrator and AMS. [40 CFR 60.116b(e)(3)(iv)]

(c) Monitoring Requirements

[25 PA Code §§127.511 & 139, §§114(a)(3) & 504(b) of Clean Air Act]

The Permittee shall monitor the following:

(1) Determine the gap areas and maximum gap widths, between the primary seal and the wall of the storage vessel and between the secondary seal and the wall of the storage vessel according to the following frequency. [40 CFR 60.113b(b)(1)]

(i) Measurements of gaps between the tank wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with VOL and at least once every 5 years thereafter. [40 CFR 60.113b(b)(1)(i)]

(ii) Measurements of gaps between the tank wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter. [40 CFR 60.113b(b)(1)(ii)]

(iii) If any source 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 40 CFR 60.113b(b)(1)(i) and 40 CFR 60.113b(b)(1)(ii). [40 CFR 60.113b(b)(1)(iii)]

(2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures: [40 CFR 60.113b(b)(2)]

(i) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports. [40 CFR 60.113b(b)(2)(i)]

(ii) Measure seal gaps around the entire circumference of the tank in each place where a 0.32-cm diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the storage vessel and measure the circumferential distance of each such location. [40 CFR 60.113b(b)(2)(ii)]

(iii) The total surface area of each gap described in paragraph 40 CFR 60.113b(b)(2)(ii) shall be determined by using probes of various widths to measure accurately the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance. [40 CFR 60.113b(b)(2)(iii)]

(3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the respective standards in 40 CFR 60.113b(b)(4). [40 CFR 60.113b(b)(3)]

(4) Make necessary repairs or empty the storage vessel within 45 days of identification in any inspection for seals not meeting the requirements listed in 40 CFR 60.113b(b)(4)(i) and 40 CFR 60.113b(b)(4)(ii): [40 CFR 60.113b(b)(4)]

(i) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm. [40 CFR 60.113b(b)(4)(i)]

(A) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface. [40 CFR 60.113b(b)(4)(i)(A)]

(B) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope. [40 CFR 60.113b(b)(4)(i)(B)]

(ii) The secondary seal is to meet the following requirements: [40 CFR 60.113b(b)(4)(ii)]

(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in [40 CFR 60.113b(b)(2)(iii)]. [40 CFR 60.113b(b)(4)(ii)(A)]

(B) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm. [40 CFR 60.113b(b)(4)(ii)(B)]

(C) There are to be no holes, tears, or other openings in the seal or seal fabric. [40 CFR 60.113b(b)(4)(ii)(C)]

(iii) If a failure is detected during an inspection and cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the EPA Administrator and AMS in the inspection report required in 40 CFR 60.113b(b)(4). Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 CFR 60.113b(b)(4)(iii)]

(5) Notify the EPA Administrator and AMS 30 days in advance of any gap measurements required by 40 CFR 60.113b(b)(1) to afford the EPA Administrator and AMS the opportunity to have an observer present. [40 CFR 60.113b(b)(5)]

(6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. [40 CFR 60.113b(b)(6)]

(i) If the external 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, the Permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before filling or refilling the storage vessel with VOL. [40 CFR 60.113b(b)(6)(i)]

(7) For all the inspections required by 40 CFR 60.113b(b)(6), the Permittee shall notify the EPA Administrator and AMS in writing at least 30 days prior to the filling or refilling of each storage vessel to afford the EPA Administrator and AMS the opportunity to inspect the storage vessel prior to refilling. If the inspection required by 40 CFR 60.113b(b)(6) is not planned and the Permittee could not have known about the inspection 30 days in advance of refilling the tank, the Permittee shall notify the EPA Administrator and AMS at least 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 EPA Administrator and AMS at least 7 days prior to the refilling. [40 CFR 60.113b(b)(6)(ii)]

(d) Recordkeeping Requirements

[25 PA Code §§127.511, 135.21, 135.5 & 139]

The Permittee shall keep the following records:

(1) The Permittee shall keep copies of all records required by 40 CFR 60.116b(b), for the life of the source. [40 CFR 60.116b(a)]

(2) he Permittee of each storage vessel shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel. Each storage vessel with a design capacity less than 75 m3 is subject to no provision of this subpart other than those required by this paragraph. The records of this condition shall be kept for the life of the source. [40 CFR 60.116b(a) and (b)]

(3) The Permittee of each storage vessel either with a design capacity greater than or equal to 151 m3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m3 but less than 151 m3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa 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. [40 CFR 60.116b(c)]

(4) The Permittee shall keep a record of each gap measurement performed as required by 40 CFR 60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:

(i) The date of measurement. [40 CFR 60.115b(b)(3)(i)]

(ii) The raw data obtained in the measurement. [40 CFR 60.115b(b)(3)(ii)]

(iii) The calculations described in 40 CFR 60.113b (b)(2) and (b)(3). [40 CFR 60.115b(b)(3)(iii)]

(e) Reporting Requirements

(1) Within 60 days of performing the seal gap measurements, the Permittee furnish the EPA Administrator and AMS with a report that contains:

