



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: April 28, 2023

Effective Date:

Revision Date:

Expiration Date:

Revision Type: Modification, Significant

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

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

TITLE V Permit No: 23-00003

Federal Tax Id - Plant Code: 45-5201144-1

Owner Information

Name: MONROE ENERGY LLC

Mailing Address: 4101 POST RD
TRAINER, PA 19061-5052

Plant Information

Plant: MONROE ENERGY LLC/TRAINER

Location: 23 Delaware County 23949 Trainer Borough

SIC Code: 2911 Manufacturing - Petroleum Refining

Responsible Official

Name: MARK SCHUCK

Title: SVP, TRAINER COMPLEX

Phone: (610) 364 - 8082

Email: Mark.Schuck@monroe-energy.com

Permit Contact Person

Name: ELIZABETH CLAPP

Title: ENV LEADER

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[Signature] _____

JILLIAN A. GALLAGHER, SOUTHEAST REGION AIR PROGRAM MANAGER



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**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
034	BOILER 9	349.600 MMBTU/HR	
		N/A	Refinery Gas
		N/A	Natural Gas
035	BOILER 10	349.600 MMBTU/HR	
		N/A	Natural Gas
		N/A	Refinery Gas
053	BOILER 14	346.900 MMBTU/HR	
090	EXISTING EMERGENCY COMPRESSION IGNITION ENGINES <500HP		
091	NEW EMERGENCY COMPRESSION IGNITION ENGINES (IC <30LITER)		
093	LPG TRUCK LOADING RACK		
101	FCC UNIT	2,167.000 BBL/HR	GAS OIL
		N/A	COKE-REGENERATO
102	CLAUS SULFUR RECOV. PLT.	3.700 Tons/HR	LIQUID SULFUR
		4.000 MCF/HR	FUEL GAS
103	MAIN FLARE	1.000 BBL/HR	PETRO. LIQUIDS
		N/A	PROCESS GAS
		4.400 MMCF/HR	Natural Gas
104	MARINE VESSEL BALLASTING	8.500 Th BBL/HR	CRUDE OIL
105	MARINE VESSEL LOADING	108.600 Th Gal/HR	GASOLINE
106	PROCESS DRAINS & H2O SEP.	7,710.000 BBL/HR	WASTEWATER
111	COOLING TOWERS	60.000 Th BBL/HR	COOLING WATER
112	PURGING & SAMPLING, ETC	8.500 Th BBL/HR	CRUDE
113	LPG RECOVERY UNIT	8.500 Th BBL/HR	CRUDE OIL
114	RACT FUGITIVE EQUIPMENT		
115	NSPS FUGITIVE EQUIPMENT		
118	RAILCAR LOADING LPG & BUTANE	N/A	LPG & BUTANE
119	PLATFORMER REGENERATOR	N/A	PLATINUM CATALYST
123	#66 EXT.FLOAT 43M BBLS	N/A	TVP< 11.1 PSIA
124	#67 EXT.FLOAT 43M BBLS	N/A	TVP< 11.1 PSIA
125	#68 EXT.FLOAT 43M BBLS	N/A	TVP< 11.1 PSIA
126	#95 EXT.FLOAT 59M BBLS	N/A	TVP< 11.1 PSIA
127	#96 EXT.FLOAT 59M BBLS	N/A	TVP< 11.1 PSIA
128	MACT FUGITIVES		
129	DISULFIDE OXIDIZER SEPARATOR VENT	1.000 Gal/HR	PETROLEUM PRODUCTS
130	PEABODY HEATER	74.000 MMBTU/HR	
		74.000 MCF/HR	NATURAL GAS
131	AWWTP EMERGENCY GENERATOR	100.000 Gal/HR	Diesel Fuel
133	BENZENE WASTE OPERATIONS		
134	#132 INT.FLOAT 15M BBLS	N/A	TVP< 11.1 PSIA
136	#151 EXT.FLOAT 53M BBLS	N/A	TVP< 11.1 PSIA

**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
137	#152 INT. FLOAT 61M BBL	N/A	TVP< 11.1 PSIA
138	#153 EXT.FLOAT 53M BBLS	N/A	TVP < 1.5 PSIA
139	#154A INT. FLOAT 105M BBLS	N/A	TVP < 13.0 PSIA
140	#155 INT. FLOAT 63M BBLS.	N/A	TVP< 11.1 PSIA
141	#156 EXT.FLOAT 53M BBLS	N/A	TVP< 11.1 PSIA
142	#157 EXT.FLOAT 77M BBLS	N/A	TVP< 1.5 PSIA
143	#159 EXT.FLOAT 79M BBLS	N/A	TVP< 11.1 PSIA
144	#161 EXT.FLOAT 86M BBLS	N/A	TVP< 11.1 PSIA
145	#162 EXT.FLOAT 82M BBLS	N/A	TVP< 11.1 PSIA
146	#163 EXT.FLOAT 82M BBLS	N/A	TVP< 11.1 PSIA
147	#164 EXT.FLOAT 83M BBLS	N/A	TVP< 11.1 PSIA
148	#165 EXT.FLOAT 82M BBLS	N/A	TVP< 11.1 PSIA
149	#166 EXT.FLOAT 83M BBLS	N/A	TVP< 11.1 PSIA
150	#168 INT. FLOAT 79M BBLS.	N/A	TVP< 11.1 PSIA
151	#169 EXT.FLOAT 78M BBLS	N/A	TVP< 11.1 PSIA
152	#170 EXT.FLOAT 71M BBLS	N/A	TVP< 11.1 PSIA
153	#171 INT. FLOAT 83M BBLS	N/A	TVP< 11.1 PSIA
154	#172 EXT.FLOAT 81M BBLS	N/A	TVP< 1.5 PSIA
155	#174 EXT.FLOAT 154M BBLS	N/A	TVP< 11.1 PSIA
156	#175 EXT.FLOAT 151M BBLS	N/A	TVP< 11.1 PSIA
157	#178 EXT.FLOAT 80M BBLS	N/A	TVP< 11.1 PSIA
160	#181 EXT.FLOAT 129M BBLS	N/A	TVP< 11.1 PSIA
161	#182 EXT.FLOAT 129M BBLS	N/A	TVP< 11.1 PSIA
162	#184 EXT.FLOAT 26M BBLS	N/A	TVP< 11.1 PSIA
163	#185 EXT.FLOAT 150M BBLS	N/A	TVP< 11.1 PSIA
164	#186 EXT.FLOAT 151M BBLS	N/A	TVP< 11.1 PSIA
165	#93 EXT.FLOAT 244M BBL	N/A	TVP< 11.1 PSIA
166	#94 EXT.FLOAT 243M BBL	N/A	TVP < 11.1 PSIA
167	#65 FIXED ROOF TANK 9 M BBL		
168	#445 FIXED ROOF TANK 7 M BBL		
180	#54 CONE ROOF TK 54M BBLS		
190	#134 INT. FLOAT 15M BBLS	N/A	TVP< 11.1 PSIA
194	#160 INT. FLOAT 85 M BBLS	85.000 Th BBL/HR	JET A KEROSENE
210	MISCELLANEOUS PROCESS VENTS		
215	NSPS NEW FUGITIVE EQUIPMENT	8.500 Th BBL/HR	CRUDE OIL
216	CONSENT DECREE FUGITIVE EQUIPMENT (2012)		
217	MACT CC MAINTENANCE VENTS		
218	MACT CC PRESSURE RELIEF DEVICES		
300	MISCELLANEOUS MACT GROUP 2 TANKS		
501	SPHEROID 501 (1.26 MM GAL)	N/A	LIGHT ISOCRACATE

**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput		Fuel/Material
502	SPHEROID 502 (1.26 MM GAL)	N/A		LIGHT ISOCRACATE
513	SPHEROID 513 (1.26 MM GAL)	N/A		LIGHT ISOCRACATE
700	HEAT EXCHANGE SYSTEMS			
701	COOLING TOWERS (CLOSED LOOP RECIRCULATING HEAT EXCHANGERS)			
702	ULSG COOLING TOWER	612,000.000	Gal/HR	COOLING WATER
730	REFORMER UNIT FUGITIVES	250.000	Tons/HR	REFORMATE
733	FCCU FEED HEATER	63.000	MMBTU/HR	
		87.000	MCF/HR	fuel gas
735	KEROSENE/HCN HTU HEATER	23.000	MMBTU/HR	
		28.000	MCF/HR	Refinery Gas
736	DIESEL HTU HEATER	39.000	MMBTU/HR	
		39.000	MCF/HR	Refinery Gas
737	NAPHTHA HDS HEATER	76.000	MMBTU/HR	
		93.000	MCF/HR	Refinery Gas
738	PLATFORMER FEED HEATER	913.000	MMBTU/HR	
		1,310.000	MCF/HR	Refinery Gas
739	ISOCRACKER 1ST STAGE HEATER.	50.000	MMBTU/HR	
		80.000	MCF/HR	Refinery Gas
740	ISOCRACKER SPLITTER RBLR	76.000	MMBTU/HR	
		109.000	MCF/HR	Refinery Gas
741	D2/VGO HYDROTREATER FEED HEATER	56.000	MMBTU/HR	
		80.000	MCF/HR	Refinery Gas
742	VCD 541 VAC HEATER	56.000	MMBTU/HR	
		80.000	MCF/HR	Refinery Gas
		100.000	MCF/HR	Natural Gas
743	VCD 542 VAC HEATER	72.000	MMBTU/HR	
		103.000	MCF/HR	Refinery Gas
		100.000	MCF/HR	Natural Gas
744	ACD 543 CRUDE HEATER	514.000	MCF/HR	Refinery Gas
745	ACD 544 CRUDE HEATER	514.000	MCF/HR	Refinery Gas
746	VCD 544 VAC HEATER	229.000	MCF/HR	Refinery Gas
747A	REACTOR EFFLUENT HEATER H-124-01 (H01)	71.760	MMBTU/HR	
		60,710.000	CF/HR	Refinery Gas
748A	STRIPPER REBOILER HEATER H-124-02 (H02)	44.200	MMBTU/HR	
		37,394.000	CF/HR	Refinery Gas
T001	MACT GROUP 1, INT FLOAT ROOF TANKS	1.000	BBL/HR	
T002	MACT GROUP 1, EXT FLOATING TANKS	1.000	BBL/HR	
T003	MACT CC GROUP 2 TANKS	1.000	BBL/HR	
T003-A	MACT CC GROUP 2 - PA CODE 129.56			
T003-B	MACT CC GROUP 2 - PA CODE 129.57			

**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
T004	RACT-ONLY EXT FLOAT ROOF TANKS	1.000 BBL/HR	
T005	EXT FLOAT NSPS KB TANKS	1.000 BBL/HR	
T006	MACT GR 1, TANKS ROUTED TO CLOSED VENT SYS		
T007	INTERNAL FLOAT NSPS KB TANKS	1.000 BBL/HR	
C01	CO BOILER		
C02	RESEARCH COTTRELL ESP		
C03	SCOT TAIL GAS TREATER		
C04	WASTEWATER WATER OIL SEPARATOR. (1)		
C053-1	LNB & FGR (BOILER 14)		
C053-2	SCR (BOILER 14)		
C053-3	OXIDATION CATALYST (BOILER 14)		
C06	HYDROGEN CHLORIDE ABSORPTION SYSTEM		
C07	LNB & FGR (BOILER 9)		
C08	SCR (BOILER 9)		
C09	CO CATALYST (BOILER 9)		
C10	LNB & FGR (BOILER 10)		
C101-3	FCCU SELECTIVE NON-CATALYTIC REDUCTION SYSTEM		
C101-4	FCCU WET GAS SCRUBBER		
C102	SRU INCINERATOR		
C103	MAIN FLARE		
C106	CARBON CANISTERS		
C11	SCR (BOILER 10)		
C12	CO CATALYST (BOILER 10)		
C701	COOLING TOWER DRIFT ELIMINATORS		
C702	COOLING TOWER DRIFT ELIMINATORS		
C733	FCCU FEED HEATER ULTRA-LOW NOX BURNERS		
C746	544 VACUUM HEATER ULTRA-LOW NOX BURNERS		
FM002	NORTH SIDE FUEL GAS SYSTEM (RFG)		
FM003	NAPHTHA FUEL GAS SYSTEM		
FM004	ISO LPS FUEL GAS SYSTEM		
FM005	NATURAL GAS		
FM006	AMINE FUEL GAS SYSTEM		
FM007	DIESEL FUEL		
S01	FCC STACK		
S02	CLAUS SULFUR STACK		
S03	MAIN FLARE STACK		
S034	BOILER 9 STACK		
S035	BOILER 10 STACK		
S053	BOILER 14 STACK		
S090	EXISTING EMERGENCY CI ENGINES <500 HP		

**SECTION A. Site Inventory List**

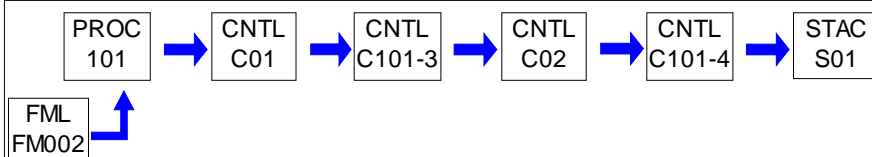
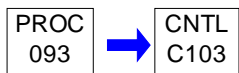
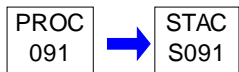
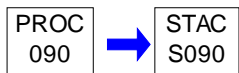
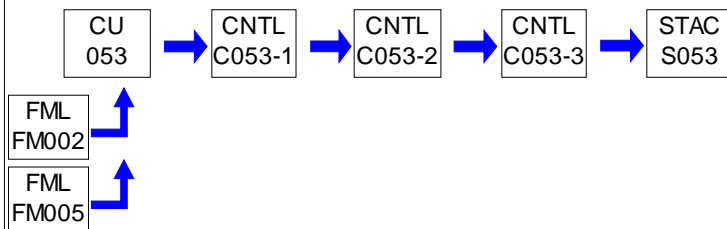
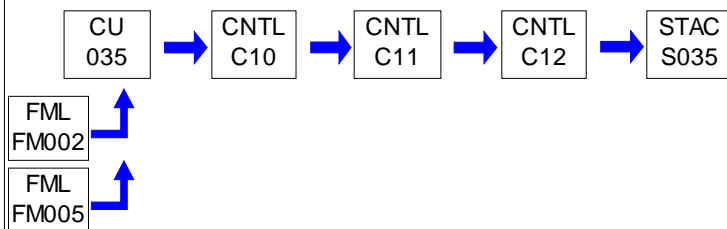
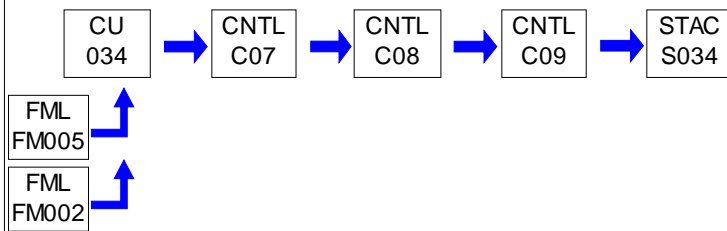
Source ID	Source Name	Capacity/Throughput	Fuel/Material
	STACKS		
S091	NEW EMERGENCY CI ENGINES<30 LITERS STACK		
S106	WWTP CARBON CANISTER STACK		
S131	AWWTP GENERATOR STACK		
S14	KEROSENE HTU STACK		
S15	DIESEL HTU STACK		
S16	NAPTHA HDS STACK		
S17	PLATFORMER HEATER STACK		
S18	PLATFORMER HEATER STACK		
S19	ISOCRACKER 1ST STAGE STK		
S20	ISOCRACKER SPLITTER STACK		
S21	D2/VGO HYDROTREAT FEED HEATER STACK		
S210	MISCELLANEOUS PROCESS VENTS		
S22	VCD 541 VAC STACK		
S23	VCD 542 VAC STACK		
S24	ACD 543 CRUDE HEATER STK		
S25	ACD 544 CRUDE HTR STK		
S26	VCD 544 HEATER STACK		
S27	PLATFORMER REGEN STACK		
S34	ACD 543 CRUDE HTR STACK		
S35	ACD 544 CRUDE HTR STACK		
S733	FCCU FEED HEATER STACK		
S747A	REACTOR EFFLUENT HEATER H-124-01 (H01) STACK		
S748A	STRIPPER REBOILER HEATER H-124-02 (H02) STACK		
ST006	T006 TANKS ROUTED TO CLOSED VENT SYS		
Z01	BALLASTING FUGITIVES		
Z02	VESSEL LOADING FUGITIVES		
Z03	DRAINS AND WASTEWATER FUGITIVES		
Z04	STATE/NSPS FUGITIVES		
Z05	VALVE & FLANGE FUG.		
Z07	COOLING TOWER FUG.		
Z08	PURGE & SAMPLE FUG.		
Z13	TANKS 66 FUGITIVES		
Z139	TANK 139 FUGITIVES		
Z14	TANK 67 FUGITIVES		
Z15	TANK 68 FUGITIVES		
Z16	TANK 95 FUGITIVES		
Z17	TANK 96 FUGITIVES		
Z18	RAILCAR LOADING FUGITIVES		
Z216	CONSENT DECREE FUGITIVE EQUIPMENT		

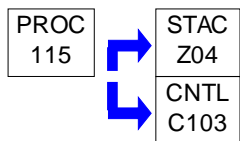
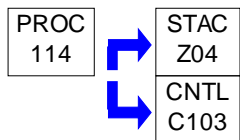
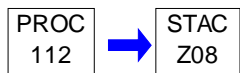
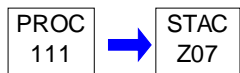
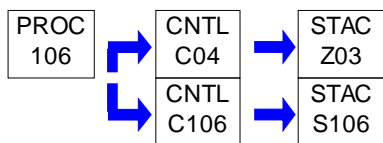
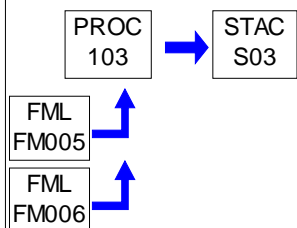
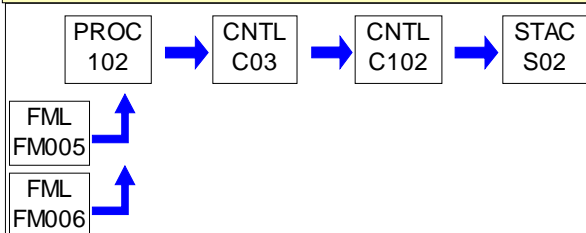
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
	EMISSIONS		
Z217	MACT CC MAINTENCE VENTS FUGITIVE EMISSIONS		
Z218	MACT CC PRESSURE RELIEF DEVICES EMISSIONS		
Z24	TANK 132 FUGITIVES		
Z26	TANK 151 FUGITIVES		
Z27	TANK 152 FUGITIVES		
Z28	TANK 153 FUGITIVES		
Z30	TANK 155 FUGITIVES		
Z31	TANK 156 FUGITIVES		
Z32	TANK 157 FUGITIVES		
Z33	TANK 159 FUGITIVES		
Z34	TANK 161 FUGITIVES		
Z35	TANK 162 FUGITIVES		
Z36	TANK 163 FUGITIVES		
Z37	TANK 164 FUGITIVES		
Z38	TANK 165 FUGITIVES		
Z39	TANK 166 FUGITIVES		
Z40	TANK 168 FUGITIVES		
Z41	TANK 169 FUGITIVES		
Z42	TANK 170 FUGITIVES		
Z43	TANK 171 FUGITIVES		
Z44	TANK 172 FUGITIVES		
Z45	TANK 174 FUGITIVES		
Z46	TANK 175 FUGITIVES		
Z47	TANK 178 FUGITIVES		
Z50	TANK 181 FUGITIVES		
Z51	TANK 182 FUGITIVES		
Z52	TANK 184 FUGITIVES		
Z53	TANK 185 FUGITIVES		
Z54	TANK 186 FUGITIVES		
Z65	93 TANK FUGITIVES		
Z66	#94 TANK FUGITIVES		
Z701	COOLING TOWER EXHAUST		
Z702	COOLING TOWER FUGITIVES		
Z79	#54 CONE ROOF FUGITIVES		
Z80	#134 CONE ROOF FUGITIVES		
Z84	#160 CONE ROOF FUGITIVES		
Z87	REFORMATE FUGITIVES		
ZT001	T001 FUGITIVE EMISSIONS		
ZT002	T002 FUGITIVE EMISSIONS		
ZT003	T003 FUGITIVE EMISSIONS		