(i) The date of measurement. [40 CFR 60.115b(b)(2)(i)]

(ii) The raw data obtained in the measurement. [40 CFR 60.115b(b)(2)(ii)]

(iii) The calculations described in 40 CFR 60.113b (b)(2) and (b)(3). [40 CFR 60.115b(b)(2)(iii)]

(2) Within 60 days of performing the seal gap measurements required by (c)(1) of this section, The Permittee shall furnish the EPA Administrator and AMS with a report that contains:

(i) The date of measurement. [40 CFR 60.115b(b)(2)(i)]

(ii) The raw data obtained in the measurement. [40 CFR 60.115b(b)(2)(ii)]

(iii) The calculations described in 40 CFR 60.113b (b)(2) and (b)(3). [40 CFR 60.115b(b)(2)(iii)]

(3) After each seal gap measurement that detects gaps exceeding the limitations specified by (c)(4) of this section, the Permittee shall submit a report to the EPA Administrator and AMS within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (e)(2) of this section and the date the vessel was emptied or the repairs made and date of repair. [40 CFR 60.115b(b)(4)]

(4) The Permittee of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the EPA Administrator and AMS within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range. [40 CFR 60.116b(d)]

5. Group 15A Petroleum Liquids Storage Tanks

Girard Point Tanks, P032, P036, P037, P039, P144, P147, , P153, P154, , P175, P176, P177, P178, and P179. Point Breeze Tanks, P529, P530, P534 and P582

(a) Work Practice.

(1) Each tank shall have maximum true vapor pressure of less than 10.4 kPa (1.5 psia) and the annual average true vapor pressure shall be less than 8.3 kPa (1.2 psia).

6. Group 22 – Degreasing Vats

Girard Point equipment numbered P108 (PB Fab/Machine Shop small parts degreasers)

(a) Emissions

(1) VOC emissions from each part cleaner/cold cleaning machine shall not exceed 2.7 tons per rolling 12-month basis. [Installation Permit No. 12070-12071, dated May 21, 2012].

(b) Work Practice Standards

(1) No solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, may be used as a cleaning and/or drying agent in any degreaser. [Exempt from 40 CFR §63.460]

(2) The Permittee shall not use any solvent subject to the Federal National emissions standards for hazardous air pollutants (NESHAP) for halogenated solvent cleaners under 40 CFR Part 63 (relating to National emissions standards for hazardous air pollutants for source categories). [AMS Installation Permit No. 12070-71, dated May 21, 2012]

(3) Cold cleaning degreasers which have a degreaser opening which is greater than 10 square feet shall be equipped with:

(i) A cover to prevent evaporation of solvent during periods of non-use. [25 PA Code 129.63(a)(1)(i)]

(ii) Equipment for draining cleaned parts. [25 PA Code 129.63(a)(1)(ii)]

(iii) A permanent, conspicuous label summarizing the operating requirements. [25 PA Code 129.63(a)(1)(iii)]

(4) Be operated in accordance with the following requirements:

(i) Do not dispose of waste solvent or transfer it to another party, such that greater than 20% for the waste solvent (by weight) can evaporate into the atmosphere, store waste solvent only in covered containers. [25 PA Code129.63(a)(2)(i)]

(ii) Close degreaser cover whenever not handling parts in the cleaner. [25 PA Code 129.63(a)(2)(ii)]

(iii) Drain cleaned parts for at least 15 seconds or until dripping ceases. [25 PA Code 129.63(a)(2)(iii)]

(5) Each parts cleaner/cold cleaning machine shall: [AMS Installation Permit No. 12070-71, dated May 21, 2012]

(i) Immersion cold cleaning machines shall have a freeboard ratio of 0.50 or greater [25PA Code 129.63(a)(1)]

(ii)Immersion cold cleaning machines and remote reservoir cold cleaning machines shall have a permanent, conspicuous label summarizing the operating requirements in Section D.6(5)(iv). In addition, the label shall include the following discretionary good operating practices: [25PA Code 129.63(a)(2)(i)]

(A) Cleaned parts should be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts should be positioned so that solvent drains directly back to the cold cleaning machine.

(B) When a pump-agitated solvent bath is used, the agitator should be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned.

(C) Work area fans should be located and positioned so that they do not blow across the opening of the degreaser unit.

(iii)Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforates drain with a diameter of not more than 6 inches shall constitute an acceptable cover. [25PA Code 129.63(a)(2)(ii)]

(iv)Cold Cleaning Machines shall be operated in accordance with the following procedures: [25PA Code 129.63(a)(3)]

(A) Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.

(B) Flushing of parts using a flexible hose or other flushing device shall be performed only within the cold cleaning machines. The solvent spray shall be a solid fluid stream, not a atomized or shower spray.

(C) Sponges, fabric, wood, leather, paper products and other absorbent materials may not be cleaned in the cold cleaning machine.

(D) Air agitated solvent baths may not be used.

(E) Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately.

(v)The Permittee may not use, sell or offer for sale for use in a cold cleaning machine any solvent with a vapor pressure of 1.0 millimeter of mercury (mm Hg) or greater and containing greater than 5% VOC by weight, measured at 20C (68F) containing VOCs [25PA Code 129.63(a)(4)]

(A)The above condition does not apply: [25PA Code 129.63(a)(7)]

(I) To cold cleaning machines used in extreme cleaning service;

(II) If the owner or operator of the cold cleaning machine demonstrates, and AMS approves in writing, that compliance will result in unsafe operating conditions.

(III) To immersion cold cleaning machines with a freeboard ratio equal to or greater than 0.75.

(vi) If a person sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine, the person shall provide to the purchaser, the following written information: [25PA Code 129.63(a)(7)]

(A) The name and address of the solvent supplier

(B) The type of solvent including the product or vendor identification number

(C) The vapor pressure of the solvent measured in mm Hg at 20C (68F)

(vii)VOC material shall be kept in covered containers when not in use. [AMR V, Sec. XIII.A.2].

(c) Monitoring Requirements

25 PA Code §§127.511 & 139, §§114(a)(3) & 504(b) of Clean Air Act]

The Permittee shall monitor the following:

(1) The concentration of these solvents may be determined using EPA test method 18, material safety data sheets, or engineering calculations. [40 CFR 63.460(a)]

(2) Proper operation of parts cleaner/cold cleaning machine in accordance with manufacturer's recommended operations and maintenance [Installation Permit 12070-71, dated May 21, 2012]

(d) Recordkeeping Requirements

[25 PA Code §§127.511, 135.21, 135.5 & 139]

The Permittee shall keep the following records:

(1) Records of the type and amount of any solvent with a vapor pressure that is greater than 0.3 kilopascals at 20 degrees Celsius that is added to the vats.

(2) Documentation of the concentration of solvents as determined using EPA test method 18, material safety data sheets, or engineering calculations.

(3) For the parts cleaner/cold cleaning machine, Permittee shall keep the following records: [Installation Permit No. 12070-71, dated May 21, 2012]

(i) monthly solvent usage.

(ii) VOC and HAP content of the solvent added to the parts cleaner/cold cleaner machine.

(iii) VOC emission on a monthly and rolling 12-month basis.

(iv) Records shall be kept for a period of 5 years and shall be produced upon request.

7. Group 25A – Refining Wastewater

Girard Point equipment numbered P131and P132 Point Breeze equipment numbered P639

Girard Point equipment P114 Point Breeze equipment numbered P640, P641, and P667.

EFRTs storing stormwater and process water – Girard Point P142, Point Breeze equipment numbered P624 and P627.

IFRs – Girard Point Tanks P-012, , P-135, P-159, P-160, P-174,

EFRs – Girard Point Tanks P-006, P-155, P-162 and Point Breeze Tanks – P-521, P-546, , P624, P-627

(a) Work Practice Standards

(1) The Permittee shall meet the following standards for each tank

(i) Internal Floating Roof Tanks

(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. [40 CFR 60.112b(a)(1)(i)]

(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: [40 CFR 60.112b(a)(1)(ii)]

(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.

(2) 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.

(3) 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. [40 CFR 60.112b(a)(1)(iii)]

(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. [40 CFR 60.112b(a)(1)(iv)]

(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. [40 CFR 60.112b(a)(1)(v)]

(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. [40 CFR 60.112b(a)(1)(vi)]

(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. [40 CFR 60.112b(a)(1)(vii)]

(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. [40 CFR 60.112b(a)(1)(viii)]

(I) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 CFR 60.112b(a)(1)(xi)]

(ii) External Floating Roof Tanks

(A) 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 is to consist of two seals, one above the other. The lower seal is referred to as the primary seal, and the upper seal is referred to as the secondary seal. [40 CFR 60.112b(a)(2)(i)]

(1) The primary seal shall be either a mechanical shoe seal or a liquid-mounted seal. The seal shall completely cover the annular space between the edge of the floating roof and tank wall.

(a) The accumulated area of gaps between the tank wall and the mechanical shoe or liquid-mounted primary seal shall not exceed 212 Cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 3.81 cm. [40 CFR 60.113b(b)(4)(i)]

(i) One end of the mechanical shoe is to extend into the stored liquid, and the other end is to extend a minimum vertical distance of 61 cm above the stored liquid surface.

(ii) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(2) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion

(a) The secondary seal is to meet the following requirements: [40 CFR 60.113b(b)(4)(ii)]

(i) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (b)(2)(iii) of this section.

(ii) The accumulated area of gaps between the tank wall and the secondary seal shall not exceed 21.2 cm^2 per meter of tank diameter, and the width of any portion of any gap shall not exceed 1.27 cm.

(iii) There are to be no holes, tears, or other openings in the seal or seal fabric.