**SECTION A. Site Inventory List**

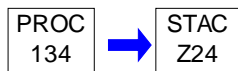
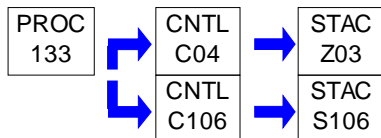
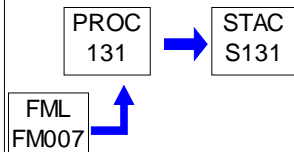
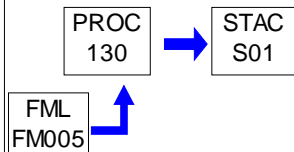
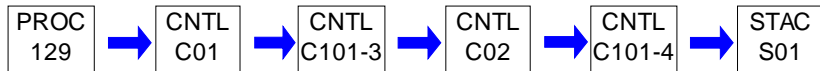
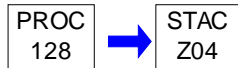
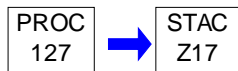
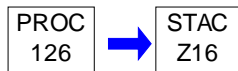
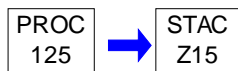
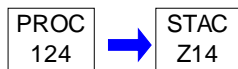
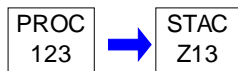
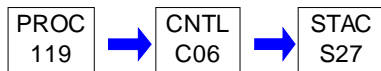
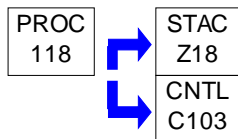
Source ID	Source Name	Capacity/Throughput	Fuel/Material
ZT004	T004 FUGITIVE EMISSIONS		
ZT005	T005 FUGITIVE EMISSIONS		
ZT007	T007 FUGITIVE EMISSIONS		

PERMIT MAPS

**PERMIT MAPS**



PERMIT MAPS



**PERMIT MAPS**

PROC
136 → STAC
Z26

PROC
137 → STAC
Z27

PROC
138 → STAC
Z28

PROC
139 → STAC
Z139

PROC
140 → STAC
Z30

PROC
141 → STAC
Z31

PROC
142 → STAC
Z32

PROC
143 → STAC
Z33

PROC
144 → STAC
Z34

PROC
145 → STAC
Z35

PROC
146 → STAC
Z36

PROC
147 → STAC
Z37

PROC
148 → STAC
Z38

PROC
149 → STAC
Z39

PROC
150 → STAC
Z40

**PERMIT MAPS**

PROC
151 → STAC
Z41

PROC
152 → STAC
Z42

PROC
153 → STAC
Z43

PROC
154 → STAC
Z44

PROC
155 → STAC
Z45

PROC
156 → STAC
Z46

PROC
157 → STAC
Z47

PROC
160 → STAC
Z50

PROC
161 → STAC
Z51

PROC
162 → STAC
Z52

PROC
163 → STAC
Z53

PROC
164 → STAC
Z54

PROC
165 → STAC
Z65

PROC
166 → STAC
Z66

PROC
180 → STAC
Z79



PERMIT MAPS

PROC
190 → STAC
Z80

PROC
194 → STAC
Z84

PROC
210 → STAC
S210

PROC
215 → STAC
Z04
CNTL
C103

PROC
216 → STAC
Z216

PROC
217 → CNTL
C103
STAC
Z217

PROC
218 → STAC
Z218

PROC
501 → STAC
S03
CNTL
C103

PROC
502 → STAC
S03
CNTL
C103

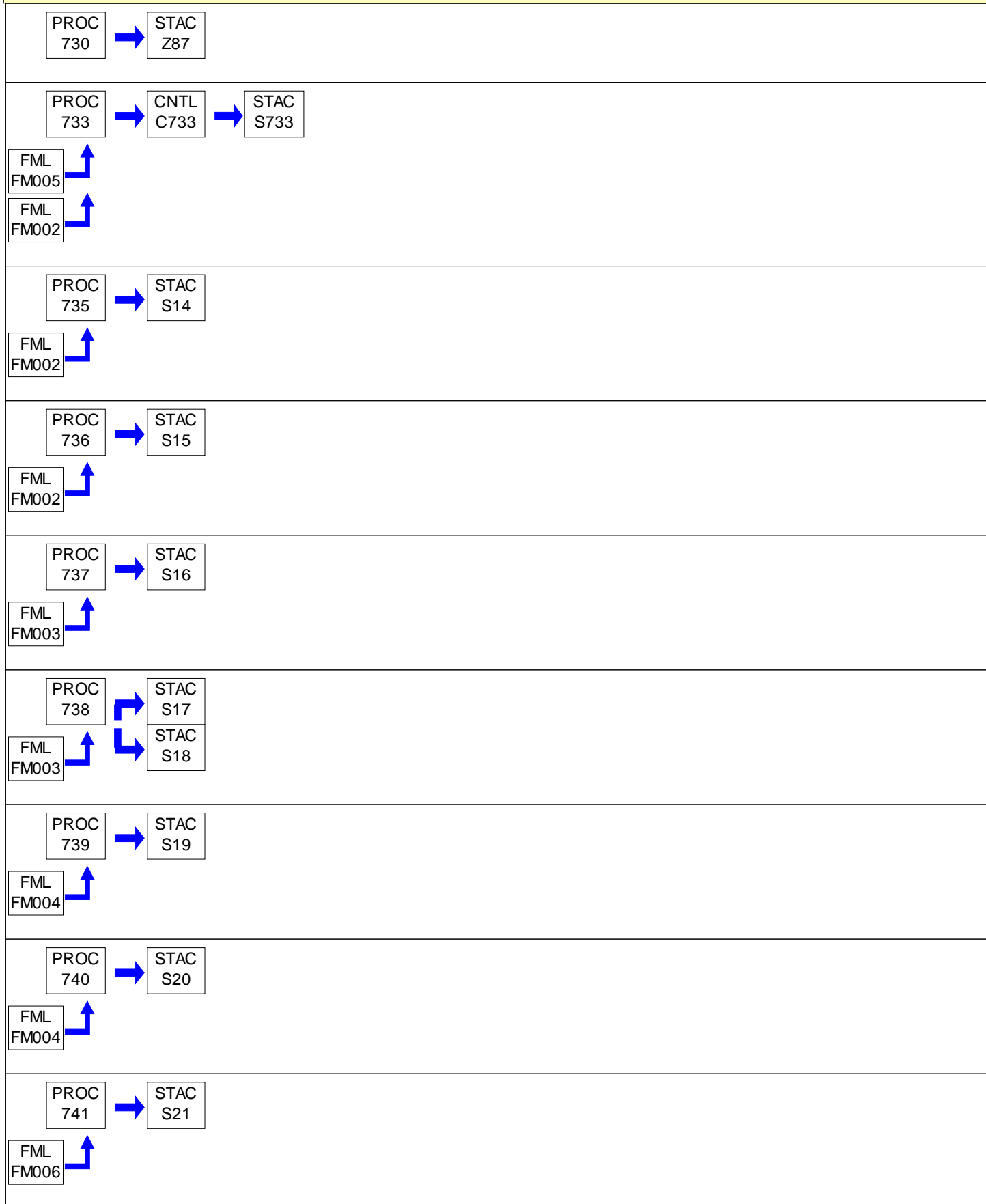
PROC
513 → STAC
S03
CNTL
C103

PROC
701 → CNTL
C701 → STAC
Z701

PROC
702 → CNTL
C702 → STAC
Z702

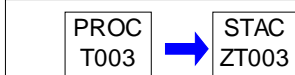
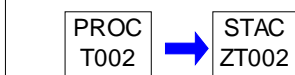
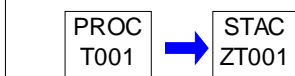
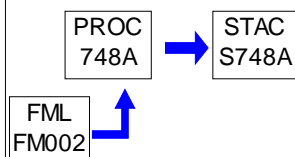
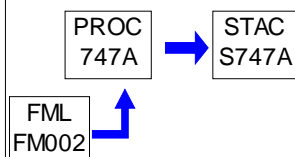
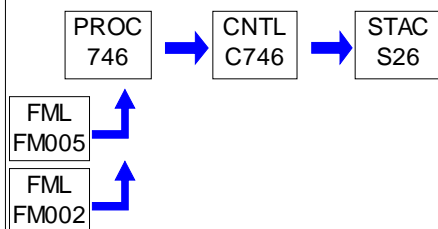
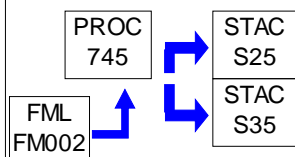
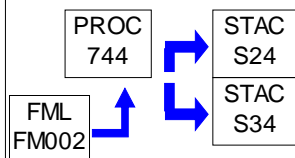
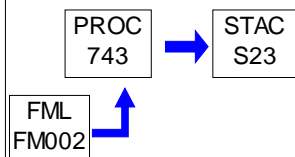
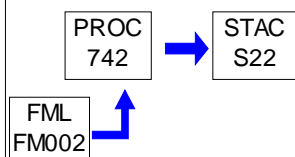


PERMIT MAPS





PERMIT MAPS



**PERMIT MAPS**

PROC
T004 → STAC
ZT004

PROC
T005 → STAC
ZT005

PROC
T006 → STAC
ST006
CNTL
C103

PROC
T007 → STAC
ZT007

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(1) The Department determines that no other change in the permit is necessary;

(2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit

**SECTION B. General Title V Requirements**

responsibility, coverage and liability between the current and the new permittee; and,

(3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.

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

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

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

(1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

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

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

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

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

(1) Enforcement action

(2) Permit termination, revocation and reissuance or modification

(3) Denial of a permit renewal application

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

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

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

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

#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]**Duty to Provide Information**

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements****#013 [25 Pa. Code § 127.522(a)]****Operating Permit Application Review by the EPA**

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

R3_Air_Apps_and_Notices@epa.gov

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

#014 [25 Pa. Code § 127.541]**Significant Operating Permit Modifications**

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

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

**SECTION B. General Title V Requirements****#018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]****Fee Payment**

- (a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees). The applicable fees shall be made payable to "The Commonwealth of Pennsylvania Clean Air Fund" with the permit number clearly indicated and submitted to the respective regional office.
- (b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.
- (c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.
- (d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).
- (e) The permittee shall pay an annual operating permit maintenance fee according to the following fee schedule established in 25 Pa. Code § 127.704(d) on or before December 31 of each year for the next calendar year.
- (1) Eight thousand dollars (\$8,000) for calendar years 2021—2025.
 - (2) Ten thousand dollars (\$10,000) for calendar years 2026—2030.
 - (3) Twelve thousand five hundred dollars (\$12,500) for the calendar years beginning with 2031.

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

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

- (1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.
- (2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

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

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

- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of

**SECTION B. General Title V Requirements**

oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM₁₀ from a single source during the term of the permit and 3.0 tons of PM₁₀ at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

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

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

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this

**SECTION B. General Title V Requirements**

permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

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

#024 [25 Pa. Code § 127.513]**Compliance Certification**

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

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

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department in accordance with the submission requirements specified in Section B, Condition #022 of this permit. The Title V compliance certification shall be emailed to EPA at R3_APD_Permits@epa.gov.

#025 [25 Pa. Code §§ 127.511 & Chapter 135]**Recordkeeping Requirements**

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

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

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

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

**SECTION B. General Title V Requirements****#026 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]****Reporting Requirements**

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

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

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

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

#027 [25 Pa. Code § 127.3]**Operational Flexibility**

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

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

#028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]**Risk Management**

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

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

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

**SECTION B. General Title V Requirements**

- (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
- (ii) The date on which a regulated substance is first present above a threshold quantity in a process.
- (2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.
- (3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.
- (c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.
- (d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:
 - (1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,
 - (2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.
- (e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.
- (f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:
 - (1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.
 - (2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Section B, Condition #026 of this permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

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

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

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

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

- (1) The applicable requirements are included and are specifically identified in this permit.
- (2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

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

- (1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.
- (2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

- (1) Construction or demolition of buildings or structures.
- (2) Grading, paving and maintenance of roads and streets.
- (3) Use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets.
- (4) Clearing of land.
- (5) Stockpiling of materials.
- (6) Open burning operations, as specified in 25 Pa. Code § 129.14.
- (7) N/A
- (8) N/A
- (9) Sources and classes of sources other than those identified in (1)-(8) of this condition, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:

- (i) The emissions are of minor significance with respect to causing air pollution; and
- (ii) The emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

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

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

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

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

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

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

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

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

The opacity limitations as per 25 Pa. Code § 123.41 shall not apply to a visible emission in any of the following instances:

- (a) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a) (1) – (8) (relating to prohibition of certain fugitive emissions).

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

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

**SECTION C. Site Level Requirements**

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

Fuel Restriction(s).**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall not burn fuel oil in any combustion devices except during period of natural gas curtailment, test runs, or operator training. This does not limit the permittee's ability to burn Torch Oil in the FCCU.

For the purpose of this condition, fuel oil is defined as any liquid fossil fuel with a sulfur content of greater than 0.05% sulfur, by weight.

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

- (a) If at any time the Department has cause to believe that air contaminant emissions from any source 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 tests deemed necessary by DEP to determine the actual emission rate(s).
- (b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139 and the most current version of the Department's Source Testing Manual, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.
- (c) At least ninety (90) days prior to the test, the company shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.
- (d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.
- (e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), one electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.
- (f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

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

- (a) The permittee shall email all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

**SECTION C. Site Level Requirements**

Southeast Region
RA-EPSEstacktesting@pa.gov

Central Office
RA-EPstacktesting@pa.gov

(b) The following pertinent information shall be listed on the title page.

1. Test Date(s)

- a. For protocols, provide the proposed date on which testing will commence or "TBD"
- b. For reports, provide the first and last day of testing

2. Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF ID under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

3. Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but "Other Id" is used in DEP electronic systems. They are the same number and must also be listed for control equipment

4. Testing Requirements (all that apply)

- a. Plan approval number(s)
- b. Operating permit number
- c. Applicable federal subpart(s) (i.e. 40 CFR 60, Subpart JJJJ)
- d. Special purpose(s) (Consent Order, RFD, RACT II, Tier II, etc.)

(c) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a "Public Copy" or "Confidential Copy" and each page of the latter must be marked "CONFIDENTIAL".

III. MONITORING REQUIREMENTS.**# 010 [25 Pa. Code §123.43]****Measuring techniques**

Visible emissions may be measured using either of the following:

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

011 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

- (a) The permittee shall operate and maintain the Department certified continuous monitor for hydrogen sulfide for all sources that are subject to 40 C.F.R. Part 60, Subpart J.
- (b) The permittee, on a daily basis, shall monitor the heating value of the refinery fuel gas using gas chromatography, calorimeter or another Department approved method. The permittee may apply to the Department to change the monitoring schedule based upon the results of the daily monitoring.
- (c) The permittee shall monitor the facility, once per operating day, for the following:
 - (1) Odors which may be objectionable (as per 25 Pa. Code §123.31).
 - (2) Visible Emissions (as per 25 Pa. Code §§123.41 and 123.42).
 - (3) Fugitive Particulate Matter (as per 25 Pa. Code §§ 123.1 and 123.2).

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(d) Objectionable odors, which may cause annoyance or discomfort to the public, as well as fugitive particulate emissions, and visible emissions that are caused by or may be caused by operations at the site shall:

- (1) Be investigated;
- (2) Be reported to the facility management, or individual(s) designated by the permittee;
- (3) Have appropriate corrective action taken (for emissions that originate on-site); and
- (4) Be recorded in a permanent written log.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.658]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Fenceline monitoring provisions****Fenceline Monitoring Provisions --**

(a) The permittee shall conduct sampling along the facility property boundary and analyze the samples in accordance with Methods 325A and 325B of Appendix A of 40 CFR Part 63 and 40 CFR Sections 63.658(b) through (k).

(b) The target analyte is benzene.

(c) The permittee shall determine passive monitor locations in accordance with Section 8.2 of Method 325A of Appendix A of 40 CFR Part 63 and in accordance with 40 CFR Sections 63.658(c)(1) through (4).

(d) The permittee shall collect and record meteorological data according to the applicable requirements in 40 CFR Sections 63.658(d)(1) through (3).

(e) The permittee shall use a sampling period and sampling frequency as specified in 40 CFR Sections 63.658(e)(1) through (3).

(f) Within 45 days of completion of each sampling period, the permittee shall determine whether the results are above or below the action level as specified in 40 CFR Sections 63.658(f)(1) through (3).

(g) Within 5 days of determining that the action level has been exceeded for any annual average (delta c) and no longer than 50 days after completion of the sampling period, the permittee shall initiate a root cause analysis to determine the cause of such exceedance and to determine appropriate corrective action, such as those described in 40 CFR Sections 63.658(g)(1) through (4). The root cause analysis and initial corrective action analysis shall be completed and initial corrective actions taken no later than 45 days after determining there is an exceedance. Root cause analysis and corrective action may include, but is not limited to that specified at 40 CFR Sections 63.658(g)(1) through (4):

(h) If, upon completion of the corrective action analysis and corrective actions such as those described in 40 CFR Section 63.658(g), the (delta c) value for the next 14-day sampling period for which the sampling start time begins after the completion of the corrective actions is greater than 9 µg/m³ or if all corrective action measures identified require more than 45 days to implement, the permittee shall develop a corrective action plan that describes the corrective action(s) completed to date, additional measures that the permittee proposes to employ to reduce fenceline concentrations below the action level, and a schedule for completion of these measures. The permittee shall submit the corrective action plan to the Administrator within 60 days after receiving the analytical results indicating that the delta c value for the 14-day sampling period following the completion of the initial corrective action is greater than 9 µg/m³ or, if no initial corrective actions were identified, no later than 60 days following the completion of the corrective action analysis required in 40 CFR Section 63.658(g).

(i) The permittee may request approval from the Administrator for a site-specific monitoring plan to account for offsite upwind sources or onsite sources excluded under 40 CFR Section 63.640(g) according to the requirements in 40 CFR Sections 63.658(i)(1) through (4).

(j) The permittee shall comply with the applicable recordkeeping and reporting requirements in 40 CFR Sections 63.655(h) and (i).

(k) As outlined in 40 CFR Section 63.7(f), the permittee may submit a request for an alternative test method. At a minimum,

**SECTION C. Site Level Requirements**

the request must follow the requirements outlined in 40 CFR Sections 63.658(k)(1) through (7).

IV. RECORDKEEPING REQUIREMENTS.**# 013 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

(a) The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

- (1) Date, time, and location of the incident(s).
- (2) To the extent known, identification of the primary cause of the event.
- (3) The corrective action taken, if necessary, to abate the situation and prevent future occurrences.

(b) The permittee shall, on a daily basis, keep a record of the heating value of the refinery fuel gas that is combusted.

(c) The permittee shall keep records of emission calculations, on a monthly and 12-month rolling basis, for each pollutant that has an emission(s) limit under each Source ID listed in Section D of this TVOP, and supporting records and/or documents such as, but not limited to, the following:

- (1) CMS data;
- (2) Emission factor(s) from the latest stack test(s), LDAR results, AP-42, and/or annual/bi-annual/5-yr tune-up results;
- (3) Operating hours, production rates, fuel usages, fuel heating values, etc.

(d) The permittee shall record greenhouse gas emissions (CO₂, CH₄, N₂O), including any relevant emissions data, from all stationary fuel combustion sources at the facility as part of compliance with the GHG Mandatory Reporting Rule.

(e) For fence-line monitoring systems subject to 40 C.F.R. §63.658, each owner or operator shall keep the records specified at 40 C.F.R. § 63.655(i)(8)(i) through(x) on an ongoing basis.