(B) 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. [40 CFR 60.112b(a)(2)(ii)]

(C) The external floating roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible. [40 CFR 60.112b(a)(2)(iii)]

8. Group 27 – Emergency Generators and Fire Pumps

(a) Emission Limitations

(1) Nitrogen Oxides (NOx) emission from each emergency generator and pump shall be less than 100 lbs/hr, 1000 lbs/day, 2.75 tons per ozone season (May 1 – September 30), and 6.6 tons per rolling 12-month period

(2) Particulate Matter emissions from each unite may not exceed 0.04 grain per dry standard cubic foot [25 Pa Code 123.13(c)(1)(i)]

(3) Carbon monoxide (CO) emissions from each unit may not exceed 1% by volume of exhaust gases [AMR VIII]

(4) Emissions from the Fire Pump #4 (FP-010) shall not exceed the following:

(i) Non-methane Hydrocarbon and Nitrogen Oxides (NMHC+NOx) emissions shall not exceed 4.0 g/kW-hr (3.0 g/hp-hr). [40 CFR 60.4205(c) and Table 4]

(ii) Carbon Monoxide (CO) emissions shall not exceed 3.5 g/kW-hr (2.6 g/hp-hr); [40 CFR 60.4205(c) and Table 4]

(iii) Particulate Matter (PM) emissions shall not exceed 0.20 g/kW-hr (0.15 g/hp-hr); [40 CFR 60.4205(c) and Table 4]

(b) Work Practice

(1) Each emergency generator shall be operated only during emergencies, emergency testing, and engine tuning.

(i) Emergencies are defined as when the primary power source for the facility has been rendered inoperable by an unanticipated incident.

(ii) Testing for each generator is limited to 30 minutes per week.

(iii) Engine tuning may be performed on the generator one time per year and is limited to four hours.

(2) Each emergency generator shall operate less than 500 hours per rolling 12-month period. [25 Pa Code §129.93]

(3) Each emergency generator and fire/mitigation pump shall be installed, maintained, and operated in accordance with manufacturer's specifications. [25 Pa Code §129.93]

(4) The Permittee shall only burn No.2 fuel oil in each Fire/Mitigation Pump. The maximum sulfur content of diesel fuel shall be 0.2 % by weight. [25 Pa Code §123.22(e) & AMR III Sec. I & III]

(i) The Fire Pump #4 (FP-010) shall only burn diesel fuel oil. The diesel fuel used in the fire pump shall meet the following requirements:

(A) The diesel fuel used in the emergency generator shall meet the following: [40 CFR 60.4207(b), 40 CFR 80.510(b)]

(1) The maximum sulfur content of the diesel fuel shall be 15 part per million (ppm);

(2) The minimum cetane index shall be 40 or maximum aromatic content of 35 volume percent.

(5) The fire/mitigation pumps shall be operated only during emergencies, testing, and engine tuning. [AMS Installation Permit 11101 dated 6/24/11, AMS Installation Permit 11346-52 dated 2/23/12]

(i) Emergencies are defined as when there is significant drop in pressure in the fire water system or when an actual or suspected release of HF occurs and the mitigation pumps must be activated.

(ii) Testing for the fire pump is limited to 30 minutes per week.

(iii) Engine tuning may be performed on the fire pump one time per year and is limited to four (4) hours.

(6) The Fire/Mitigation Pump shall operate less than 500 hours per rolling 12-month period.

(7) Sound levels produced by the emergency generator or pumps shall not exceed the following:

(i) 5 decibels above background level measured at the property boundary of the nearest occupied residential property: or

(ii) 10 decibels above background level measured at the property boundary of the nearest occupied non-residential property [Philadelphia Code Chapter 10-400 (Noise and Excessive Vibration) §10-403(3)]

(8) Vibration levels shall not exceed 0.15 inches per second beyond any source property boundary. [Philadelphia Code Title 10 Chapter 10-400]

(9) No testing and/or tuning of the Emergency Generators and Fire/Mitigation Pumps shall be performed on a day for which an Air Quality Forecast has predicted an Air Quality Action Day, or on an Air Quality Action Day [AMS XV, Sec III]

(10) Testing and/or tuning of the Emergency Generators and Fire/Mitigation Pumps during the ozone season, when not otherwise prohibited in Section D.9(b)(9), shall only be performed between the hours of 5:00 PM and 11:00 PM, except as follows: [AMS XV, Sec III]

(i) Facilities that are able to demonstrate compliance with Philadelphia Code Chapter 10-400 (Noise and Excessive Vibration) can perform testing and/or tuning between the hours of 5:00 PM and 7:30 AM.

(11) The Emergency Generators and Fire/Mitigation Pumps are exempt from the above condition in Section D.9(b)(9) and (10) during emergencies or emergency repairs regardless of the air quality. [AMS XV, Sec III]

(12) The Fire/Mitigation Pumps may be tested on the seventh day after six consecutive Air Quality Action Days, notwithstanding Section D.9.(b)(9) [AMR XV.Sec III.D]

(13) The Fire/Mitigation pump shall: [40 CFR 63.6602, Table 2c]

(i) Change oil and filter every 500 hours of operation or annually, whichever comes first;

(ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;

(iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(14) The Permittee shall install a non-resettable hour meter if one is not already installed on each emergency generator and Fire/Mitigation pump.