014 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

The owner and operator of an air contamination source subject to 129.115 and § § 129.111—129.114 shall keep records to demonstrate compliance with § § 129.111—129.114 in accordance with the applicable regulations in 25 Pa. Code, Part I, Subpart C, Article III (relating to air resources) and as specified in the operating permit or plan approval for the air contamination source as follows:

- (1) The records shall include sufficient data and calculations to demonstrate that the requirements of § § 129.111—129.114 are met.
- (2) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.

V. REPORTING REQUIREMENTS.**# 015 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department at 484-250-5920. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by

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improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

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

(c) The report shall describe the following:

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

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

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

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

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

016 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

The permittee shall submit the following reports:

- (1) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #26 of section B of this permit.
- (2) A semi annual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

017 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

The owner and operator of an air contamination source subject to 129.115 and § § 129.111—129.114 shall keep records to demonstrate compliance with § § 129.111—129.114 and submit reports to the Department or appropriate approved local air pollution control agency in accordance with the applicable regulations in 25 Pa. Code, Part I, Subpart C, Article III (relating to air resources) and as specified in the operating permit or plan approval for the air contamination source as follows:

- (1) The records shall include sufficient data and calculations to demonstrate that the requirements of § § 129.111—129.114 are met.

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(2) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.

(3) The records necessary to determine compliance shall be reported to the Department or appropriate approved local air pollution control agency on a schedule specified in the applicable regulation or as otherwise specified in the operating permit or plan approval for the air contamination source.

018 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

The records necessary to determine compliance shall be reported to the Department or appropriate approved local air pollution control agency on a schedule specified in the applicable regulation or as otherwise specified in the operating permit for the air contamination source.

019 [40 CFR Part 61 NESHAPs §40 CFR 61.145]**Subpart M--National Emission Standard for Asbestos
Standard for demolition and renovation.**

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

In the event that the permittee performs any demolition/renovation of asbestos containing material, as defined in 40 C.F.R. 61, Subpart M, for which advance notification is required pursuant to such regulations, then the permittee shall provide the Department with notification prior to any such demolition/renovation in accordance with the notification provisions of 40 C.F.R. 61, Subpart M.

020 [40 CFR Part 63 NESHAPs for Source Categories §40 CFR 63.655]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Reporting and recordkeeping requirements.**

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

(a) As per 40 C.F.R. §63.655(e), the permittee shall submit the reports listed in (a)(i) and (ii), below, and shall keep records as described in 40 C.F.R. § 63.655(i).

(i) Periodic reports as described in 40 C.F.R. § 63.655(g).

(ii) Other reports described in 40 C.F.R. § 63.655(h).

(b) Reports shall be submitted, as specified in 40 C.F.R. Part 63, Subpart A and as follows:

(i) The permittee shall submit the information specified in 40 CFR § 63.10(b) and Table 6 of 40 CFR Part 63, Subpart CC, as applicable. For each new, modified, or reconstructed source subject to 40 C.F.R. Part 63, Subpart CC, the information shall be submitted with the application for approval of construction or reconstruction for the new, modified, or reconstructed source required by 40 C.F.R. § 63.5(d). The information may be submitted in an operating permit application, in an amendment to an operating permit application, or in a separate submittal.

(1) The determination of applicability of this subpart to petroleum refining process units that are designed and operated as flexible operation units.

(2) The determination of applicability of this subpart to any storage vessel for which use varies from year to year.

(3) The determination of applicability of this subpart to any distillation unit for which use varies from year to year.

021 [40 CFR Part 63 NESHAPs for Source Categories §40 CFR 63.655]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Reporting and recordkeeping requirements.**

For fence-line monitoring systems subject to 40 CFR Section 63.658, each owner or operator shall submit the information in 40 CFR Section 63.555 (h)(8)(i) - (viii) to EPA's Compliance and Emissions Data Reporting Interface (CEDRI) within 45 days after the end of each reporting period. Reporting shall be on a quarterly basis and as described in 40 CFR Section 63.555(h)(8).

**SECTION C. Site Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 022 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

A person responsible for any source specified in 25 Pa. Code §123.1 shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

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

023 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

- (a) The permittee shall ensure that the source(s) and air pollution control device(s) listed in this permit are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturers' specifications, unless otherwise specifically provided elsewhere in this permit.
- (b) The permittee may not modify any air contaminant system identified in Section A, of this permit, prior to obtaining Department approval, except those modifications authorized by Condition #019(g), of Section B, of this permit.
- (c) The permittee shall immediately, upon discovery, implement measures, which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A, of this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.

024 [25 Pa. Code §129.55]**Petroleum refineries--specific sources**

- (a) Wastewater separators. No person may permit the use of a compartment of a single or multiple compartment volatile organic compound wastewater separator which compartment receives effluent water containing 200 gallons a day or more of any volatile organic compound from equipment processing, refining, treating, storing or handling volatile organic compounds unless the compartment is equipped with one of the following vapor loss control devices—properly installed, in good working order, and in operation—as follows:
 - (1) A container having openings sealed and totally enclosing the liquid contents. Gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
 - (2) A container equipped with a floating roof—consisting of a pontoon-type roof, double-deck-type roof or internal floating cover—which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and container wall. Gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.
- (b) Pumps and compressors. Pumps and compressors handling volatile organic compounds with a vapor pressure of greater than 1.5 psi (10.3 kilopascals) at actual conditions shall have mechanical seals. For the purpose of determining vapor pressure, a temperature no greater than 100° F shall be used.
- (c) Vacuum-producing systems. Vacuum producing systems shall conform with the following:
 - (1) The owner or operator of any vacuum-producing systems at a petroleum refinery may not permit the emission of volatile organic compounds from the condensers, hot wells or accumulators of the system.

**SECTION C. Site Level Requirements**

(2) The emission limit under paragraph (1) shall be achieved by one of the following:

(i) Piping the vapors to a firebox or incinerator.

(ii) Compressing the vapors and adding them to the refinery fuel gas.

(iii) A method approved by the Department which recovers no less than 90% by weight of uncontrolled volatile organic compounds that would otherwise be emitted to the atmosphere.

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

025 [25 Pa. Code §129.62]**General standards for bulk gasoline terminals/plants, and small gasoline storage tanks**

Gasoline may not be spilled or discarded in sewers or stored in open containers or handled in a manner that would result in uncontrolled evaporation to the atmosphere.

026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.647]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Wastewater provisions.**

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

As defined in 40 C.F.R. § 63.641, all Group 1 wastewater streams shall comply with the requirements of 40 C.F.R. §§ 61.340 through 61.355 for each process wastewater stream that meets the definition in 40 C.F.R. § 63.641.

VII. ADDITIONAL REQUIREMENTS.**# 027 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall reduce emissions of Class I and Class II refrigerants during the service, maintenance, repair and disposal of equipment in accordance with the requirements of 40 C.F.R. 82, Subpart F recycling and emissions reduction.

028 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall comply with all of the existing requirements of the renewed Title V Operating Permit No. 23-00003, and Plan Approval Nos. 23-0003Z and 23-0003AF.

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

[Additional authority for this condition is also derived from 25 Pa. Code §§127.208 and 127.210].

(a) The permittee shall use and transfer Emission Reduction Credits (ERCs) in accordance with 25 Pa. Code § 127.208.

(b) Plan Approval 23-0003Z authorizes the transfer and use of 25.0 tons of VOC ERC for offset purpose at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

(1) The 25.0 tons of VOC ERC were generated from the shutdown sources at Element Markets, LLC, Baltimore, Maryland State, on January 17, 2007. These VOC ERCs were certified by Maryland State Department of the Environment on April 30, 2008. These VOC ERC were owned by Element Markets, LLC. prior to this transfer.

(2) Monroe Energy, LLC is a holder of the 25.0 tons VOC ERC. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).

(3) Pursuant to 25 Pa. Code §127.208(2), upon the issuance of this amended Plan Approval, the 25.0 tons of VOC ERCs, not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code §127.206(f), except as specified in 25 Pa. Code §127.206(g). If the 25.0 tons VOC ERC identified in this Plan Approval are

**SECTION C. Site Level Requirements**

not used and are subsequently reentered into the ERC registry, these VOC ERC will expire on January 17, 2017.

(c) Plan Approval 23-0003Z authorizes the transfer and use of 25.73 tons of VOC ERC for offset purpose at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

(1) The 25.73 tons of VOC ERCs were generated from the shutdown sources at Foamex L.P. facility in Eddystone, Delaware County, Pennsylvania State, on December 31, 2008. These VOC ERCs were certified by DEP on March 9, 2009. These VOC ERCs were owned by Element Markets, LLC. prior to this transfer.

(2) Monroe Energy, LLC is a holder of the 25.73 tons VOC ERCs. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).

(3) Pursuant to 25 Pa. Code §127.208(2), upon the issuance of this amended Plan Approval, the 25.73 tons of VOC ERCs, not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code §127.206(f), except as specified in 25 Pa. Code §127.206(g). If the 25.73 tons VOC ERCs identified in this Plan Approval are not used and are subsequently reentered into the ERCs registry, these VOC ERCs will expire on December 31, 2018.

(d) Plan Approval 23-0003Z authorizes the transfer and use of 24.20 tons of VOC ERCs for offset purpose at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

(1) The 24.20 tons of VOC ERC were generated from the shutdown sources at Philadelphia Baking Company in Philadelphia City, Pennsylvania State, on September 21, 2007. These VOC ERCs were certified by DEP on September 22, 2008. These VOC ERCs were owned by Element Markets, LLC. prior to this transfer.

(2) Monroe Energy, LLC is a holder of the 24.20 tons VOC ERCs. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).

(3) Pursuant to 25 Pa. Code §127.208(2), upon the issuance of this amended Plan Approval, the 24.20 tons of VOC ERCs, not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code §127.206(f), except as specified in 25 Pa. Code §127.206(g). If the 24.20 tons VOC ERCs identified in this Plan Approval are not used and are subsequently reentered into the ERC registry, these VOC ERC will expire on September 21, 2017.

(e) Plan Approval 23-0003Z authorizes the transfer and use of 11.18 tons of VOC ERCs for offset purpose at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

(1) The 11.18 tons of VOC ERC were generated from the shutdown sources at New York Organic Fertilizer Company (NYOFCO) in Bronx, New York State on July 2, 2010. These VOC ERCs were certified by NYSDEC. These VOC ERCs were owned by NYOFCO prior to this transfer.

(2) Monroe Energy, LLC will be a holder of the 11.18 tons VOC ERCs pending on the final transfer approved by both New York State DEC and the Department. Monroe Energy, LLC will be the holder of the 11.18 tons VOC ERCs effective on the date when the transfer is approved by the Department. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).

(3) Pursuant to 25 Pa. Code §127.208(2), upon the issuance of this amended Plan Approval, the 11.18 tons of VOC ERCs, not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code §127.206(f), except as specified in 25 Pa. Code §127.206(g). If the 11.18 tons VOC ERCs identified in this Plan Approval are not used and are subsequently reentered into the ERC registry, these VOC ERC will expire on July 2, 2020.

(f) Plan Approval 23-0003Z authorizes the transfer and use of 4.07 tons of VOC ERCs for offset purpose at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

(1) The 4.07 tons of VOC ERC were generated from the shutdown sources at PE Bayshore LLC, in Bay Shore, New York State on September 19, 2014. These VOC ERCs were certified by NYSDEC. These VOC ERCs were owned by Element Markets, LLC prior to this transfer.

(2) Monroe Energy, LLC will be a holder of the 4.07 tons VOC ERCs pending on the final transfer approved by both New York State DEC and the Department. Monroe Energy, LLC will be the holder of the 4.07 tons VOC ERCs effective on the date when the transfer is approved by the Department. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).

(3) Pursuant to 25 Pa. Code §127.208(2), upon the issuance of this amended Plan Approval, the 4.07 tons of VOC ERCs,

**SECTION C. Site Level Requirements**

not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code §127.206(f), except as specified in 25 Pa. Code §127.206(g). If the 4.07 tons VOC ERCs identified in this Plan Approval are not used and are subsequently reentered into the ERC registry, these VOC ERC will expire on September 19, 2024.

(g) Offset ratios - Plan Approval 23-0003Z:

- (1) The 5-year aggregated VOC emission increases including this project are 69.37 tons.
- (2) The permittee shall provide VOC ERCs at a 1.3:1.0 ratio to offset the net emission increase of 69.37 tons as per 25 Pa. Code §§127.205(3) and 127.210. The required VOC ERCs are 90.18 tons.
- (3) The permittee has provided a total of 90.18 tons VOC ERCs through ERC purchasing and transferring approved by the Department.

(h) Plan Approval 23-0003AC authorizes the transfer and use of 47.0 tons of NOx ERCs for offset purposes at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

- (1) The 47.0 tons of NOx ERC were generated from the shutdown of the FMC Corporation facility at 1701 East Patapsco Avenue, Baltimore, Maryland 21226, on June 2, 2008. These NOx ERCs were certified by Maryland State Department of the Environment on August 16, 2010. These NOx ERCs were owned by FMC Corporation prior to this transfer.
- (2) Monroe Energy, LLC is a holder of the 47.0 tons NOx ERCs. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).
- (3) Pursuant to 25 Pa. Code § 127.208(2), upon the issuance of this amended Plan Approval, the 47.0 tons of NOx ERCs, not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code § 127.206(f), except as specified in 25 Pa. Code § 127.206(g). If the 47.0 tons NOx ERCs identified in this Plan Approval are not used and are subsequently reentered into the ERC registry, these NOx ERC will expire on June 2, 2018.

(i) Offset ratios - Plan Approval 23-0003AC:

- (1) The 10-year aggregated NOx emission increase including this project is 35.40 tons.
- (2) The permittee shall provide NOx ERCs at a 1.3:1 ratio to offset the net emission increase of 35.40 tons as per 25 Pa. Code § 127.210. The required NOx ERCs are 47.0 tons.
- (3) The permittee has provided a total of 47.0 tons NOx ERCs through ERC purchasing and transferring approved by the Department.

(j) Plan Approval 23-0003AD authorizes the transfer and use of 9.42 tons of VOC ERCs for offset purposes at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

- (1) The 9.42 tons of VOC ERCs were generated from the shutdown of sources at the Glenwood Combustion Turbine facility located Shore Road, in Glenwood Landing, NY, on July 1, 2012. These VOC ERCs were certified by the New York State Department of Environmental Conservation on January 11, 2016. These VOC ERCs were owned by Elements Markets, LLC prior to this transfer.
- (2) Monroe Energy, LLC will be a holder of the 9.42 tons VOC ERCs. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).
- (3) Pursuant to 25 Pa. Code § 127.208(2), upon the issuance of this amended Plan Approval, the 9.42 tons of VOC ERCs, not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code § 127.206(f), except as specified in 25 Pa. Code § 127.206(g). If the 9.42 tons of VOC ERCs identified in this Plan Approval are not used and are subsequently reentered into the ERC registry, these VOC ERCs will expire on July 1, 2022.

(k) Plan Approval 23-0003AD authorizes the transfer and use of 9.27 tons of VOC ERCs for offset purposes at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

- (1) The 9.27 tons of VOC ERCs were generated from the shutdown of a natural gas/oil fired boiler at the National Grid Far Rockaway Power Station in Far Rockaway, NY, on July 1, 2012. These VOC ERCs were certified by the New York State Department of Environmental Conservation on November 22, 2013. These VOC ERCs were owned by Elements Markets, LLC prior to this transfer.
- (2) Monroe Energy, LLC will be a holder of the 9.27 tons VOC ERCs. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).

**SECTION C. Site Level Requirements**

(3) Pursuant to 25 Pa. Code § 127.208(2), upon the issuance of this amended Plan Approval, the 9.27 tons of VOC ERCs, not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code § 127.206(f), except as specified in 25 Pa. Code § 127.206(g). If the 9.27 tons VOC ERCs identified in this Plan Approval is not used and is subsequently reentered into the ERC registry, these VOC ERCs will expire on July 1, 2022.

(l) Plan Approval 23-0003AD authorizes the transfer and use of 1.16 tons of VOC ERCs for offset purposes at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

(1) The 1.16 tons of VOC ERCs were generated from the shutdown of sources at the Montauk Generating Facility located at Navy Road in Montauk, NY, on May 1, 2013. These VOC ERCs were certified by the New York State Department of Environmental Conservation on October 21, 2015. These VOC ERCs were owned by Elements Markets, LLC prior to this transfer.

(2) Monroe Energy, LLC is a holder of the 1.16 tons VOC ERCs. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).

(3) Pursuant to 25 Pa. Code § 127.208(2), upon the issuance of this amended Plan Approval, the 1.16 tons of VOC ERCs, not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code § 127.206(f), except as specified in 25 Pa. Code § 127.206(g). If the 1.16 tons VOC ERCs identified in this Plan Approval is not used and is subsequently reentered into the ERC registry, these VOC ERCs will expire on May 1, 2023.

(m) Plan Approval 23-0003AD authorizes the transfer and use of 10.15 tons of VOC ERCs for offset purposes at Monroe's Trainer Refinery in accordance with 25 Pa. Code §127.208(2):

(1) The 10.15 tons of VOC ERCs was generated from the shutdown of sources at the Quad Graphics facility in Atglen, West Sadsbury Township, Chester County, PA, on March 4, 2016. These VOC ERCs were certified by the Pennsylvania Department of Environmental Protection on February 7, 2017. These VOC ERCs were owned by Elements Markets, LLC prior to this transfer.

(2) Monroe Energy, LLC will be a holder of the 10.15 tons VOC ERCs pending on the final transfer approved by both New York State DEC and the Department. Monroe Energy will be the holder of the 10.15 tons VOC ERCs effective on the date when the transfer is approved by the Department. This Plan Approval is in accordance with the requirements of 25 Pa. Code Chapter 127, Subpart E - New Source Review, §127.205(3).

(3) Pursuant to 25 Pa. Code § 127.208(2), upon the issuance of this amended Plan Approval, the 10.15 tons of VOC ERCs, not generated by the over-control of emissions, are no longer subject to the 10-year expiration date under 25 Pa. Code § 127.206(f), except as specified in 25 Pa. Code § 127.206(g). If the 10.15 tons VOC ERCs identified in this Plan Approval is not used and is subsequently reentered into the ERC registry, these VOC ERCs will expire on March 4, 2026.

(n) Offset ratios - Plan Approval 23-0003AD

(a) The 5-year aggregated VOC emission increase including this project is 30.0 tons.

(b) The permittee shall provide VOC ERCs at a 1.3:1 ratio to offset the net emission increase of 30.0 tons as per 25 Pa. Code §§ 127.210. The required VOC ERCs is 39.0 tons.

(c) The permittee has provided a total of 30.0 tons VOC ERCs through ERC purchasing and transferring approved by the Department.

(d) The permittee shall not commence operation of the LPG truck loading rack until the transfer of 9.0 tons of VOC ERCs are approved by the Department.

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

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

**SECTION D. Source Level Requirements**

Source ID: 034

Source Name: BOILER 9

Source Capacity/Throughput: 349.600 MMBTU/HR

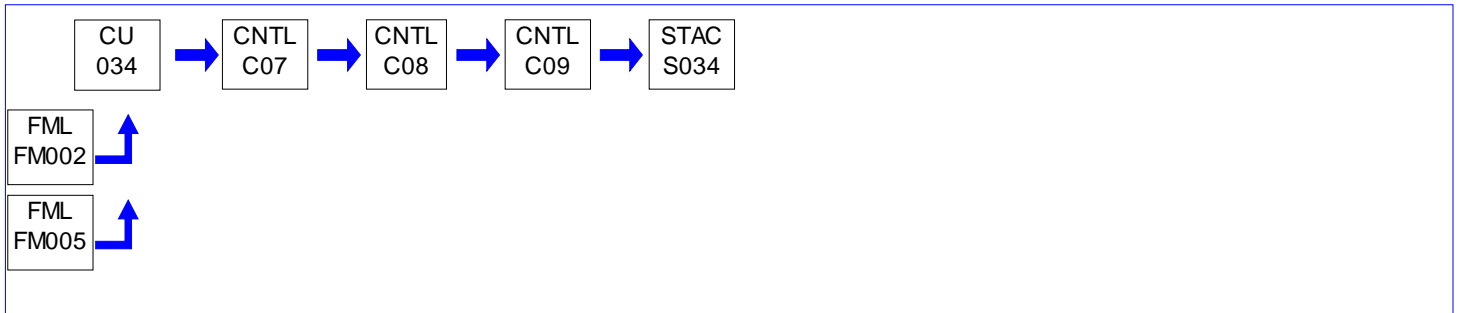
N/A

Refinery Gas

N/A

Natural Gas

Conditions for this source occur in the following groups: GROUP 10
GROUP 30
GROUP 40
GROUP 50

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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



SECTION D. Source Level Requirements

*** Permit Shield in Effect. ***

**SECTION D. Source Level Requirements**

Source ID: 035

Source Name: BOILER 10

Source Capacity/Throughput: 349.600 MMBTU/HR

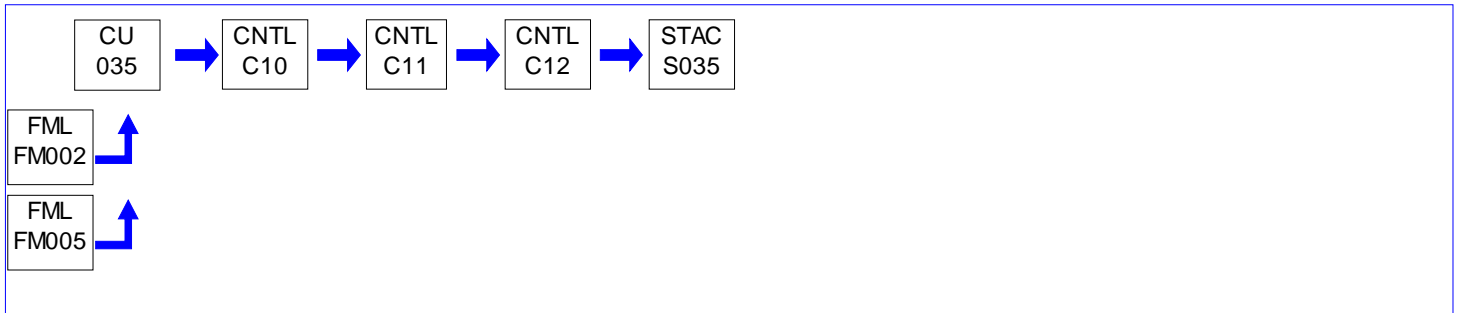
N/A

Natural Gas

N/A

Refinery Gas

Conditions for this source occur in the following groups: GROUP 10
GROUP 30
GROUP 40
GROUP 50

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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



SECTION D. Source Level Requirements

*** Permit Shield in Effect. ***

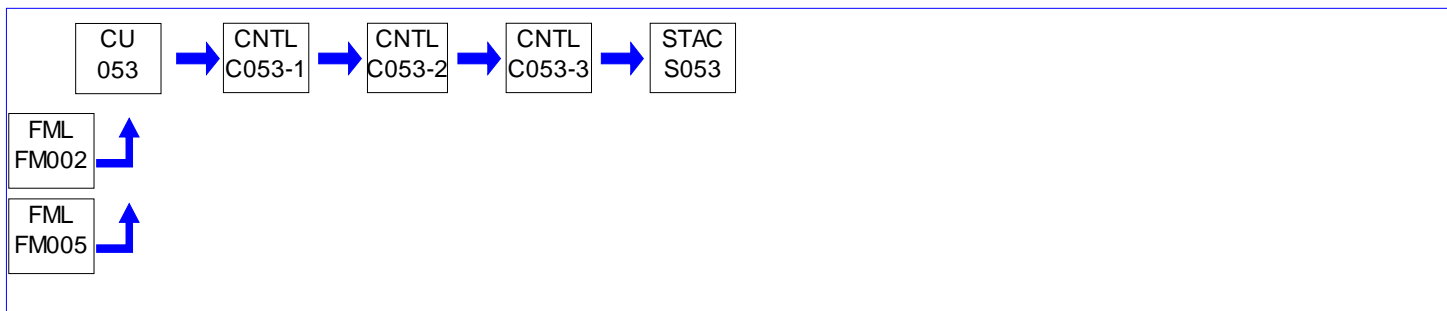
**SECTION D. Source Level Requirements**

Source ID: 053

Source Name: BOILER 14

Source Capacity/Throughput: 346.900 MMBTU/HR

Conditions for this source occur in the following groups: GROUP 30
GROUP 40
GROUP 50

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.11]****Combustion units**

The permittee shall not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:

The rate determined by the following formula:

$$A = 3.6E^{-0.56}$$

where:

A = Allowable emissions in pounds per million Btus of heat input, and

E = Heat input to the combustion unit in millions of Btus per hour,

when E is equal to or greater than 50 but less than 600.

002 [25 Pa. Code §123.22]**Combustion units**

Combustion units in the Southeast Pennsylvania air basin must conform with the following:

(1) General provision. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO₂, from a combustion unit except as provided in paragraph (3) or (5), in excess of the applicable rate in pounds per million Btu of heat input specified in the following table:

Rated Capacity of Units in 106 Btus per hour	Inner Zone	Outer Zone
Less than 250	1.0	1.2
Greater than or equal to 250	0.6	1.2

(2) Noncommercial fuels. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO₂, from a combustion unit using a noncommercial fuel, in excess of the rate of 0.6 pound per million Btu of heat input in the inner zone or 1.2 pounds per million Btu of heat input in the outer zone.

**SECTION D. Source Level Requirements****# 003 [25 Pa. Code §123.41]****Limitations**

The permittee shall not cause 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 three minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.

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

(a) The permittee shall not cause to be discharged into the atmosphere from this boiler any gases that contains:

- (i) NO_x emissions in excess of 0.0077 lb/MMBtu, and 11.70 tons per 12-month rolling sum.
- (ii) CO emissions in excess of 0.0195 lb/MMBtu, and 29.63 tons per 12-month rolling sum ;
- (iii) SO₂ emissions in excess of 12.02 tons per 12-month rolling sum;
- (iv) PM (filterable) emissions in excess of 0.007 lb/MMBtu, and 10.64 tons per 12-month rolling sum;
- (v) PM₁₀ (filterable + condensable) emissions in excess of 0.0089 lb/MMBtu, and 13.52 tons per 12-month rolling sum;
- (vi) PM_{2.5} (filterable + condensable) emissions in excess of 0.0089 lb/MMBtu and 9.9 tons per 12-month rolling sum; and
- (vii) VOC emissions in excess of 0.0013 lb/MMBtu, and 1.98 tons per 12-month rolling sum.

(b) Except for NO_x and SO₂ emission limits, compliance with the above emission limits that are expressed as lb/MMBtu is determined by averaging the emissions measured through three (3) 1-hour test runs.

(c) The emissions of ammonia from the SCR system shall not exceed 10 ppmvd, corrected to 3% oxygen, as measured and averaged through three (3) 1-hour test runs.

[Compliance with the emission limit for NO_x (in lbs/MMBTU) in the conditions above also demonstrates compliance with the applicable limits for NO_x in 40 C.F.R. §60.44b(a).]

005 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NO_x emission limitations:

- (a) A natural gas-fired, propane-fired or liquid petroleum gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.10 lb NO_x/million Btu heat input (daily average).
- (b) A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input (daily average).

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.44b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Standard for nitrogen oxides.**

(a) The NO_x standard applies at all times including periods of startup, shutdown, or malfunction, as per 40 C.F.R. §60.44b(h).

(b) Compliance with the NO_x emission limit in lb/MMBtu is determined on a 30-day rolling average basis, as per 40 C.F.R. §60.44b(i).

**SECTION D. Source Level Requirements****Fuel Restriction(s).****# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The boiler shall only be operated on Refinery Fuel Gas (RFG) and/or Natural Gas.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.102a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Emissions limitations.**

The permittee shall not burn in this boiler any fuel gas that contains H₂S in excess of

(a) 162 ppmv determined hourly on a 3-hour rolling average basis; and

(b) 60 ppmv determined daily on a 365 successive calendar day rolling average basis.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7499]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What are the subcategories of boilers and process heaters?**

As per 40 C.F.R. §63.7499(l), the boiler is in the subcategory of units designed to burn gas 1 fuels.

Control Device Efficiency Restriction(s).**# 010 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The NO_x emissions from the boiler shall be reduced by selective catalytic reduction (SCR) system.

(b) The CO and VOC emissions from the boiler shall be reduced by an oxidation catalyst. The oxidation catalyst shall be operated to maintain a minimum catalyst bed inlet temperature of 500°F. The minimum inlet temperature shall be maintained at all times when the boiler is operating, except during periods of startup, shutdown, and malfunction.

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

[Additional authority for this permit condition is derived from 40 C.F.R. §§60.8, 60.46b, and 60.104a.]

(a) The permittee shall perform a stack test using Department approved procedures for the boiler once per permit term, but no less frequently than once every 5 years for NO_x, CO, PM/PM₁₀/PM_{2.5}, VOC, and SO₂ emissions.

(b) At least 90 days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(c) At least 30 days prior to the test, the Regional Manager shall be notified of the date and time of the test.

(d) Within 60 days after the test, two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Manager for approval.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.104a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Performance tests.**

As per 40 C.F.R. §60.104a(j), the permittee shall determine compliance with the fuel gas H₂S limit in 40 C.F.R. §60.102a(g)(1)(ii) according to the following test methods and procedures:

(1) Method 11, 15, or 15A of appendix A-5 to 40 C.F.R. part 60 or Method 16 of appendix A-6 to part 60 for determining the

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H₂S concentration using an H₂S monitor as specified in 40 C.F.R. §60.107a(a)(2). The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference - see 40 C.F.R. §60.17) is an acceptable alternative to EPA Method 15A of appendix A-5 to 40 C.F.R. part 60. The permittee may demonstrate compliance based on the mixture used in the boiler.

(i) For Method 11 of appendix A-5 to 40 C.F.R. part 60, the sampling time and sample volume must be at least 10 minutes and 0.010 dscm (0.35 dscf). Two samples of equal sampling times must be taken at about 1-hour intervals. The arithmetic average of these two samples constitutes a run. For most fuel gases, sampling times exceeding 20 minutes may result in depletion of the collection solution, although fuel gases containing low concentrations of H₂S may necessitate sampling for longer periods of time.

(ii) For Method 15 of appendix A-5 to 40 C.F.R. part 60, at least three injects over a 1-hour period constitutes a run.

(iii) For Method 15A of appendix A-5 to 40 C.F.R. part 60, a 1-hour sample constitutes a run. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference - see 40 C.F.R. §60.17) is an acceptable alternative to EPA Method 15A of appendix A-5 to 40 C.F.R. part 60.

(iv) If monitoring is conducted at a single point in a common source of fuel gas as allowed under 40 C.F.R. §60.107a(a)(2)(iv), only one performance test is required. That is, performance tests are not required when a new affected fuel gas combustion device is added to a common source of fuel gas that previously demonstrated compliance.

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.46b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units****Compliance and performance test methods and procedures for particulate matter and nitrogen oxides.**

As per 40 C.F.R. §60.46b(c) and (e), to determine compliance with the emission limit for NO_x required under 40 C.F.R. §60.44b, the permittee shall conduct the performance test as required under 40 C.F.R. §60.8 using the continuous system for monitoring NO_x under 40 C.F.R. §60.48b(b).

(a) As per 40 C.F.R. §60.46b(e)(1), for the initial compliance test, NO_x emissions from this unit are monitored for 30 successive unit operating days and the 30-day average emission rate is used to determine compliance with the NO_x emission standard of 0.20 lb/MMBtu under 40 C.F.R. §60.44b(a)(1)(ii) and 0.0077 lb/MMBtu established under Condition #004 above. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

(b) As per 40 C.F.R. §60.46b(e)(3), following the date on which the initial performance test is completed or is required to be completed under 40 C.F.R. §60.8, whichever date comes first, the permittee shall determine compliance with the NO_x standards under 40 C.F.R. §60.44b on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 unit operating days.

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

(a) This boiler must be equipped with the following continuous monitoring systems (CMS) approved by the Department, operated and maintained in accordance with the requirements of 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), and the Submittal and Approval, "Recordkeeping and Reporting" and "Quality Assurance" requirements of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001.

(1) CMS #1

Parameters	Limit and Units	Averaging Time Period
NO ₂	0.0077 lb/MMBtu heat input	30-day average, rolling by 1 day
O ₂ (or CO ₂)	%	30-day average, rolling by 1 day

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(2) CMS #2

Source name: North Yard Fuel Gas System

Parameter	Units	Limits and averaging time period
H2S	ppmv	162 ppmv - 3-hour average, rolling by 1 hour, and 60 ppmv - 365-day average, rolling by 1 day

Using the Department certified H2S monitoring system (SCIC: 5) for the North Yard Fuel Gas System fulfills this requirement.

(b) Certification and Testing Requirements

(1) Initial application (Phase I)

A proposal containing information as listed in the Phase I section of the Department's Continuous Source Monitoring Manual for the continuous gas monitoring system must be submitted no later than 180 days prior to the planned initial source startup date.

(2) Performance testing (Phase II)

Testing as listed in the Phase II section of the Department's Continuous Source Monitoring Manual must be completed for the continuous gas monitoring system no later than 180 days after initial source startup date and no later than 60 days after source achieves normal process capacity.

(3) Final approval (Phase III)

The final report of testing as listed in the Phase III section of the Department's Continuous Source Monitoring Manual must be submitted to the Bureau no later than 60 days after completion of testing.

(4) The permittee will not be issued an operating permit until the Department issues approval of Phase III in writing.

(c) The permittee shall install, operate, and maintain a device to continuously measure, indicate, and record the inlet temperature of the catalyst bed.

015 [25 Pa. Code §129.115]

Written notification, compliance demonstration and recordkeeping and reporting requirements

In accordance with 25 Pa. Code § 129.115(b)(4), the permittee shall demonstrate compliance with the emission limit established under 25 Pa. Code § 129.112(g)(1)(i) and (iv) using a CEMS, in accordance with the requirements in Chapter 139, Subchapter C, using a daily average.

(a) The daily average shall be calculated by summing the total pounds of pollutant emitted for the calendar day and dividing that value by the total heat input to the source for the same calendar day.

(b) The daily average for the source shall include all emissions that occur during the entire day.

016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.107a]

Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007

Monitoring of emissions and operations for fuel gas combustion devices and flares.

(a) As per 40 C.F.R. §60.107a(a)(2), the permittee shall install, operate, calibrate, and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H2S in the fuel gases before being burned in the boiler.

(i) The permittee shall install, operate, and maintain each H2S monitor according to Performance Specification 7 of

**SECTION D. Source Level Requirements**

appendix B to 40 C.F.R. part 60. The span value for this instrument is 300 ppmv H₂S.

(ii) The permittee shall conduct performance evaluations for the H₂S monitor according to the requirements of 40 C.F.R. §60.13(c) and Performance Specification 7 of appendix B to 40 C.F.R. part 60. The permittee shall use Method 11, 15, or 15A of appendix A-5 to 40 C.F.R. part 60 or Method 16 of appendix A-6 to part 60 for conducting the relative accuracy evaluations.

(iii) The permittee shall comply with the applicable quality assurance procedures in appendix F to 40 C.F.R. part 60 for each H₂S monitor.

(iv) Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H₂S in the fuel gas being burned.

(b) As per 40 C.F.R. §60.107a(i), for the purpose of reports required by 40 C.F.R. §60.7(c), periods of excess emissions for the boiler are defined in 40 C.F.R. §60.107a(i)(1)(ii) below:

All rolling 3-hour periods during which the average concentration of H₂S as measured by the H₂S continuous monitoring system exceeds 162 ppmv, all days in which the concentration of H₂S as measured by daily stain tube sampling exceeds 162 ppmv, and all rolling 365-day periods during which the average concentration as measured by the H₂S continuous monitoring system exceeds 60 ppmv.

017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units****Emission monitoring for particulate matter and nitrogen oxides.**

(a) As per 40 C.F.R. §60.48b(b)(1), the permittee shall install, calibrate, maintain, and operate CEMS for measuring NO_x and O₂ (or CO₂) emissions discharged to the atmosphere, and shall record the output of the system.

(b) As per 40 C.F.R. §60.48b(c), the CEMS shall be operated and data recorded during all periods of operation of the boiler except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(c) As per 40 C.F.R. §60.48b(d), the 1-hour average NO_x emission rates measured by the continuous NO_x monitor required by 40 C.F.R. §§60.48b(b) and 60.13(h) shall be expressed in lb/MMBtu heat input and shall be used to calculate the average emission rates under 40 C.F.R. §60.44b. The 1-hour averages shall be calculated using the data points required under 40 C.F.R. §60.13(h)(2).

(d) As per 40 C.F.R. §60.48b(e)(2), the procedures under 40 C.F.R. §60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems. The NO_x span value is 500ppm.

(e) As per 40 C.F.R. §60.48b(f), when NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7 of appendix A of this part, Method 7A of appendix A of this part, or other approved reference methods to provide emission data for a minimum of 75 percent of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive unit operating days.

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

[Additional authority for this permit condition is derived from 40 C.F.R. §63.7560.]

(a) The permittee must keep a copy of each notification and report submitted to comply with this Operating Permit, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted.

(b) The records shall be in a form suitable and readily available for expeditious review.

(c) The permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

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(d) The permittee shall keep each record on site, or they must be accessible from on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The records can be kept off site for the remaining 3 years.

(e) The permittee shall comply with the recordkeeping requirements established in 40 C.F.R. 60 Subparts Db and Ja, and 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), and the recordkeeping and reporting requirements in Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001. Compliance with any subsequently issued revisions to the Continuous Source Monitoring Manual will constitute compliance with this permit condition.

(f) The permittee shall keep records of the inlet temperature of the catalyst bed.

(g) The permittee shall keep records of emissions for NO_x, CO, SO₂, PM, PM₁₀, PM_{2.5}, and VOC in tons on a monthly basis and 12-month rolling sum.

019 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

The permittee shall maintain records of the following:

- (a) daily average NO_x emissions (lb/MMBtu) for natural gas and refinery fuel gas
- (b) total pounds of NO_x emitted, per fuel, daily
- (c) total heat input, per fuel, daily
- (d) maintenance activities performed on the source

020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Reporting and recordkeeping requirements.**

(a) As per 40 C.F.R. §60.49b(d), the permittee shall record and maintain records of the amounts of each fuel combusted during each day for the reporting period.

(b) As per 40 C.F.R. §60.49b(g) and (i), the permittee shall maintain records of the following information for each operating day:

- (1) Calendar date;
- (2) The average hourly NO_x emission rates (expressed as NO₂) (lb/MMBtu heat input) measured or predicted;
- (3) The 30-day average NO_x emission rates (lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days;
- (4) Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standards under 40 C.F.R. §60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;
- (5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;
- (6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data;
- (7) Identification of the times when the pollutant concentration exceeded full span of the CEMS;
- (8) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; and

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(9) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of 40 C.F.R. Part 60.

021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7555]

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

What records must I keep?

(a) The permittee must keep:

(1) A copy of each notification and report submitted to comply with 40 C.F.R. 63 Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) Records of compliance demonstrations as required in 40 C.F.R. §63.10(b)(2)(viii).

(b) The permittee must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown.

(c) The permittee must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown.

V. REPORTING REQUIREMENTS.**# 022 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.108a]**

Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007

Recordkeeping and reporting requirements.

(a) As per 40 C.F.R. §60.108a(a) and (b), the permittee shall comply with the notification, and reporting requirements in 40 C.F.R. §60.7 and other requirements as specified in this section.

(b) As per 40 C.F.R. §60.108a(d), the permittee shall submit an excess emissions report for all periods of excess emissions according to the requirements of 40 C.F.R. §60.7(c) except that the report shall contain the information specified below:

(1) The date that the exceedance occurred;

(2) An explanation of the exceedance;

(3) Whether the exceedance was concurrent with a startup, shutdown, or malfunction of the boiler; and

(4) A description of the action taken, if any.

(5) For any periods for which monitoring data are not available, any changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

(6) A written statement, signed by a responsible official, certifying the accuracy and completeness of the information contained in the report.

023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]

Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Reporting and recordkeeping requirements.