(15) The Permittee shall develop a maintenance plan for the Fire/Mitigation Pumps 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. [40 CFR 63.6625(e)]

(16) The Permittee must minimize the engine’s time spent at idle during startup and minimize the engine’s startup time to period needed for appropriate and safe loading of engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]

(17) The Belmont Firehouse Williams Pump (fire pump FP-019) shall operate less than 500 hours per rolling 12 month period. The fire pump shall be operated only during emergencies, testing, tuning, and fire training. [AMS Installation Permit 13170 dated 7/31/13]

(i) Emergencies are defined as the endangerment of lives, of equipment, possessions, and inventories by fire.

(ii) Testing for the Belmont Firehouse Williams Pump (fire pump FP-019) is limited to 30 minutes per week.

(iii) Engine tuning may be performed on the Belmont Firehouse Williams Pump (fire pump FP-019) one time per year and is limited to four hours.

(iv) Fire training is limited to 16 hours per rolling 12 month period.

(18) The Belmont Firehouse Williams Pump (fire pump FP-019) shall be subject to 40 CFR 60 Subpart IIII if the fire pump is stationed at a location or a single site at the facility for a period of 1-year or more. [AMS Installation Permit 13170 dated 7/31/13]

(c) Testing Requirements [25 Pa Code §139]

(1) If at any time AMS 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, or established pursuant to, any applicable rule or regulation contained in 25 PA Code Article III, the Permittee shall be required to conduct whatever test are deemed necessary by AMS to determine the actual emission rate(s).

(2) The following performance tests methods shall be used to demonstrate compliance with the emission limitations:

(i) U.S.E.P.A. Reference Methods 5 and 202 shall be used for particulate matter.

(ii) U.S.E.P.A. Reference Method 9 shall be used for opacity. At a minimum, opacity shall be determined as an average of 24 consecutive observations recorded at 15-second intervals.

(iii) U.S.E.P.A. Reference Method 10 shall be used for carbon monoxide.

(iv) ASTM D1266, D129, D1552, D2622 or D270 shall be used for sulfur in fuel.

(v) Compliance determination shall consist of the arithmetic means of results of three separate runs for each source test using U.S.E.P.A. Reference Methods 5/202 and 10. The source test shall be consistent with U.S.E.P.A. designated test methods and 25 Pa Code §139. The Permittee shall submit a test protocol to AMS for approval at least 30 days before the test date.

(vi) The Permittee may use alternative test methods to those listed in this section if they are given prior approval by AMS in accordance with 25 Pa Code §139.3.

(d) Monitoring Requirements

(1) The proper operation of each emergency generator and fire pump in accordance with manufacturers recommended operations and maintenance, operating hours on a 12-month rolling basis, and sulfur content in fuel oil.

(e) Recordkeeping Requirements

The Permittee shall keep following records;

(1) The Permittee shall provide verification or calculations to demonstrate compliance with the NOx emission limits in Section D.9 (a)(1) on a monthly basis and rolling 12-month basis. Verification may be based on AP-42, manufacturer's certified emission factors, or other AMS-approved emission factors;

(2) Operating hours for each emergency generator and fire/mitigation pump on a 12-month rolling basis

(3) The Air Quality Index (AQI) number or color code shall be determined and recorded when testing or tuning of an Emergency Generator and Fire/Mitigation Pump is conducted, to demonstrate compliance with Section D.9 (b)(9) and (12) [AMS XV, Sec IV]

(4) Monthly fuel type and manifests documenting the sulfur content of diesel fuel.

(5) Manufacturer's engine compliance certification to demonstrate compliance with the applicable emission standards in 40 CFR 60.4205(b). [40 CFR 60.4211(c)]

(6) Occurrence and duration of each malfunction of operation [40 CFR 63.6655(a)(2)]

(7) Oil and Air filter change, inspection of air cleaner, hoses, and belts to demonstration compliance with Section D.9.(b)(13)

(8) Date and location of the Belmont Firehouse Williams Pump (fire pump FP-019) each time the emergency fire pump is relocated to different site at the facility [AMS Installation Permit 13170 dated 7/31/13]

(f) Reporting Requirements

[25 Pa Code §127.442 & AMR I Sec. II]

(1) Any violation of an emission limitation that does not result from a malfunction requiring reporting under Section C.16 shall be reported (by phone call or facsimile transmission) to AMS within 24 hours of detection and followed by written notification within thirty-one (31) days.