(a) The permittee shall submit notification of the date of initial startup, as provided by 40 C.F.R. §60.7. This notification shall include the design heat input capacity of the boiler and the fuels to be combusted in the boiler.

(b) As per 40 C.F.R. §60.49b(h), the permittee shall submit excess emission reports for NO_x excess emissions that

**SECTION D. Source Level Requirements**

occurred during the reporting period.

(c) As per 40 C.F.R. §60.49b(v), the permittee may submit electronic quarterly reports for NO_x in lieu of submitting the written reports required under 40 C.F.R. §60.49b(h) and (i). The format of each quarterly electronic report shall be coordinated with the permitting authority. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the permittee, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the permittee shall coordinate with DEP to obtain their agreement to submit reports in this alternative format.

(d) As per 40 C.F.R. §60.49b(w), the reporting period is each 6 month period. All reports shall be submitted to DEP and shall be postmarked by the 30th day following the end of the reporting period.

024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7550]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What reports must I submit and when?**

(a) As per 40 C.F.R. §63.7550(a) and (c)(1) and (c)(5), the permittee must submit each compliance report that contains the following:

- (i) Company and Facility name and address.
- (ii) Process unit information.
- (iii) Date of report and beginning and ending dates of the reporting period.
- (iv) The total operating time during the reporting period.
- (xiv) Include the date of the most recent tune-up for the boiler. Include the date of the most recent burner inspection if it was not done on a 5 year period and was delayed until the next scheduled or unscheduled unit shutdown.

(b) As per 40 C.F.R. §63.7550(b), the permittee must submit each report, according to 40 C.F.R. §63.7550(h), according to the requirements in paragraph (1) through (4) below.

(1) The first 5-year compliance report must cover the period beginning on the date of the boiler startup and ending January 31, 5 years after the boiler startup date.

(2) The first 5-year compliance report must be postmarked or submitted no later than January 31.

(3) 5-year compliance reports must cover the applicable 5-year periods from January 1 to December 31.

(4) 5-year compliance reports must be postmarked or submitted no later than January 31.

(c) As per 40 C.F.R. §63.7550(h)(3), the permittee must submit all reports required electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee must submit the report to DEP at the appropriate address listed in 40 C.F.R. §63.13. At the discretion of DEP, the permittee must also submit these reports, to DEP in the format specified by DEP.

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

(a) Continuous emission monitoring systems and components must be operated and maintained in accordance with the requirements established in 25 Pa. Code Chapter 139, subchapter C and the Quality Assurance requirements in Revision No. 8 of the Department's Continuous Source Monitoring Manual 274-0300-001.

(b) In accordance with 25 Pa. Code Section 139.101(12), required monitoring shall, at a minimum, meet one of the following data availability requirements unless otherwise stipulated in this permit, a plan approval, Title 25 or an order issued under Section 4 of the Air Pollution Control Act:

**SECTION D. Source Level Requirements**

(1) In each calendar month, at least 90% of the time periods for which an emission standard or an operational parameter applies, shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001; or

(2) In each calendar quarter, at least 95% of the hours shall be valid as set forth in the Quality Assurance section of Revision No. 8 of the Department's Continuous Source Monitoring Manual, 274-0300-001.

026 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

027 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7500]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What emission limits, work practice standards, and operating limits must I meet?**

As per 40 C.F.R. §63.7500(a)(3), the permittee must operate and maintain the boiler in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

028 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7515]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****When must I conduct subsequent performance tests or fuel analyses, or tune-ups?**

As per 40 C.F.R. §§63.7515(d) and 63.7540(12),

(a) The permittee must conduct a 5-year performance tune-up specified in 40 C.F.R. §63.7540(a)(10)(i) through (vi).

(b) The first 5-year tune-up must be conducted no later than 61 months after the initial startup of the boiler.

(c) Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

029 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?**

(a) As per 40 C.F.R. §§63.7510(g), 63.7515(d), and 63.7540(a)(12), the permittee must conduct a 5-year tune-up of the boiler as specified in 40 C.F.R. §63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance.

(b) As per 40 C.F.R. §63.7540(a)(10), each tune-up of the boiler must be conducted as specified below:

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shutdown);

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject;

**SECTION D. Source Level Requirements**

- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Maintain on-site and submit, if requested by the Administrator, a 5 year report containing the information in paragraphs (a)(10)(vi)(A) through (C) of this section,
- (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler;
- (B) A description of any corrective actions taken as a part of the tune-up; and
- (C) The type and amount of fuel used over the 60 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.
- (c) As per 40 C.F.R. §63.7540(12), the permittee may delay the burner inspection specified in paragraph (b)(i) above until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months.
- (d) As per 40 C.F.R. §63.7540(a)(13), if the boiler is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

VII. ADDITIONAL REQUIREMENTS.**# 030 [25 Pa. Code §145.4.]****Applicability.**

The boiler is subject to the NOx Budget Trading Program as per 25 Pa. Code §145.4(a)(2)(iii)(A). The permittee shall comply with all applicable requirements as specified in 25 Pa. Code Chapter 145.

031 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7495]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****When do I have to comply with this subpart?**

As per 40 C.F.R. §63.7495(a), the permittee must comply with 40 C.F.R. 63 subpart DDDDD for this boiler upon startup of this boiler.

032 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7565]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What parts of the General Provisions apply to me?**

The permittee shall comply with the General Provisions in 40 C.F.R. §§63.1 through 63.15 that apply.

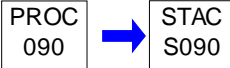
*** **Permit Shield in Effect.** ***

**SECTION D. Source Level Requirements**

Source ID: 090

Source Name: EXISTING EMERGENCY COMPRESSION IGNITION ENGINES <500HP

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.21]****General**

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

Operation Hours Restriction(s).**# 002 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The engine shall be operated less than 500 hours in a 12-month rolling period.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in this condition, is prohibited. If the engine is not operated according to paragraphs (1) and (2) below, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) The emergency stationary RICE may be operated for the purposes specified in this paragraph for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (2) below counts as part of the 100 hours per calendar year allowed by this paragraph. Emergency stationary 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. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (1) above. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

II. TESTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

Each engine must be equipped with a non-resettable hour meter.

IV. RECORDKEEPING REQUIREMENTS.**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What records must I keep?**

(a) The permittee must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE is operated and maintained according to permittee's maintenance plan.

(b) The permittee must keep records of the hours of operation of each engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

[Compliance with this condition assures compliance with the recordkeeping requirement under 25 Pa. Code § 129.115.]

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****In what form and how long must I keep my records?**

(a) The records must be in a form suitable and readily available for expeditious review according to §63.10(b)(1).

(b) As specified in § 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to § 63.10(b)(1).

V. REPORTING REQUIREMENTS.**# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6595]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****When do I have to comply with this subpart?**

The permittee must meet the applicable notification requirements in 40 C.F.R. Part 63 subpart A and §63.6645.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6650]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What reports must I submit and when?**

If any emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of this subpart, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 009 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my general requirements for complying with this subpart?**

(a) The permittee must be in compliance with the requirements in this subpart that apply at all times.

(b) At all times the permittee must operate and maintain the source, including monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

(a) The permittee must operate and maintain the engines according to the manufacturer's emission-related written instructions or develop owner's 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.

(b) The permittee must minimize each engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2c to this subpart apply.

(c) The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table 2c to this subpart. The oil analysis must be performed in accordance with the specifications specified in 40 C.F.R. §63.6625(i).

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?**

The permittee must demonstrate continuous compliance with each requirement in Table 2c to 40 C.F.R. 63 Subpart ZZZZ that apply according to methods specified in Table 6 to 40 C.F.R. 63 Subpart ZZZZ.

VII. ADDITIONAL REQUIREMENTS.**# 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What parts of my plant does this subpart cover?**

Source ID 090 covers the following Existing Emergency Generators firing diesel fuel:

Engine ID	Name	Make	Model	HP	Installation Date	liters per cylinder
10620376	Firewater Pump 3	Cummins	NT-855-F1	255	6/10/2004	2.3
10620617	Firewater Pump 4	Caterpillar Inc	3406C	420	6/10/2004	2.4
10620619	Firewater Pump 5	Caterpillar Inc	3406B DIT	420	6/10/2004	2.4
12032752	CCR Generator	Cummins	NT-855-GS2	270	6/10/2004	2.3

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6595]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****When do I have to comply with this subpart?**

**SECTION D. Source Level Requirements**

The permittee must comply with the applicable requirements no later than May 3, 2013.

015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6665]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

What parts of the General Provisions apply to me?

The permittee must comply with the parts of the General Provisions in §§63.1 through 63.15 that apply.

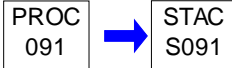
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**SECTION D. Source Level Requirements**

Source ID: 091

Source Name: NEW EMERGENCY COMPRESSION IGNITION ENGINES (IC <30LITER)

Source Capacity/Throughput:

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

The permittee shall not emit into the outdoor atmosphere of particulate matter from this source in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

002 [25 Pa. Code §123.21]**General**

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

003 [25 Pa. Code §123.41]**Limitations**

The permittee shall not emit into the outdoor atmosphere of visible air contaminants from this source 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 three minutes in any 1 hour.
- (2) Equal to or greater than 60% at any time.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4205]**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?**

(a) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 40 C.F.R. §60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.

(b) The new nonroad CI engine(s) under source ID 091 must comply with the emission standards for all pollutants as specified in 40 C.F.R. §60.4202(a)(2), as per 40 C.F.R. §60.4205(b).

(c) As per 40 C.F.R. §60.4202(a)(2), the emission standards for new nonroad CI engines for the same model year and maximum engine power are in 40 C.F.R. §89.112 for all pollutants beginning in model year 2007. The exhaust emission from this engine shall not exceed the exhaust emission standards as follows:

- (1) NMHC + NO_x: 4.0 g/kW-hr
- (2) CO: 3.5 g/kW-hr
- (3) PM: 0.20 g/kW-hr

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4206]**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?**

The permittee must operate and maintain stationary CI ICE that achieve the emission standards as required in 40 C.F.R. §60.4205 over the entire life of the engine.

**SECTION D. Source Level Requirements****Fuel Restriction(s).**

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to
Beginning October 1, 2010, the permittee must use diesel fuel that meets the requirements of 40 C.F.R. 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

Operation Hours Restriction(s).

007 [25 Pa. Code §129.112]
Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule

The engine shall be operated less than 500 hours in a 12-month rolling period.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

The permittee must operate the emergency stationary ICE according to the requirements in paragraphs (1) and (2) below. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (1) and (2) below, is prohibited. If the engine is not operated according to the requirements in paragraphs (1) and (2) below, the engine will not be considered an emergency engine and must meet all requirements for non-emergency engines in 40 C.F.R. 60 Subpart IIII.

(1) The permittee may operate the emergency stationary ICE for any combination of the purposes specified in paragraph (i) below for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (2) below counts as part of the 100 hours per calendar year allowed by this paragraph.

(i) Emergency stationary ICE 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. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(2) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (1) above. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

Each engine shall be equipped with a non-resettable hour meter to monitor and indicate the operating hours.

IV. RECORDKEEPING REQUIREMENTS.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4214]
Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI

**SECTION D. Source Level Requirements****internal combustion engine?**

The permittee must record the time of operation of the engine(s) and the reason the engine was in operation during that time each time the engine was operated.

[Compliance with this condition assures compliance with the recordkeeping requirement under 25 Pa. Code § 129.115.]

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 011 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

(a) The permittee must

- (1) Operate and maintain the engine according to the manufacturer's emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 C.F.R. parts 89 and/or 1068, as they apply.

(b) The permittee must comply by purchasing an engine certified to the emission standards in 40 C.F.R. §60.4205(b) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications.

VII. ADDITIONAL REQUIREMENTS.**# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4218]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What parts of the General Provisions apply to me?**

The permittee must comply with the applicable parts of the General Provisions in §§60.1 through 60.19.

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6590]**Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What parts of my plant does this subpart cover?**

(a) The engine(s) under this source ID must meet the requirements of 40 C.F.R. part 63 by meeting the requirements of 40 C.F.R. part 60 subpart IIII, for compression ignition engines.

(b) Source ID 091 covers the following Emergency Generator(s) firing diesel fuel:

Engine ID	Name	Make	Model	HP	Installation Date	L/cylinder
12032750	Boiler Complex Generator	Caterpillar Inc	C-15	490	6/12/2008	2.5
FTE01256	IT Bldg Generator	Caterpillar Inc	C15	619	3/13/2014	2.53

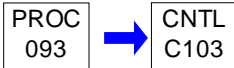
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**SECTION D. Source Level Requirements**

Source ID: 093

Source Name: LPG TRUCK LOADING RACK

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Only propane, n-butane, and isobutane products shall be dispensed at this truck loading rack.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following on a daily and monthly basis:

- (a) The number of trucks and the amount of propane loaded for each truck.
- (b) The number of trucks and the amount of n-butane or isobutane loaded or unloaded for each truck.
- (c) The number of product switches for each bay.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following on a daily and monthly basis:

- (a) The number of trucks and the amount of propane loaded for each truck.
- (b) The number of trucks and the amount of n-butane or isobutane loaded or unloaded for each truck.
- (c) The number of product switches for each bay.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following on a monthly basis:

- (a) Fugitive VOC emission calculations from the LPG truck loading rack and piping components.

V. REPORTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Emissions from the LPG truck loading rack shall be captured and sent to the refinery's main flare (Source C103), which utilizes a flare gas recovery system.

006 [25 Pa. Code §129.55]**Petroleum refineries--specific sources**

Pumps handling volatile organic compounds with a vapor pressure of greater than 1.5 psi at actual conditions shall have mechanical seals. For the purpose of determining vapor pressure, a temperature no greater than 100°F shall be used.

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

40 CFR Part 60, Subpart GGGa was selected as BAT. BAT is a state-enforceable condition; therefore, any non-compliance issues with Subpart GGGa for the LPG Truck Loading Rack are state-enforceable only.

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

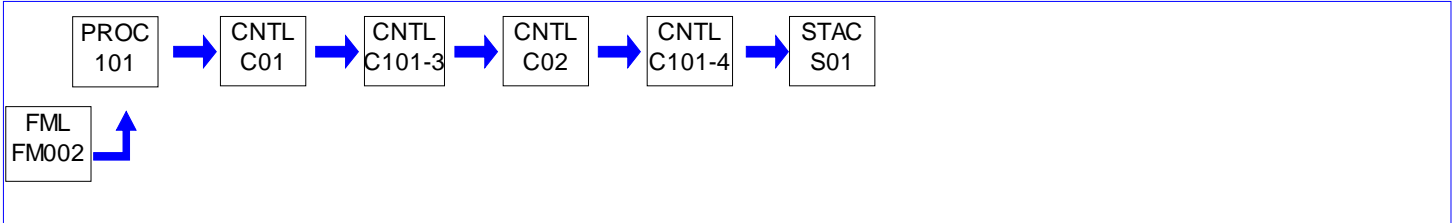
**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: FCC UNIT

Source Capacity/Throughput: 2,167.000 BBL/HR
N/AGAS OIL
COKE-REGENERATO

Conditions for this source occur in the following groups: GROUP 20

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

Emissions from this source including the air cleaning devices shall not exceed any of the following:

(a) Nitrogen Oxides (NO_x) emissions shall not exceed

(1) 121.1 ppm_{dv} as 365-day rolling average at 0 percent oxygen. This limit applies at all times when the FCCU and/or CO boiler are operating.

(2) 155.3 ppm_{dv} as 7-day rolling average at 0 percent oxygen. This limit applies at all times when the FCCU and/or CO boiler are operating, including during periods of startup, shutdown, or malfunction.

(3) 500 ppm_{dv} as 3-hour average at 0 percent oxygen. This limit applies at all times when the FCCU and/or CO boiler are operating, including during periods of startup, shutdown, or malfunction.

[Additional authority of paragraphs (a)(1)-(a)(3) are derived from 25 Pa. Code § 129.114.]

(4) 654.5 tons per year calculated as a 12-month rolling sum.

(b) Carbon Monoxide (CO) emissions shall not exceed 500 ppm_{dv} as 1-hour average at 0 percent oxygen, and 434.1 tons per year calculated as a 12-month rolling sum. [Compliance with CO emission limit of 500ppm_{dv} assured compliance with 40 C.F.R. §§60.103(a) and 63.1565(a)(1).]

(c) Volatile Organic Compounds (VOCs) emissions shall not exceed 8.1 tons per year calculated as a 12-month rolling sum.

(d) Particulate Matter (PM) emissions shall not exceed 93.3 tons per year calculated as a 12-month rolling sum and 0.5lb/1000lb coke burned on a 3-hour average basis.

[Compliance with this PM emission limit assured compliance with 40 C.F.R. §§60.102(a)(1) and 63.1564(a)(1).]

(e) Ammonia (NH₃) emissions shall not exceed 25 ppm_{dv} corrected to 0 percent oxygen.

(f) Sulfur Dioxide (SO₂) emissions shall not exceed 50 ppm_{dv} corrected to 0 percent oxygen, calculated daily as a 7-day rolling average basis, 25 ppm_{dv} corrected to 0 percent oxygen, calculated as a 365-day rolling average, and 165.8 tons per year calculated as a 12-month rolling period.

(g) The permittee shall comply with 25 Pa. Code §123.41, regarding visible emissions.

[Compliance with these limits assures compliance with applicable requirements of 40 CFR §60.102(a)(2) regarding the standard for opacity, and 40 C.F.R. Part 63 Subpart UUU regarding the opacity and visible emission standards].

**SECTION D. Source Level Requirements****# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1570]****Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my general requirements for complying with this subpart?**

(a) The permittee shall be in compliance with all of the non-opacity standards set forth in 40 CFR 63 Subpart UUU when operating Source ID 101.

Throughput Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The amount of coke combusted in the FCCU regenerator shall not exceed 42,554 pounds per hour, calculated as a 30-day rolling average.

Control Device Efficiency Restriction(s).**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The wet gas scrubber (Source ID: C101-4) shall be operated to maintain a minimum liquid-to-gas ratio at or above 0.08 gallons/dscf on an hourly average.

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

(a) The permittee shall conduct annual particulate matter (PM) emissions testing from this source and the CO Boiler using the methods specified in 40 C.F.R. §60.106(b)(2). Upon demonstrating through at least three (3) consecutive annual tests that the PM limits are not being exceeded, the permittee may request approval from EPA to reduce the testing frequency to less than annually. At no time will the testing be less frequent than once every five (5) years.

(b) The permittee shall ensure that all testing is done in accordance with the provisions of 25 Pa. Code Chapter 139, 40 C.F.R. Part 60 Subparts A and J, and 40 C.F.R. Part 63, Subparts A and UUU, and with the applicable Testing Requirements specified in Section C of this permit.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.106]**Subpart J - Standards of Performance for Petroleum Refineries****Test methods and procedures.**

The permittee shall use the test methods in 40 C.F.R. 60 Appendix A and/or the methods and procedures as specified in 40 C.F.R. §60.106, except as provided in 40 C.F.R. §60.8(b).

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

(a) The permittee shall operate and maintain DEP certified continuous emission monitors for nitrogen oxides (NO_x), carbon monoxide (CO), sulfur dioxide (SO₂), and oxygen (O₂) on the FCC Unit in accordance with the applicable provisions of 25 Pa. Code Chapter 139, 40 CFR §§ 60.13 and 60.105, 40 CFR 60, Appendices A, B, and F.

(b) The permittee shall monitor and record

(1) The ratio of liquid-to-gas of the wet gas scrubber (Source ID: C101-4).

(2) The amount of reagent flowing to the SNCR system (Source ID: C101-3).

(c) The permittee shall monitor and record the following for the FCC Unit:

**SECTION D. Source Level Requirements**

- (1) The amount of fuel consumed on a daily basis.
- (2) The H₂S content of the fuel consumed.
- (3) The BTU content of the fuel consumed.
- (4) The sulfur content of the FCC Unit feed.
- (5) The monthly operating hours of the FCC Unit.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.105]**Subpart J - Standards of Performance for Petroleum Refineries****Monitoring of emissions and operations.**

(a) The permittee shall monitor and record daily the following:

- (1) Average coke burn-off rate (tons per hour) and hours of operation of the FCC Unit.
- (2) The rate of combustion of liquid fuels and the hours of operation during which liquid fuels are combusted in the CO Boiler (Source ID C01).

(b) The permittee shall monitor and record the liquid-to-gas ratio (gallon/dscf) of the wet gas scrubber (Source ID: C101-4) on an hourly average.

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.109]**Subpart J - Standards of Performance for Petroleum Refineries****Delegation of authority.**

The permittee shall obtain the USEPA approval, if seeking compliance with 40 C.F.R. §60.104(b)(1) under 40 C.F.R. §60.105(a)(13)(iii).

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1572]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my monitoring installation, operation, and maintenance requirements?**

- a. The permittee shall operate and maintain CO, SO₂, O₂ continuous emission monitoring systems according to the requirements specified in paragraphs (a)(1) through (4) of 40 C.F.R. §63.1572.
- b. The permittee shall use the US EPA approved alternative monitoring plan (AMP) to conduct performance test and operate and maintain the liquid-to-gas ratio monitoring system in lieu of a continuous opacity monitoring system to determine compliance with 40 C.F.R. §60.102(a).
- c. The permittee shall operate and maintain each continuous parameter monitoring system according to the requirements in 40 CFR Sections 63.1572(c)(1) through (5) and Table 41 of 40 CFR Part 63 Subpart UUU.
- d. The permittee shall monitor and collect data according to the requirements in paragraphs (1) through (2) of 40 C.F.R. §63.1572(d).

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

(a) The permittee shall keep the following records:

- (1) The amount of fuel consumed on a daily basis.
 - (2) The H₂S content of the fuel consumed.
 - (3) The BTU content of the fuel consumed.
 - (4) The sulfur content of the FCCU feed.
 - (5) The monthly operating hours of the FCC Unit.
- [Additional authority of this condition is derived from 25 Pa. Code §129.115.]

(b) The permittee shall keep records of the emissions specified in emission restrictions for the FCC Unit on a monthly

**SECTION D. Source Level Requirements**

basis and 12-month rolling sum.

(c) The permittee shall keep records of the amount of coke combusted in the FCC Unit on a daily basis and calculated as an hourly average and 30 day rolling average.

(d) The permittee shall keep the following records per the monitoring requirements of Source 101 for the air pollution control devices:

- (1) The wet gas scrubber liquid-to-gas ratio.
- (2) The amount of reagent flowing to the SNCR system.
- (3) The operating parameters that are used to calculate the above parameters.

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

[Additional authority derived from 25 Pa. Code § 129.115]

The permittee must keep records of maintenance conducted on the source and air pollution control devices.

013 [25 Pa. Code §129.204]**Emission accountability.**

The permittee may develop an alternative calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by DEP, in writing, prior to implementation.

014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.107]**Subpart J - Standards of Performance for Petroleum Refineries****Reporting and recordkeeping requirements.**

The permittee shall record and maintain the information specified in 40 C.F.R. §60.107(b)(1) and (4).

V. REPORTING REQUIREMENTS.**# 015 [25 Pa. Code §123.46]****Monitoring requirements**

All certified emission monitor results shall be reported to the Department on a quarterly basis.

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

The FCC Unit is subject to 40 C.F.R. 60 Subpart J of the Standards of Performance for New Stationary Sources and 40 C.F.R. 63 Subpart UUU of the National Emission Standards for Hazardous Air Pollutants for Refineries, and shall comply with all applicable requirements of the Subparts. 40 C.F.R. Sections 60.4 and 63.13 require submission of copies of all requests, reports, applications, submittals, and other communications to both the EPA and the Department. The Department copies shall be forwarded to the address specified in Section B of this permit. EPA copies shall be forwarded to the electronic reporting interface established for the Subpart.

017 [25 Pa. Code §129.204]**Emission accountability.**

[Additional authority is derived from 25 Pa. Code §129.115.]

The permittee shall monitor NO_x emissions and report the data from the CEMS in accordance with 25 Pa. Code, Chapter 139 or Chapter 145 (relating to interstate pollution transport reduction). Any data invalidated under Chapter 139 shall be substituted with data calculated using the potential emission rate for the unit or, if approved by DEP in writing, an alternative amount of emissions that is more representative of actual emissions that occurred during the period of invalid data.

**SECTION D. Source Level Requirements****# 018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.105]****Subpart J - Standards of Performance for Petroleum Refineries****Monitoring of emissions and operations.**

For the purpose of reports under 40 C.F.R. §60.7(c), periods of excess emission that shall be determined and reported are:

CO - All 1-hour periods during which the average CO concentration as measured by the CO continuous monitoring system exceeds 500ppm.

SO₂ - All 7-day periods during which the average concentration of SO₂ as measured by the SO₂ CEM system exceed 50ppm (dry basis, zero percent excess air).

SO₂ - All 365-day periods during which average concentration of SO₂ as measured by the SO₂ CEM system exceed 25ppm (dry basis, zero percent excess air).

Opacity - All 1-hour period during which the measured liquid-to-gas ratio of the wet gas scrubber (Source ID: C101-4) is below the required minimum of 0.08 gallons/dscf.

019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.107]**Subpart J - Standards of Performance for Petroleum Refineries****Reporting and recordkeeping requirements.**

The permittee shall submit a report in accordance with 40 C.F.R. §60.107(c), (d), (f), and (g).

020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1575]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What reports must I submit and when?**

(a) The permittee shall submit each report required in Table 43 of 40 CFR Part 63 Subpart UUU.

(b) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(c) The compliance report must contain the information required below:

(1) Company name and address.

(2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.

(3) Date of report and beginning and ending dates of the reporting period.

(4) If there are no deviations from any emission limitation that applies to the permittee and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system or continuous opacity monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(d) For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a continuous opacity monitoring system or a continuous emission monitoring system to comply with the emission limitation or work practice standard in this subpart, the semiannual compliance report must contain the information in paragraphs (c)(1) through (3) of this section and the information in paragraphs (d)(1) through (4) of this section.

(1) The total operating time of each affected source during the reporting period and identification of the sources for which there was a deviation.

(2) Information on the number, date, time, duration, and cause of deviations (including unknown cause, if applicable).

**SECTION D. Source Level Requirements**

- (3) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).
- (4) The applicable operating limit or work practice standard from which you deviated and either the parameter monitor reading during the deviation or a description of how you deviated from the work practice standard.
- (e) For each deviation from an emission limitation occurring at an affected source where you are using a continuous emission monitoring system to comply with the emission limitation, the permittee must include the information in 40 CFR §63.1575(c)(1) through (3) and in 40 CFR §63.1575(d)(1) through (3); and the information in 40 CFR §63.1575(e)(2) through (13); and the information below.
- (1) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks.
- (2) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was out-of-control, including the information in 40 CFR §63.8(c)(8).
- (3) An estimate of the quantity of each regulated pollutant emitted over the respective emission limit during the deviation, and a description of the method used to estimate the emissions.
- (4) A summary of the total duration of the deviation during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging period specified in the regulation for other types of emission limitations), and the total duration as a percent of the total source operating time during that reporting period.
- (5) A breakdown of the total duration of the deviations during the reporting period and into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (6) A summary of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system as a percent of the total source operating time during that reporting period.
- (7) A breakdown of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.
- (8) An identification of each HAP that was monitored at the affected source.
- (9) A brief description of the process units.
- (10) The monitoring equipment manufacturer(s) and model number(s).
- (11) The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.
- (12) A description of any change in the continuous emission monitoring system or continuous opacity monitoring system, processes, or controls since the last reporting period.
- (f) The permittee also must include the information required in 40 CFR §63.1575(f)(1) through (2) in each compliance report, if applicable.
- (1) The permittee must include the information in 40 CFR §63.1575(f)(1)(i) or (ii), if applicable.

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- (i) If the permittee is complying with 40 CFR §63.1575(k)(1), a summary of the results of any performance test done during the reporting period on any affected unit. Results of the performance test include the identification of the source tested, the date of the test, the percentage of emissions reduction or outlet pollutant concentration reduction (whichever is needed to determine compliance) for each run and for the average of all runs, and the values of the monitored operating parameters.
- (ii) If the permittee is not complying with 40 CFR §63.1575(k)(1), a copy of any performance test done during the reporting period on any affected unit. The report may be included in the next semiannual compliance report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, the permittee must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method.
- (2) Any requested change in the applicability of an emission standard (e.g., the permittee wants to change from the PM standard to the Ni standard for catalytic cracking units or from the HCl concentration standard to percent reduction for catalytic reforming units) in the compliance report. The permittee must include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.
- (g) You may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.
- (h) [Reserved]
- (i) If the applicable permitting authority has approved a period of planned maintenance for your catalytic cracking unit according to the requirements in paragraph (j) of this section, you must include the following information in your compliance report.
- (1) In the compliance report due for the 6-month period before the routine planned maintenance is to begin, you must include a full copy of your written request to the applicable permitting authority and written approval received from the applicable permitting authority.
- (2) In the compliance report due after the routine planned maintenance is complete, you must include a description of the planned routine maintenance that was performed for the control device during the previous 6-month period, and the total number of hours during those 6 months that the control device did not meet the emission limitations and monitoring requirements as a result of the approved routine planned maintenance.
- (j) If you own or operate multiple catalytic cracking units that are served by a single wet scrubber emission control device (e.g., a Venturi scrubber), you may request the applicable permitting authority to approve a period of planned routine maintenance for the control device needed to meet requirements in your operation, maintenance, and monitoring plan. You must present data to the applicable permitting authority demonstrating that the period of planned maintenance results in overall emissions reductions. During this pre-approved time period, the emission control device may be taken out of service while maintenance is performed on the control device and/or one of the process units while the remaining process unit(s) continue to operate. During the period the emission control device is unable to operate, the emission limits, operating limits, and monitoring requirements applicable to the unit that is operating and the wet scrubber emission control device do not apply. The applicable permitting authority may require that you take specified actions to minimize emissions during the period of planned maintenance.
- (1) You must submit a written request to the applicable permitting authority at least 6 months before the planned maintenance is scheduled to begin with a copy to the EPA Regional Administrator.
- (2) Your written request must contain the information in paragraphs (j)(2)(i) through (v) of this section.

**SECTION D. Source Level Requirements**

- (i) A description of the planned routine maintenance to be performed during the next 6 months and why it is necessary.
- (ii) The date the planned maintenance will begin and end.
- (iii) A quantified estimate of the HAP and criteria pollutant emissions that will be emitted during the period of planned maintenance.
- (iv) An analysis showing the emissions reductions resulting from the planned maintenance as opposed to delaying the maintenance until the next unit turnaround.
- (v) Actions you will take to minimize emissions during the period of planned maintenance.
- (k) Electronic submittal of performance test and CEMS performance evaluation data. For performance tests or CEMS performance evaluations conducted on and after February 1, 2016, if required to submit the results of a performance test or CEMS performance evaluation, you must submit the results according to the procedures in paragraphs (k)(1) and (2) of this section.
- (1) Unless otherwise specified by this subpart, within 60 days after the date of completing each performance test as required by this subpart, you must submit the results of the performance tests following the procedure specified in either paragraph (k)(1)(i) or (ii) of this section.
 - (i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (<http://www.epa.gov/ttn/chief/ert/index.html>) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>).) Performance test data must be submitted in a file format generated through use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (k)(1)(i).
 - (ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.
- (2) Unless otherwise specified by this subpart, within 60 days after the date of completing each CEMS performance evaluation required by §63.1571(a) and (b), you must submit the results of the performance evaluation following the procedure specified in either paragraph (k)(2)(i) or (ii) of this section.
 - (i) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the evaluation, you must submit the results of the performance evaluation to the EPA via the CEDRI. (CEDRI is accessed through the EPA's CDX.) Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT or an alternate file format consistent with the XML schema listed on the EPA's ERT Web site. If you claim that some of the performance evaluation information being submitted is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (k)(2)(i).
 - (ii) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported

**SECTION D. Source Level Requirements**

by the EPA's ERT as listed on the EPA's ERT Web site at the time of the evaluation, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(l) Extensions to electronic reporting deadlines. (1) If you are required to electronically submit a report through the Compliance and Emissions Data Reporting Interface (CEDRI) in the EPA's Central Data Exchange (CDX), and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date(s) and time(s) the CDX or CEDRI were unavailable when you attempted to access it in the 5 business days prior to the submission deadline; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(2) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

VI. WORK PRACTICE REQUIREMENTS.**# 021 [25 Pa. Code §123.46]****Monitoring requirements**

The continuous monitors shall be operated and maintained in accordance with DEP's most recent version of the Continuous Source Monitoring Manual.

022 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

[Additional authority of this condition is derived from 25 Pa. Code §129.114.]

The permittee shall operate and maintain the source and the following air-cleaning devices in accordance with manufacturers' specifications as well as good air pollution control practices:

- (a) The wet gas scrubber (Source ID C101-4) to control the emissions of sulfur dioxide (SO₂) and particulate matter (PM).
- (b) The enhanced selective non-catalytic reduction (SNCR) system (Source ID C101-3) to control the emissions of nitrogen oxides (NO_x).
- (c) CO Boiler (Source ID C01).

**SECTION D. Source Level Requirements**

(d) Research Cottrell ESP (Source ID C02) to control the emissions of particulate matter - The Research Cottrell ESP consists of 8 Rectifiers.

(1) In the event of an unplanned outage of one or more rectifiers for more than 24-hours, which is not related to preventive maintenance or troubleshooting, the permittee shall:

(a) Notify PADEP via Electronic Mail within one business day as to the unplanned outage and shall provide a detailed description of the probable cause(s) and actions that have or will be undertaken to address the rectifier(s) in an expeditious manner, and whether the unplanned outage is expected to continue.

(b) In the event of an extended, unplanned outage of one or more rectifiers, the permittee shall either repair the rectifier(s) within 30 days of the unplanned outage or perform a stack test to verify compliance with the 0.5 lb PM/1,000 lb coke limit in Condition 001(d) of this section. If the permittee conducts a stack test, the test will be scheduled between 30 and 60 days from the date of the permittee's notification of the unplanned outage, and will be conducted using the last Department-approved protocol. If the stack test identifies a non-compliance with Condition 001(d), the permittee shall notify the Department via Electronic Mail under Section C, Condition 014 regarding such non-compliance and the permittee will submit a written plan to PADEP identifying the probable cause for the unplanned outage and corrective actions that will be undertaken to address the failure in an expeditious manner.

023 [25 Pa. Code §129.201]**Boilers**

(a) Each year, the permittee shall calculate the difference between the actual emissions from the CO Boiler for the period from May 1 through September 30 and the allowable emissions for that period.

Note: Actual emissions are measured as the NO_x out of the CO Boiler minus the NO_x into the CO Boiler.

(b) The permittee shall calculate allowable emissions by multiplying the CO Boiler's cumulative heat input for the period by the emission rate of 0.17 pounds NO_x per million Btu heat input. Note: Heat input means the aggregate of heat generated from the conversion of CO => CO₂ and the heat generated from the burning of RFG/natural gas.

024 [25 Pa. Code §129.204]**Emission accountability.**

(a) For the CO Boiler, the permittee shall surrender to the Department one CAIR NO_x allowance and one CAIR NO_x Ozone Season allowance, as defined in 40 CFR 96.102 and 96.302 (relating to definitions), for each ton of NO_x by which the combined actual emissions exceed the allowable emissions of this source from May 1 through September 30.

The surrendered NO_x allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

(b) By November 1 of each year, the permittee shall surrender the required NO_x allowances to the Department's designated NO_x allowance tracking system account and provide to the Department, in writing, the following:

- (1) The serial number of each NO_x allowance surrendered.
- (2) The calculations used to determine the quantity of NO_x allowances required to be surrendered.

(c) If the permittee fails to comply with (b), above, the permittee shall by December 31 surrender three (3) NO_x allowances of the current or later year vintage for each NO_x allowance that was required to be surrendered by November 1 of that year.

(d) The surrender of NO_x allowances under (c), above, does not affect the liability of the permittee of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.

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

**SECTION D. Source Level Requirements**

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

[Note: On July 6, 2011, EPA promulgated the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. The CSAPR provisions of 40 CFR Part 97, Subpart AAAAA (relating to CSAPR NOx Annual Trading Program), replaced the provisions of 40 CFR Part 96, Subpart AA (relating to CAIR NOx Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart EEEEE (relating to CSAPR NOx Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NOx Ozone Season Trading Program and CSAPR NOx Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart GGGGG (relating to CSAPR NOx Ozone Season Group 3 Trading Program), to replace the provisions of 40 CFR Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season (though DEP will accept CSAPR NOx Ozone Season Group 2 allowances of current year vintage from other states, if available). Accordingly, the permittee shall surrender CSAPR NOx Annual allowances and either CSAPR NOx Ozone Season Group 2 allowances or CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 CFR §§ 97.402, 97.802, and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

025 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1570]

Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

What are my general requirements for complying with this subpart?

At all times, when operating, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

[Compliance with this streamlined condition assures compliance with 25 Pa. Code § 129.112(d).]

The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

VII. ADDITIONAL REQUIREMENTS.

026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7491]

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

Are any boilers or process heaters not subject to this subpart?

As per 40 C.F.R. §63.7491(i), CO Boiler (Source ID C01) used as a control device to comply with subpart UUU of 40 C.F.R. part 63 is not subject to 40 C.F.R. 63 subpart DDDDD.

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

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Source ID: 102

Source Name: CLAUS SULFUR RECOV. PLT.

Source Capacity/Throughput:

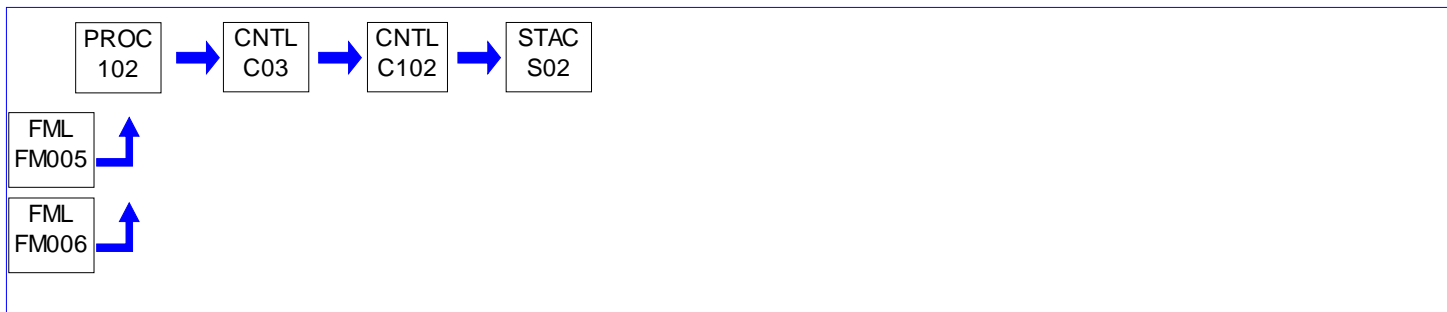
3.700 Tons/HR

LIQUID SULFUR

4.000 MCF/HR

FUEL GAS

Conditions for this source occur in the following groups: GROUP 20

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

Particulate matter emissions from this source shall not exceed 0.04 gr/dscf.

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

[Additional authority for this permit condition is derived from 40 C.F.R. Part 60, Subpart Ja.]

The permittee shall not discharge or cause the discharge of any gases into the atmosphere in excess of 250 ppm by volume (dry basis) of sulfur dioxide (SO₂) at zero percent excess air on a 12-hour rolling average basis, pursuant to 40 C.F.R. § 60.102a (f) (1) (i).

[Compliance with this condition also demonstrates compliance with 25 Pa. Code §129.13 and 40 C.F.R. Part 63 Subpart UUU Table 31.1.a.]

003 [25 Pa. Code §127.441]**Operating permit terms and conditions.**(a) NO_x emissions from this source shall not exceed 3.39 tons per year, based on a 12-month rolling sum.

(b) VOC emissions from this source shall not exceed 0.62 tons per year, based on a 12-month rolling sum.

(c) PM-2.5 emissions from this source shall not exceed 0.76 tons per year, based on a 12-month rolling sum.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1570]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my general requirements for complying with this subpart?**

(a) The permittee shall be in compliance with all of the non-opacity standards set forth in 40 CFR 63 Subpart UUU at all times when operating.