9. Group 28. Internal Combustion Engines

(a) Emission Limitations

(1) Nitrogen Oxides (NOx) emission from each source shall be less than 100 lbs/hr, 1000 lbs/day, 2.75 tons per ozone season (May 1 – September 30), and 6.6 tons per rolling 12-month period

(2) Particulate Matter emissions from each unit may not exceed 0.04 grain per dry standard cubic foot [25 Pa Code 123.13(c)(1)(i)]

(3) Carbon monoxide (CO) emissions from each unit may not exceed 1% by volume of exhaust gases [AMR VIII]

(4) Carbon Monoxide (CO) emissions from pumps and air compressors (IC-002, IC-006, IC-007, IC-008, rIC-006, rIC-007) shall be limit to the following: [40 CFR §63.6602, Table 2c]

(i) Each pump and air compressor 100 ≤ hp ≤ 300 hp shall limit the CO concentration in the exhaust to 230 ppmvd or less at 15% O2

(5) Carbon Monoxide (CO) emissions from pumps and air compressors (IC-008) shall not exceed 2.6 g/bhp/hr [AMS Installation Permit 12098-99, dated 8/6/12]

(6) IC-009 (the 147 hp flood control RICE) shall comply with the following emission requirements:

(i) NMHC + NOx emissions shall not exceed 4.0 g/kW-hr or 3.0 g/hp-hr; [Tier 3 Engine]

(ii) CO emissions shall not exceed 5.0 g/kW-hr or 3.7 g/hp-hr; [Tier 3 Engine]

(iii) PM emissions shall not exceed 0.30 g/kW-hr or 0.23 g/hp-hr. [Tier 3 Engine]

(7) IC-010 (the 275 hp flood control RICE) shall comply with the following emission requirements:

(i) NMHC + NOx emissions shall not exceed 4.0 g/kW-hr or 3.0 g/hp-hr; [Tier 3 Engine]

(ii) CO emissions shall not exceed 3.5 g/kW-hr or 2.6 g/hp-hr; [Tier 3 Engine]

(iii) PM emissions shall not exceed 0.20 g/kW-hr or 0.15 g/hp-hr. [Tier 3 Engine]

(b) Work Practice

(1) Each unit shall only burn fuel types as stated in Table A-1 Group 28.

(2) Sound levels produced by the fire pump shall not exceed the following: [Philadelphia Code Chapter 10-400 (Noise and Excessive Vibration) §10-403(3)]

(i) 5 decibels above background level measured at the property boundary of the nearest occupied residential property: or

(ii) 10 decibels above background level measured at the property boundary of the nearest occupied non-residential property.

(3) Vibration levels shall not exceed 0.15 inches per second beyond any source property boundary. [Philadelphia Code Title 10 Chapter 10-400]

(4) The maximum hours of operation of each pump and air compressor shall be as follows: [AMS Installation Permit 11345, 11362-74 dated 9/14/12, AMS Installation Permit 12000-03 dated 10/12/12, IP18-000373-374]

Sources	Per rolling 12-month average
rIC-001 ≤ 14 BHP pump	7821 hours
rIC-006 ≤ 101 BHP air compressor	2627 hours
rIC-007 ≤ 144 BHP pump	1984 hours
IC-002 (53P-800C pump)	458 hours
IC-005 (FE-5(2) Flood Control Pump Driver)	2300 hours
IC-006 (Godwin 894572/4 Flood Control Pump Driver)	1150 hours
IC-007 (B-2623 Flood Control Pump Driver)	3050 hours
IC-008 (Engine Set 1290 (northside of 8 Sep))	360 hours
IC-009 Flood Control RICE For flood control at GP 2nd and J	500 hours
IC-010 Flood Control RICE For flood control at Girard point 2-separtor	500 hours

(5) Each pump and air compressor shall meet the minimum Tier level as follows: [AMS Installation Permit 11345, 11362-74 dated 9/14/12, AMS Installation Permit 12000-03 dated 10/12/12]

Sources	Tier Level*
rIC-001 ≤ 14 BHP pump	No Tier
rIC-006 ≤ 101 BHP air compressor	Tier 4
rIC-007 ≤ 144 BHP pump	Tier 3
IC-002 (53P-800C pump)	No Tier
IC-005 (FE-5(2) Flood Control Pump Driver)	No Tier
IC-006 (Godwin 894572/4 Flood Control Pump Driver)	Tier 1
IC-007 (B-2623 Flood Control Pump Driver)	Tier 3
IC-008 (Engine Set 1290 (northside of 8 Sep))	Tier 2
IC-009 Flood Control RICE For flood control at GP 2nd and J	Tier 3
IC-010 Flood Control RICE For flood control at Girard point 2-separtor	Tier 3

*Tier level are based on 40 CFR 60 Subpart IIII

(6) Each pump and air compressor shall only burn diesel fuel. The diesel fuel shall meet the following requirements assuring compliance with 40 CFR 63.6604, 40 CFR §60.510(b)

(i) The maximum sulfur content of the diesel fuel shall be 15 part per million (ppm);

(ii) The minimum cetane index shall be 40 or maximum aromatic content of 35 volume percent.

(7) For each pump and air compressor less than 100 hp (, rIC-001,): [40 CFR §63.6602, Table 2c, AMS Installation Permit 12000-03 dated 10/12/12]

(i) Change oil and filter every 1000 hours of operation or annually, whichever comes first;

- PES owned diesel pump shall use an oil analysis program as stated in 40 CFR 63.6625(i)

(ii) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first;

(iii) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

(8) The Permittee shall maintain the pump and air compressor less than 100 hp according to the manufacturer's emission-related written instructions or develop 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 [40 CFR 63.6625(e)]

(9) The Permittee shall install a non-resettable hour meter if one is not already installed. [assures compliance with 40 CFR 63.6625(f)]

(10) The Permittee must minimize the engine's time spent at idle during startup and minimize the engine's startup time to period needed for appropriate and safe loading of engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]

(11) IC-009 and IC-010 shall comply with the following:

(i) Each flood control RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine.

(ii) Each flood control RICE may be operated during storm events for emergency water pumping to control flood.

(iii) Each flood control RICE may be operated for the purposes specified in paragraph (11)(i) for up to 100 hours per calendar year.

(iv) Each flood control RICE shall be installed, operated, and maintained in accordance with both the manufacturer's specification and the specifications in the application per IP18-000373-374.

(c) Testing Requirement

(1) If at any time AMS 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, or established pursuant to, any applicable rule or regulation contained in 25 PA Code Article III, the Permittee shall be required to conduct whatever test are deemed necessary by AMS to determine the actual emission rate(s).

(2) The following performance tests methods shall be used to demonstrate compliance with the emission limitations:

(i) U.S.E.P.A. Reference Methods 5 and 202 shall be used for particulate matter.

(ii) U.S.E.P.A. Reference Method 9 shall be used for opacity. At a minimum, opacity shall be determined as an average of 24 consecutive observations recorded at 15-second intervals.

(iii) U.S.E.P.A. Reference Method 10 shall be used for carbon monoxide.

(iv) ASTM D1266, D129, D1552, D2622 or D270 shall be used for sulfur in fuel.

(v) Compliance determination shall consist of the arithmetic means of results of three separate runs for each source test using U.S.E.P.A. Reference Methods 5/202 and 10. The source test shall be consistent with U.S.E.P.A. designated test methods and 25 Pa Code §139. The Permittee shall submit a test protocol to AMS for approval at least 30 days before the test date. The test report shall be submitted for approval to AMS at least 60 days prior to the test.

(vi) The Permittee may use alternative test methods to those listed in this section if they are given prior approval by AMS in accordance with 25 Pa Code §139.3.

(3) The Permittee shall demonstrate initial compliance with the CO concentration in Section D.9(a)(4) on each pump or air compressor greater than 100 hp (, IC-002, IC-006, IC-007, IC-008, rIC-006, rIC-007) [40 CFR §63.6610(a) & 40 CFR §63.6612(a)]

(i) The performance test shall comply with 40 CFR 63 Subpart ZZZZ, Table 4 and 40 CFR §63.6620

(ii) During the initial performance test, the Permittee must establish each operating limitation

(d) Monitoring Requirements

The Permittee shall monitor:

(1) The proper operation of each unit in accordance with manufacturers recommended operations and maintenance, operating hours on a 12-month rolling basis, and fuel usage and sulfur content in fuel oil.

(2) Each maintenance conducted on each pump and air compressor to demonstrate that the engines are operated and maintained in accordance to the maintenance plan. [40 CFR 63.6625(e) & 40 CFR 63.6655(e)]

(e) Recordkeeping Requirements

The Permittee shall keep following records;

(1) NOx emission per rolling 12-month period, calculated monthly to demonstrate compliance with Section D9.(a)(1). Verification shall be based on AP-42 factors, manufacturer's specification, or other AMS approved emission factors.

(2) Daily operating hours, operating hours per rolling 12-month period calculated monthly to assure compliance with Section D.9.(b)(4)

(3) Monthly fuel type and manifests documenting the sulfur content of diesel fuel.

(4) Manufacturer's engine compliance certification to demonstrate compliance with the Tier level in Section D.9.(b)(5)

(5) Occurrence and duration of each malfunction of operation [40 CFR 63.6655(a)(2)]

(6) Oil and Air filter change, inspection of air cleaner, hoses, and belts to demonstration compliance with Section D.9.(b)(7)

(7) Performance tests

(8) For IC-009 and IC-010, the EPA Tier rating of each RICE.

(f) Reporting Requirements

(1) For each pump and air compressor, the Permittee shall report, in accordance with 40 CFR 63.6650, each instant in which there is a deviation in the emission limitation or operating limitation, [40 CFR 63.6640(b)]

(2) The Permittee shall submit Semi-Annual Compliance reports beginning with May 3, 2013. [40 CFR 63.6650]

(i) Each deviation of emission limitation and operating limitation that occurs during the reporting period shall be reported and the reports must contain

the following:

(A) The total operating time of each pump and air compressor at which the deviation occurred during the reporting period.