(b) The permittee shall be in compliance with the opacity and visible emission limits set forth in 40 CFR 63 Subpart UUU at all times when operating.

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

The permittee shall follow the most recent version of Continuous Source Monitoring Manual, Document No. 274-0300-001

**SECTION D. Source Level Requirements**

for performance test procedures of the CEMS, and to operate and maintain the CEMS, unless otherwise stated under Condition #009, of this Source.

III. MONITORING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall monitor the following for this source:

- (1) On a daily basis, the exhaust volume rate and SO₂ concentration in the stack (Source ID S02) to determine the actual emissions of sulfur oxides, expressed as SO₂.
- (2) The amount and type of fuel consumed by the incinerator (Source ID C102) on a monthly basis.

(b) The permittee shall comply with all applicable monitoring and recording requirements in accordance with 40 C.F.R. 60, Subparts A and J, and 40 C.F.R. 63, Subparts A and UUU.

(c) The permittee shall operate and maintain continuous emissions monitors for SO₂ and O₂ in accordance with 40 C.F.R. § 60.105(a)(5) and §63.1572.

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

[Additional authority for this permit conditions are also derived from 40 C.F.R. § 60.106a]

(a) The permittee shall do the following:

- (1) The permittee shall install, operate, calibrate, and maintain an instrument for continuously monitoring and recording the concentration (dry basis, zero percent excess air) of any SO₂ emissions into the atmosphere. The monitor shall include an oxygen monitor for correcting the data for excess air.
- (2) The span values for this monitor are two times the applicable SO₂ emission limit of 250 ppmvd and between 10 and 25 percent O₂, inclusive.
- (3) The owner or operator shall install, operate, and maintain each SO₂ CEMS according to Performance Specification 2 of appendix B to 40 CFR Part 60.
- (4) The Permittee shall conduct performance evaluations of each SO₂ monitor according to the requirements in 40 CFR §60.13(c) and Performance Specification 2 of appendix B to 40 C.F.R. Part 60.
- (5) The permittee shall use Methods 6 or 6C of appendix A-4 to 40 CFR Part 60 and Method 3 or 3A of appendix A-2 of 40 CFR Part 60 for conducting the relative accuracy evaluations. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference—see 40 C.F.R. §60.17) is an acceptable alternative to EPA Method 6.

(b) Excess emissions: All 12-hour periods during which the average concentration of SO₂ as measured by the SO₂ continuous monitoring system required under paragraph (a)(1) above exceeds 250 ppmv (dry basis, zero percent excess air).

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

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

(a) The permittee shall maintain records of the following for this source:

**SECTION D. Source Level Requirements**

- (1) The allowable emission rate of SO₂.
- (2) The actual emission rate of SO₂.
- (3) The amount of fuel gas consumed by the incinerator (Source ID C102) on a monthly basis.

(b) The permittee shall comply with the applicable recordkeeping requirements set forth in 40 C.F.R. 60, Subparts A and J, and 40 C.F.R. 63, Subpart A and § 63.1576.

(1) The permittee shall keep a current copy of the operation, maintenance, and monitoring plan onsite and available for inspection. The permittee shall keep records to show continuous compliance with the procedures in the operation, maintenance, and monitoring plan as per 40 C.F.R. § 63.1576(e).

(2) The records shall be in a form suitable and readily available for expeditious review according to 40 C.F.R. §§ 63.10(b)(i) and 63.1576(g).

(3) The permittee shall keep the records for 5 years, and keep the records on site for at least 2 years according to 40 C.F.R. §§ 63.10(b)(1) and 63.1576(h) and (i).

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

[Additional authority for this permit conditions is derived from 40 C.F.R. § 60.108a]

The permittee shall maintain the following records:

(a) Records of discharges greater than 500 lb SO₂ in excess of the allowable limits from a sulfur recovery plant. The following information shall be recorded no later than 45 days following the end of a discharge exceeding the thresholds:

- (i) A description of the discharge.
- (ii) The date and time the discharge was first identified and the duration of the discharge.
- (iii) The measured or calculated cumulative quantity of gas discharged over the discharge duration. If the discharge duration exceeds 24 hours, record the discharge quantity for each 24-hour period.
- (iv) For each discharge greater than 500 lb SO₂ in excess of the allowable limits from a sulfur recovery plant, either the measured concentration of reduced sulfur or SO₂ discharged to the atmosphere.
- (v) For each discharge greater than 500 lb SO₂ in excess of the allowable limits from sulfur recovery plant, the cumulative quantity of H₂S and SO₂ released into the atmosphere.
- (vi) The steps that the permittee took to limit the emissions during the discharge.
- (vii) The root cause analysis and corrective action analysis conducted as required in 40 C.F.R. § 60.103a(d), including an identification of the affected facility, the date and duration of the discharge, a statement noting whether the discharge resulted from the same root cause(s) identified in a previous analysis and either a description of the recommended corrective action(s) or an explanation of why corrective action is not necessary under 40 C.F.R. § 60.103a(e).
- (viii) For any corrective action analysis for which corrective actions are required in 40 C.F.R. § 60.103a(e), a description of the corrective action(s) completed within the first 45 days following the discharge and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

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

The permittee shall calculate and maintain records of NO_x, VOC, and PM-2.5 emissions for this source on a monthly and 12-month rolling sum basis.

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

[Additional authority for the permit conditions is also derived from 40 C.F.R. Part 63, Subpart UUU.]

(a) The permittee shall comply with the applicable reporting requirements set forth in 40 C.F.R. Part 60, Subparts A, and Part 63, Subparts A and UUU.

**SECTION D. Source Level Requirements**

(b) The permittee shall submit all the applicable notifications and reports in accordance with 40 C.F.R. § 63.1574 and § 63.1575.

(c) The permittee shall report each instance in which the emission limitations and operating limit are not met as per 40 C.F.R. § 63.1570(f).

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

[Additional authority for this permit conditions is also derived from 40 C.F.R. § 60.108a]

(a) The permittee shall comply with the notification, recordkeeping, and reporting requirements in 40 C.F.R. § 60.7.

(b) The permittee shall notify the Administrator of the specific monitoring provisions of 40 C.F.R. §§ 60.105a, 60.106a and 60.107a with which the permittee intends to comply.

(c) The permittee shall submit an excess emissions report for all periods of excess emissions according to the requirements of 40 C.F.R. §60.7(c) except that the report shall contain the information specified in paragraphs (c)(1) through (7) below:

- (1) The date that the exceedance occurred;
- (2) An explanation of the exceedance;
- (3) Whether the exceedance was concurrent with a startup, shutdown, or malfunction of an affected facility or control system; and
- (4) A description of the action taken, if any.
- (5) The information stated in Condition #004, of this Section.
- (6) For any periods for which monitoring data are not available, any changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.
- (7) A written statement, signed by a responsible official, certifying the accuracy and completeness of the information contained in the report.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1575]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What reports must I submit and when?**

(a) The permittee shall submit each report required in Table 43 of 40 CFR Part 63 Subpart UUU.

(b) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(c) The compliance report must contain the information required below:

- (1) Company name and address.
- (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
- (3) Date of report and beginning and ending dates of the reporting period.
- (4) If there are no deviations from any emission limitation that applies to the permittee and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system or continuous opacity monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(d) For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a continuous opacity monitoring system or a continuous emission

**SECTION D. Source Level Requirements**

monitoring system to comply with the emission limitation or work practice standard in this subpart, the semiannual compliance report must contain the information in 40 CFR §63.1575(c)(1) through (3) of this section and the information below.

- (1) The total operating time of each affected source during the reporting period and identification of the sources for which there was a deviation.
- (2) Information on the number, date, time, duration, and cause of deviations (including unknown cause, if applicable).
- (3) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).
- (4) The applicable operating limit or work practice standard from which you deviated and either the parameter monitor reading during the deviation or a description of how you deviated from the work practice standard.
- (e) For each deviation from an emission limitation occurring at an affected source where you are using a continuous opacity monitoring system or a continuous emission monitoring system to comply with the emission limitation, you must include the information in 40 CFR §63.1575(c)(1) through (3), in 40 CFR §63.1575(d)(1) through (3), and the information in paragraphs (e)(1) through (12) below:
 - (1) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks.
 - (2) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was out-of-control, including the information in §63.8(c)(8).
 - (3) An estimate of the quantity of each regulated pollutant emitted over the emission limit during the deviation, and a description of the method used to estimate the emissions.
 - (4) A summary of the total duration of the deviation during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging period specified in the regulation for other types of emission limitations), and the total duration as a percent of the total source operating time during that reporting period.
 - (5) A breakdown of the total duration of the deviations during the reporting period and into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - (6) A summary of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system as a percent of the total source operating time during that reporting period.
 - (7) A breakdown of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.
 - (8) An identification of each HAP that was monitored at the affected source.
 - (9) A brief description of the process units.
 - (10) The monitoring equipment manufacturer(s) and model number(s).
 - (11) The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.

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(12) A description of any change in the continuous emission monitoring system or continuous opacity monitoring system, processes, or controls since the last reporting period.

(f) The permittee also must include the information required in 40 CFR §63.1575(f)(1) through (2) in each compliance report, if applicable.

(1) The permittee must include the information in 40 CFR §63.1575(f)(1)(i) or (ii), if applicable.

(i) If the permittee is complying with 40 CFR §63.1575(k)(1), a summary of the results of any performance test done during the reporting period on any affected unit. Results of the performance test include the identification of the source tested, the date of the test, the percentage of emissions reduction or outlet pollutant concentration reduction (whichever is needed to determine compliance) for each run and for the average of all runs, and the values of the monitored operating parameters.

(ii) If the permittee is not complying with 40 CFR §63.1575(k)(1), a copy of any performance test done during the reporting period on any affected unit. The report may be included in the next semiannual compliance report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, the permittee must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method.

(2) Any requested change in the applicability of an emission standard (e.g., the permittee wants to change from the PM standard to the Ni standard for catalytic cracking units or from the HCl concentration standard to percent reduction for catalytic reforming units) in the compliance report. The permittee must include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.

(g) You may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.

(h) [Reserved]

(i) If the applicable permitting authority has approved a period of planned maintenance for your catalytic cracking unit according to the requirements in paragraph (j) of this section, you must include the following information in your compliance report.

(1) In the compliance report due for the 6-month period before the routine planned maintenance is to begin, you must include a full copy of your written request to the applicable permitting authority and written approval received from the applicable permitting authority.

(2) In the compliance report due after the routine planned maintenance is complete, you must include a description of the planned routine maintenance that was performed for the control device during the previous 6-month period, and the total number of hours during those 6 months that the control device did not meet the emission limitations and monitoring requirements as a result of the approved routine planned maintenance.

(j) If you own or operate multiple catalytic cracking units that are served by a single wet scrubber emission control device (e.g., a Venturi scrubber), you may request the applicable permitting authority to approve a period of planned routine maintenance for the control device needed to meet requirements in your operation, maintenance, and monitoring plan. You must present data to the applicable permitting authority demonstrating that the period of planned maintenance results in overall emissions reductions. During this pre-approved time period, the emission control device may be taken out of service while maintenance is performed on the control device and/or one of the process units while the remaining process unit(s) continue to operate. During the period the emission control device is unable to operate, the emission limits, operating

**SECTION D. Source Level Requirements**

limits, and monitoring requirements applicable to the unit that is operating and the wet scrubber emission control device do not apply. The applicable permitting authority may require that you take specified actions to minimize emissions during the period of planned maintenance.

(1) You must submit a written request to the applicable permitting authority at least 6 months before the planned maintenance is scheduled to begin with a copy to the EPA Regional Administrator.

(2) Your written request must contain the information in paragraphs (j)(2)(i) through (v) of this section.

(i) A description of the planned routine maintenance to be performed during the next 6 months and why it is necessary.

(ii) The date the planned maintenance will begin and end.

(iii) A quantified estimate of the HAP and criteria pollutant emissions that will be emitted during the period of planned maintenance.

(iv) An analysis showing the emissions reductions resulting from the planned maintenance as opposed to delaying the maintenance until the next unit turnaround.

(v) Actions you will take to minimize emissions during the period of planned maintenance.

(k) Electronic submittal of performance test and CEMS performance evaluation data. For performance tests or CEMS performance evaluations conducted on and after February 1, 2016, if required to submit the results of a performance test or CEMS performance evaluation, you must submit the results according to the procedures in paragraphs (k)(1) and (2) of this section.

(1) Unless otherwise specified by this subpart, within 60 days after the date of completing each performance test as required by this subpart, you must submit the results of the performance tests following the procedure specified in either paragraph (k)(1)(i) or (ii) of this section.

(i) For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT Web site (<http://www.epa.gov/ttn/chief/ert/index.html>) at the time of the test, you must submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI). (CEDRI can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>.) Performance test data must be submitted in a file format generated through use of the EPA's ERT or an alternate electronic file format consistent with the extensible markup language (XML) schema listed on the EPA's ERT Web site. If you claim that some of the performance test information being submitted is confidential business information (CBI), you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (k)(1)(i).

(ii) For data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the test, you must submit the results of the performance test to the Administrator at the appropriate address listed in §63.13.

(2) Unless otherwise specified by this subpart, within 60 days after the date of completing each CEMS performance evaluation required by §63.1571(a) and (b), you must submit the results of the performance evaluation following the procedure specified in either paragraph (k)(2)(i) or (ii) of this section.

(i) For performance evaluations of continuous monitoring systems measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the evaluation, you must submit the results of the performance evaluation to the EPA via the CEDRI. (CEDRI is accessed through the EPA's CDX.) Performance evaluation data must be submitted in a file format generated through the use of the EPA's ERT or an alternate file format

**SECTION D. Source Level Requirements**

consistent with the XML schema listed on the EPA's ERT Web site. If you claim that some of the performance evaluation information being submitted is CBI, you must submit a complete file generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT Web site, including information claimed to be CBI, on a compact disc, flash drive or other commonly used electronic storage media to the EPA. The electronic storage media must be clearly marked as CBI and mailed to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT or alternate file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph (k)(2)(i).

(ii) For any performance evaluations of continuous monitoring systems measuring RATA pollutants that are not supported by the EPA's ERT as listed on the EPA's ERT Web site at the time of the evaluation, you must submit the results of the performance evaluation to the Administrator at the appropriate address listed in §63.13.

(l) Extensions to electronic reporting deadlines. (1) If you are required to electronically submit a report through the Compliance and Emissions Data Reporting Interface (CEDRI) in the EPA's Central Data Exchange (CDX), and due to a planned or actual outage of either the EPA's CEDRI or CDX systems within the period of time beginning 5 business days prior to the date that the submission is due, you will be or are precluded from accessing CEDRI or CDX and submitting a required report within the time prescribed, you may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. You must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description identifying the date(s) and time(s) the CDX or CEDRI were unavailable when you attempted to access it in the 5 business days prior to the submission deadline; a rationale for attributing the delay in reporting beyond the regulatory deadline to the EPA system outage; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the report must be submitted electronically as soon as possible after the outage is resolved. The decision to accept the claim of EPA system outage and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

(2) If you are required to electronically submit a report through CEDRI in the EPA's CDX and a force majeure event is about to occur, occurs, or has occurred or there are lingering effects from such an event within the period of time beginning 5 business days prior to the date the submission is due, the owner or operator may assert a claim of force majeure for failure to timely comply with the reporting requirement. For the purposes of this section, a force majeure event is defined as an event that will be or has been caused by circumstances beyond the control of the affected facility, its contractors, or any entity controlled by the affected facility that prevents you from complying with the requirement to submit a report electronically within the time period prescribed. Examples of such events are acts of nature (e.g., hurricanes, earthquakes, or floods), acts of war or terrorism, or equipment failure or safety hazard beyond the control of the affected facility (e.g., large scale power outage). If you intend to assert a claim of force majeure, you must submit notification to the Administrator in writing as soon as possible following the date you first knew, or through due diligence should have known, that the event may cause or caused a delay in reporting. You must provide to the Administrator a written description of the force majeure event and a rationale for attributing the delay in reporting beyond the regulatory deadline to the force majeure event; describe the measures taken or to be taken to minimize the delay in reporting; and identify a date by which you propose to report, or if you have already met the reporting requirement at the time of the notification, the date you reported. In any circumstance, the reporting must occur as soon as possible after the force majeure event occurs. The decision to accept the claim of force majeure and allow an extension to the reporting deadline is solely within the discretion of the Administrator.

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

(1) The permittee shall comply with the applicable work practice standard requirements set forth in 40 CFR 60, Subparts A, and 40 CFR 63, Subparts A and UUU.

(2) The permittee shall prepare an operation, maintenance, and monitoring plan according to the requirements in 40 C.F.R. § 63.1574(f), and operate at all times according to the procedures in the plan as per 40 C.F.R. § 63.1568(a)(3).

(3) The permittee shall demonstrate continuous compliance with the emission limitation in accordance with the methods

**SECTION D. Source Level Requirements**

specified in Tables 34 and 35 of 40 C.F.R. Part 63, Subpart UUU.

(4) The permittee shall comply with the requirements for HAP emissions from bypass lines in accordance with 40 C.F.R. § 63.1569.

(5) The permittee shall demonstrate continuous compliance with the work practice standard required in 40 CFR §63.1568(a)(3) by complying with the procedures in the operation maintenance, and monitoring plan, as per 40 CFR §63.1568(c).

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

[Additional authority for this permit condition is also derived from 40 C.F.R. Part 60, Subpart Ja]

(a) The permittee shall conduct a root cause analysis and a corrective action analysis for each time the SO₂ emissions are more than 227 kg (500 lb) greater than the amount that would have been emitted if the SO₂ or reduced sulfur concentration was equal to the applicable emissions limit in Condition #001 during one or more consecutive periods of excess emissions or any 24-hour period, whichever is shorter, pursuant to 40 C.F.R. § 60.103a (c)(3).

(b) The root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a discharge meeting the condition (a), pursuant to 40 C.F.R. § 60.103a(d).

016 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1570]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my general requirements for complying with this subpart?**

At all times when operating, including periods of startup, shutdown, and malfunction, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 103

Source Name: MAIN FLARE

Source Capacity/Throughput:

1.000 BBL/HR

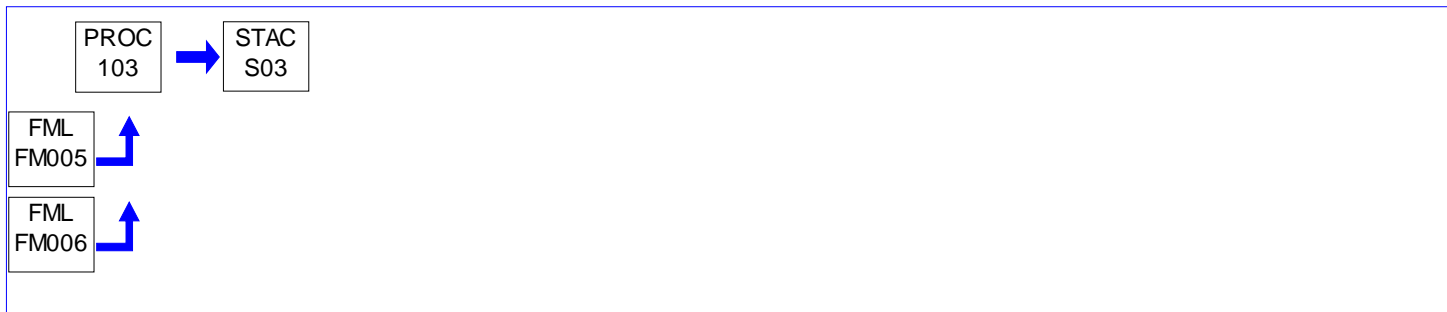
PETRO. LIQUIDS

N/A

PROCESS GAS

4.400 MMCF/HR

Natural Gas

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

The permittee shall not emit into the outdoor atmosphere of particulate matter from this source in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) .04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

(ii) The rate determined by the following formula: $A = 6000 E^{-1}$

where: A = Allowable emissions in grains per dry standard cubic foot, and E = Effluent gas volume in dry standard cubic feet per minute,

when E is equal to or greater than 150,000 but less than 300,000.