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

(ii) If there are no deviations from any emission limitations or operating limitations, a statement that there were no deviations from the emission limitations or operating limitations during the reporting period;

SECTION E. OPEN BURNING VARIANCE FOR TRAINING

(a) The Permittee may conduct controlled open burning for the firefighting and employee training as follows: [AMS Approval Letter January 25, 2011]

(1) The Permittee shall notify AMS – Facility Compliance Section at 215-685-7580 at least 24 hours prior to any controlled open burning.

(2) All controlled open burning shall follow the parameters specified in January 5, 2011 letter.

(i) The Permittee must obtain approval from AMS prior to changing any of th procedures listed in the January 5, 2011 letter.

(ii) AMS may modify or revoke the open burning variance approval if it is determined necessary to prevent air pollution problems.

SECTION F. NON APPLICABLE REQUIREMENTS

AMS has determined that the following regulations are not applicable to the facility:

Pennsylvania Regulations:

40 CFR 60 Subpart VV – Equipment Leaks
40 CFR 60 Subpart GGG – Equipment Leaks
40 CFR 60 Subpart GGGa – Equipment Leaks
40 CFR 60 Subpart QQQ – Petroleum Refineries Wastewater Systems
40 CFR 61 Subpart FF –Benzene Waste Operations
40 CFR 63 Subpart F -- Synthetic Organic Chemical Manufacturing Industry
40 CFR 63 Subpart G - Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
40 CFR 63 Subpart Q –Industrial Process Cooling Towers
40 CFR 63 Subpart CC - Petroleum Refineries
40 CFR 63 Subpart UUU - Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units
25 PA Code 123.13b – Processes - Petroleum Refining (catalytic cracking)
25 PA Code 129.13 – Sulfur Recovery Plants
25 PA Code 129.58 – Petroleum refineries – fugitive sources
25 PA Code 129.71 – Synthetic organic chemical and polymer manufacturing – fugitive sources25 Pa Code §123.12 – Incinerators

25 Pa Code §129.12 – Sulfuric Acid Plants

25 Pa Code §129.52 – Surface Coating Processes

25 Pa Code §129.54 – Seasonal Incineration Equipment

25 Pa Code §129.59 – Bulk Gasoline Terminals

25 Pa Code §129.60 – Bulk Gasoline Plants

25 Pa Code §129.65 – Ethylene Production Plants

25 Pa Code §129.82 – Control of VOC from gasoline dispensing facilities (Stage II)

NSPS Regulations:

40 CFR 60 Subpart D – Fossil fuel steam gen. units

40 CFR 60 Subpart D(a) – Fossil fuel electric utility boilers

40 CFR 60 Subpart D(c) – Small I/C/I steam gen. units

40 CFR 60 Subpart J – Petroleum refineries –

40 CFR 60 Subpart Ja

40 CFR 60 Subpart GG – Stationary gas turbines

40 CFR 60 Subpart UU – Asphalt roofing plants (stg. blowing of non-roofing asph.)

40 CFR 60 Subpart XX – Bulk Gasoline Terminals

MACT Regulations:

40 CFR 63 Subpart R – Gasoline Distribution (no gasoline loading in refinery)

40 CFR 63 Subpart Y – Mar. Ves. Ldg. – Gaso/Crude/HAP (facility does not trigger loading volume or HAP emission triggers)

40 CFR 63 Subpart DD – Offsite Waste

The following NESHAP regulations have been streamlined as a result of the applicability of related MACT regulations.

40 CFR 61 Subpart J – Bz VHAP Lks (10%w Bz) – 40 CFR 63 Subpart H has subsumed all previous 61/J applicabilities

40 CFR 61 Subpart V – VHAP Equipment Lks – 61/V is the technical section for Subpart J (see comment above)

40 CFR 61 Subpart Y – Bz (product) Storage – 40 CFR 63 Subpart G has subsumed all previous 61/Y applicabilities

40 CFR 61 Subpart Y – Bz (product) Storage – 40 CFR 63 Subpart G has subsumed all previous 61/Y applicabilities

SECTION H. SUNOCO MARCUS HOOK REFINERY

In August 2012, certain air contaminant sources related to petroleum refining and located in Sunoco Inc.'s Marcus Hook refinery which were permitted under Title V operating permit No. 23-00001 (originally issued on November 18, 2008) and the air contaminant sources located in Sunoco's Philadelphia refinery which are permitted

under Title V operating Permit No. V95-038 were determined to be a single facility for New Source Review (NSR), Prevention of Significant Deterioration (PSD) and Title V applicability purposes in accordance with a determination that the facilities were one source. As of July 6, 2013, after the change in ownership of both Marcus Hook and Philadelphia refinery air contaminant sources as well as permanent surrender of crude refining capabilities at Marcus Hook, the two facilities are no longer considered a single facility. However, PES continues to include emissions changes to air contaminant sources at the Marcus Hook refinery that occurred prior to July 6, 2013 for NSR, PSD, and Title V applicability purposes.

* This is a State requirement and is not Federally enforceable.
** This is a Local requirement and is not Federally enforceable.