(iii) .02 grain per dry standard cubic foot, when the effluent gas volume is greater than 300,000 dry standard cubic feet per minute.

002 [25 Pa. Code §127.512]**Operating permit terms and conditions.**

(a) The permittee may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO₂, from this source in excess of the following:

- (1) 0.5 tons per day during normal operation.
- (2) 25.0 tons in any 12 consecutive month period.

(b) The permittee may not permit the emission into the outdoor atmosphere of nitrogen oxides (NO_x) from this source in excess of the following:

- (1) 1.3 tons per day during normal operation.
- (2) 69.0 tons in any 12 consecutive month period.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.670]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Requirements for flare control devices.**

On or before January 30, 2019, the permittee of a flare used as a control device for an emission point subject to 40 C.F.R. § 63.670 shall meet the applicable requirements for flares as specified in 40 CFR §63.670 (a) through (q) and the applicable requirements in 40 C.F.R. § 63.671. The permittee may elect to comply with the requirements of 40 C.F.R. § 63.670(r) in lieu

**SECTION D. Source Level Requirements**

of the requirements in 40 C.F.R. § 63.670(d) through (f), as applicable. Operational requirements for the flare include:

(a) The permittee shall operate each flare with a pilot flame present at all times when regulated material is routed to the flare. Each 15-minute block during which there is at least one minute where no pilot flame is present when regulated material is routed to the flare is a deviation of the standard. Deviations in different 15-minute blocks from the same event are considered separate deviations. The permittee shall monitor for the presence of a pilot flame as specified in 40 CFR §63.670(g).

(b) The permittee shall specify the smokeless design capacity of each flare and operate with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours, when regulated material is routed to the flare and the flare vent gas flow rate is less than the smokeless design capacity of the flare. The permittee shall monitor for visible emissions from the flare as specified in 40 CFR §63.670(h).

(c) For each flare, the permittee shall comply with either 40 CFR §63.670(d)(1) or (2), provided the appropriate monitoring systems are in-place, whenever regulated material is routed to the flare for at least 15-minutes and the flare vent gas flow rate is less than the smokeless design capacity of the flare.

(1) Except as provided in 40 CFR §63.670(d)(2), the actual flare tip velocity (V_{tip}) must be less than 60 feet per second. The permittee shall monitor V_{tip} using the procedures specified in 40 CFR §63.670(i) and (k).

(2) V_{tip} must be less than 400 feet per second and also less than the maximum allowed flare tip velocity (V_{max}) as calculated according to the equation in of 40 CFR §63.670(d)(2). The permittee shall monitor V_{tip} using the procedures specified in 40 CFR §63.670(i) and (k) and monitor gas composition and determine NH_{Vg} using the procedures specified in 40 CFR §63.670(j) and (l).

(d) For each flare, the permittee shall operate the flare to maintain the net heating value of flare combustion zone gas (NH_{Vcz}) at or above 270 British thermal units per standard cubic feet (Btu/scf) determined on a 15-minute block period basis when regulated material is routed to the flare for at least 15-minutes. The permittee shall monitor and calculate NH_{Vcz} as specified in 40 CFR §63.670(m).

Fuel Restriction(s).

004 [25 Pa. Code §127.512]

Operating permit terms and conditions.

Only natural gas shall be burned as pilot gas for this source.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.103a]

Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007**Work practice standards.**

The permittee shall not burn in any affected flare any fuel gas that contains H_2S in excess of 162 ppmv (0.10 gr/dscf) determined hourly on a 3-hour rolling average basis. The combustion in a flare of process upset gases or fuel gas that is released to the flare as a result of relief valve leakage or other emergency malfunctions is exempt from this limit.

[Compliance with this condition assures compliance with 25 Pa. Code §123.21.]

Throughput Restriction(s).

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.670]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Requirements for flare control devices.

The permittee of a flare used as a control device for an emission point subject to 40 C.F.R. § 63.670 shall meet the applicable requirements for flares as specified in 40 C.F.R. §§ 63.670(a) through (q) and the applicable requirements in 40 C.F.R. § 63.671. The permittee may elect to comply with the requirements of 40 C.F.R. § 63.670(r) in lieu of the requirements of 40 C.F.R. §§ 63.670(d) through (f), as applicable. Operational requirements for the flare include:

**SECTION D. Source Level Requirements****(a) pilot flame presence--**

Pursuant to 40 C.F.R. § 63.670(b), the permittee shall operate the flare with a pilot flame present at all times when regulated material is routed to the flare. Each 15-minute block during which there is at least one minute where no pilot flame is present when regulated material is routed to the flare is a deviation of the standard. Deviations in different 15-minute blocks from the same event are considered separate deviations. The permittee shall monitor for presence of a pilot flame as specified in 40 C.F.R. § 63.670(g).

(b) visible emissions --

In accordance with 40 C.F.R. § 63.670(c), the permittee shall specify the smokeless design capacity of the flare and operate with no visible emissions, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours, when regulated material is routed to the flare and the flare vent gas flow rate is less than the smokeless design capacity of the flare. The permittee shall monitor for visible emissions from the flare as specified in 40 C.F.R. § 63.670(h).

(c) flare tip velocity --

As per 40 C.F.R. § 63.670(d), the permittee shall comply with either 40 C.F.R. § 63.670(d)(1) or (2), provided the appropriate monitoring systems are in-place, whenever regulated material is routed to the flare for at least 15-minutes and the flare vent gas flow rate is less than the smokeless design capacity of the flare.

(1) Except as provided in 40 C.F.R. § 63.670(d) (2), the actual flare tip velocity (V_{tip}) must be less than 60 feet per second. The permittee shall monitor V_{tip} using the procedures specified in 40 C.F.R. §§ 63.670(i) and (k).

(2) V_{tip} must be less than 400 feet per second and also less than the maximum allowed flare tip velocity (V_{max}) as calculated according to the equation in 40 C.F.R. § 63.670(d)(2). The permittee shall monitor V_{tip} using the procedures specified in 40 C.F.R. §§ 63.670(i) and (k) and monitor gas composition and determine NH_{Vg} using the procedures specified in 40 C.F.R. Sections (j) and (l).

(d) combustion zone operating limits --

In accordance with 40 C.F.R. § 63.670(e), the permittee shall operate the flare to maintain the net heating value of flare combustion zone gas (NH_{Vcz}) at or above 270 British thermal units per standard cubic feet (Btu/scf) determined on a 15-minute block period basis when regulated material is routed to the flare for at least 15-minutes. The permittee shall monitor and calculate NH_{Vcz} as specified in 40 C.F.R. § 63.670(m).

(e) dilution operating limits for flares with perimeter assist air --

Pursuant to 40 C.F.R. § 63.670(f), except as provided in 40 C.F.R. § 63.670(f)(1) for each flare actively receiving perimeter assist air, the permittee shall operate the flare to maintain the net heating value dilution parameter (NH_{Vdil}) at or above 22 British thermal units per square foot (Btu/ft²) determined on a 15-minute block period basis when regulated material is being routed to the flare for at least 15-minutes. The permittee shall monitor and calculate NH_{Vdil} as specified in 40 C.F.R. § 63.670(n).

Control Device Efficiency Restriction(s).**# 007 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

[Additional authority is derived from 40 C.F.R. §§ 60.18 and 63.11.]

The flare shall be maintained and operated in accordance with the applicable provisions specified in 40 C.F.R. § 60.18(a) through (f) and/or § 63.11(a) and (b).

II. TESTING REQUIREMENTS.**# 008 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

(a) EPA test method 22 in 40 C.F.R. Part 60, Appendix A, shall be used to determine the compliance of the flare with the visible emission limitations. The observation period is two (2) hours and shall be used according to EPA Method 22.

(b) The net heating value of the gas being combusted in a flare shall be calculated using the equation found in 40 C.F.R. §

**SECTION D. Source Level Requirements**

63.11(b)(6).

(c) The actual flare exit velocity shall be determined by dividing the volumetric flow rate of gas being combusted (in units of emission standard temperature and pressure), as determined by EPA test Methods 2, 2A, 2C, or 2D, in 40 CFR 60, Appendix A, as appropriate, by the unobstructed (free) cross-sectional area of the flare tip.

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.104a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Performance tests.**

As per 40 CFR §60.104a(j), the permittee shall determine compliance with the applicable H₂S emissions limit in the concentration requirement in 40 CFR §60.103a(h) for the flare according to the test methods and procedures in 40 CFR §60.104a(j)(4)(i)-(iv) below.

(1) For Method 11 of Appendix A-5 to 40 CFR Part 60, the sampling time and sample volume must be at least 10 minutes and 0.010 dscm (0.35 dscf). Two samples of equal sampling times must be taken at about 1-hour intervals. The arithmetic average of these two samples constitutes a run. For most fuel gases, sampling times exceeding 20 minutes may result in depletion of the collection solution, although fuel gases containing low concentrations of H₂S may necessitate sampling for longer periods of time.

(2) For Method 15 of Appendix A-5 to 40 CFR Part 60, at least three injects over a 1-hour period constitutes a run.

(3) For Method 15A of Appendix A-5 to 40 CFR Part 60, a 1-hour sample constitutes a run. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference-see 40 CFR §60.17) is an acceptable alternative to EPA Method 15A of appendix A-5 to part 60.

(4) If monitoring is conducted at a single point in a common source of fuel gas as allowed under 40 CFR §60.107a(a)(2)(iv), only one performance test is required. That is, performance tests are not required when a new affected fuel gas combustion device or flare is added to a common source of fuel gas that previously demonstrated compliance.

III. MONITORING REQUIREMENTS.**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.107a]****Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Monitoring of emissions and operations for fuel gas combustion devices and flares.**

(a) As per 40 C.F.R. §60.107a(a)(2), the permittee shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H₂S in the fuel gases before being burned in the flare.

(i) The permittee shall install, operate and maintain each H₂S monitor according to Performance Specification 7 of Appendix B to 40 C.F.R. Part 60. The span value for this instrument is 300 ppmv H₂S.

(ii) The permittee shall conduct performance evaluations for each H₂S monitor according to the requirements of 40 C.F.R. §60.13(c) and Performance Specification 7 of appendix B to 40 C.F.R. Part 60. The permittee shall use Method 11, 15, or 15A of appendix A-5 to 40 C.F.R. Part 60 or Method 16 of appendix A-6 to 40 C.F.R. Part 60 for conducting the relative accuracy evaluations. The method ANSI/ASME PTC 19.10-1981, "Flue and Exhaust Gas Analyses," (incorporated by reference—see 40 C.F.R. §60.17) is an acceptable alternative to EPA Method 15A of appendix A-5 to 40 C.F.R. Part 60.

(iii) The permittee shall comply with the applicable quality assurance procedures in appendix F to 40 C.F.R. Part 60 for each H₂S monitor.

(iv) Flares having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H₂S in the fuel gas being burned in the respective flares.

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(3) The permittee is not required to comply with 40 C.F.R. §60.107a(a)(2) for fuel gas streams that are exempt under 40 C.F.R. §60.103a(h) or, other flare that are inherently low in sulfur content.

(4) If the composition of an exempt fuel gas stream changes, the permittee must follow the procedures in 40 C.F.R. §60.107a(b)(3).

(b) As per 40 CFR §60.107a(e) - Sulfur monitoring for assessing root cause analysis threshold for affected flares. The permittee shall determine the total reduced sulfur concentration for each gas line directed to the flare in accordance with 40 CFR §60.107a(e)(1). Different options may be elected for different gas lines. If a monitoring system is in place that is capable of complying with the requirements related to 40 CFR §60.107a(e)(1), the permittee must comply with the requirements related to 40 CFR §60.107a(e)(1) upon startup of the modified flare.

(1) Total reduced sulfur monitoring requirements. The owner or operator shall install, operate, calibrate and maintain an instrument or instruments for continuously monitoring and recording the concentration of total reduced sulfur in gas discharged to the flare.

(i) The permittee shall install, operate and maintain each total reduced sulfur monitor according to Performance Specification 5 of appendix B to part 60. The span value should be determined based on the maximum sulfur content of gas that can be discharged to the flare (e.g., roughly 1.1 to 1.3 times the maximum anticipated sulfur concentration), but may be no less than 5,000 ppmv. A single dual range monitor may be used to comply with the requirements of 40 C.F.R. §60.107a(e) and 40 C.F.R. §60.107a(a)(2) provided the applicable span specifications are met.

(ii) The permittee shall conduct performance evaluations of each total reduced sulfur monitor according to the requirements in 40 C.F.R. §60.13(c) and Performance Specification 5 of appendix B to this 40 C.F.R. part 60. The owner or operator of each total reduced sulfur monitor shall use EPA Method 15A of appendix A-5 to this part for conducting the relative accuracy evaluations. The method ANSI/ASME PTC 19.10-1981 (incorporated by reference-see 40 C.F.R. §60.17) is an acceptable alternative to EPA Method 15A of appendix A-5 to this part. The alternative relative accuracy procedures described in section 16.0 of Performance Specification 2 of appendix B to this part (cylinder gas audits) may be used for conducting the relative accuracy evaluations, except that it is not necessary to include as much of the sampling probe or sampling line as practical.

(iii) The permittee shall comply with the applicable quality assurance procedures in appendix F to part 60 for each total reduced sulfur monitor.

(c) 40 C.F.R. §60.107a(f) - Flow monitoring for flares. Except as provided in 40 C.F.R. §60.107a(f)(2), the permittee shall install, operate, calibrate and maintain, in accordance with the specifications in 40 C.F.R. §60.107a(f)(1), a CPMS to measure and record the flow rate of gas discharged to the flare.

(1) The permittee shall install, calibrate, operate and maintain each flow monitor according to the manufacturer's procedures and specifications and the following requirements.

(i) Locate the monitor in a position that provides a representative measurement of the total gas flow rate.

(ii) Use a flow sensor meeting an accuracy requirement of +/- 20 percent of the flow rate at velocities ranging from 0.1 to 1 feet per second and an accuracy of +/- 5 percent of the flow rate for velocities greater than 1 feet per second.

(iii) Use a flow monitor that is maintainable online, is able to continuously correct for temperature and pressure and is able to record flow in standard conditions (as defined in 40 C.F.R. §60.2) over one-minute averages.

(iv) At least quarterly, perform a visual inspection of all components of the monitor for physical and operational integrity and all electrical connections for oxidation and galvanic corrosion if the flow monitor is not equipped with a redundant flow sensor.

(v) Recalibrate the flow monitor in accordance with the manufacturer's procedures and specifications biennially (every two years) or at the frequency specified by the manufacturer.

(2) Flares equipped with flare gas recovery systems designed, sized and operated to capture all flows except those

**SECTION D. Source Level Requirements**

resulting from startup, shutdown or malfunction are not required to install continuous flow monitors; provided, however, that for any such flare, the owner or operator shall comply with the monitoring alternative in 40 C.F.R. §60.107a(g).

(d) 40 C.F.R. §60.107a(i) - Excess emissions. For the purpose of reports required by 40 C.F.R. §60.7(c), periods of excess emissions for flares subject to the concentration requirement in 40 C.F.R. §60.103a(h) are defined as specified in 40 C.F.R. §60.107a(i)(2). Determine a rolling 3-hour or a rolling daily average as the arithmetic average of the applicable 1-hour averages (e.g., a rolling 3-hour average is the arithmetic average of three contiguous 1-hour averages).

(e) 40 C.F.R. §60.107a(i)(2) - H₂S concentration limits for flares: Each rolling 3-hour period during which the average concentration of H₂S as measured by the H₂S continuous monitoring system required under 40 C.F.R. §60.107a(a)(2) exceeds 162 ppmv (0.10 gr/dscf).

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.670]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Requirements for flare control devices.**

(a) Per 40 C.F.R. § 63.670(g), the permittee shall continuously monitor the presence of the pilot flame(s) using a device (including, but not limited to, a thermocouple, ultraviolet beam sensor, or infrared sensor) capable of detecting that the pilot flame(s) is present.

(b) 40 CFR §63.670(h), the permittee shall monitor visible emissions while regulated materials are vented to the flare. An initial visible emissions demonstration must be conducted using an observation period of 2 hours using Method 22 at 40 CFR Part 60, Appendix A-7. Subsequent visible emissions observations must be conducted using either the methods in CFR §63.670(h)(1) or in CFR §63.670(h)(2). The permittee must record and report any instances where visible emissions are observed for more than 5 minutes during any 2 consecutive hours as specified in 40 CFR §63.655(g)(11)(ii).

(c) The permittee shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the volumetric flow rate in the flare header or headers that feed the flare as well as any supplemental natural gas used. Different flow monitoring methods may be used to measure different gaseous streams that make up the flare vent gas provided that the flow rates of all gas streams that contribute to the flare vent gas are determined. If assist air or assist steam is used, the permittee shall install, operate, calibrate, and maintain a monitoring system capable of continuously measuring, calculating, and recording the volumetric flow rate of assist air and/or assist steam used with the flare. If pre-mix assist air and perimeter assist are both used, the permittee shall install, operate, calibrate, and maintain a monitoring system capable of separately measuring, calculating, and recording the volumetric flow rate of pre-mix assist air and perimeter assist air used with the flare. Flow monitoring system requirements and acceptable alternatives are provided in 40 CFR §63.670(i)(1) through (6).

(d) The permittee shall determine the concentration of individual components in the flare vent gas using either the methods provided in 40 CFR §63.670(j)(1) or (2), to assess compliance with the operating limits in 40 CFR §63.670(e), and if applicable, 40 CFR §63.670(d) and (f). Alternatively, the permittee may elect to directly monitor the net heating value of the flare vent gas following the methods provided in 40 C.F.R. § 63.670(j)(3), and if desired, may directly measure the hydrogen concentration in the flare vent gas following the methods provided in 40 CFR §63.670(j)(4). The permittee may elect to use different monitoring methods for different gaseous streams that make up the flare vent gas using different methods provided the composition or net heating value of all gas streams that contribute to the flare vent gas are determined.

IV. RECORDKEEPING REQUIREMENTS.**# 012 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

[Additional authority for this permit condition is derived from 40 C.F.R. § 63.670]

(a) The permittee shall maintain records of the following operating parameters for this source:

- (1) The amount and type of fuel gases consumed on a monthly basis.
- (2) The H₂S content of the fuel consumed and waste gas combusted.

**SECTION D. Source Level Requirements**

- (3) The Btu content of the fuel (or the net heating value of the gas) combusted.
- (4) Velocity tip determination.

(b) The permittee shall record the following in accordance with the monitoring requirement under Subpart Ja:

- (1) Quantity of process gas to the flare.
- (2) The H₂S content of the process gas.

(c) During flaring incidents the permittee shall record the following information:

- (1) Date,
- (2) Time,
- (3) Duration,
- (4) Flow rate of gases sent to the flare,
- (5) H₂S concentration,
- (6) Amount of pollutants emitted, and
- (7) Cause of any flaring incident.

(d) Sufficient calculations shall be performed to demonstrate compliance with the emission limits for this source.

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.108a]

Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007

Recordkeeping and reporting requirements.

The permittee shall maintain the following records:

- (1) A copy of the flare management plan.
- (2) For each fuel gas stream to which one of the exemptions listed in 40 C.F.R. §60.107a(a)(3) applies, records of the specific exemption determined to apply for each fuel stream. If the permittee applies for the exemption described in 40 C.F.R. §60.107a(a)(3)(iv), the permittee must keep a copy of the application as well as the letter from DEP granting approval of the application.
- (3) Records of discharges to an affected flare in excess of 500,000 scf above baseline in any 24-hour period as required by 40 C.F.R. §60.103a(c).

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.670]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Requirements for flare control devices.

[Additional authority for this permit condition is from 40 CFR Section 63.655.]

Per 40 CFR Section 63.670(p), the permittee shall keep the records specified in 40 CFR Section 63.665(i)(9) as listed below. The records shall be up-to-date and readily accessible, as applicable.

- (i) Retain records of the output of the monitoring device used to detect the presence of a pilot flame as required in 40 CFR 63.670(b) for a minimum of 2 years. Retain records for a minimum of 5 years, of each 15-minute block during which there was at least one minute that no pilot flame was present when regulated material was routed to the flare.
- (ii) Retain records of daily visible emissions observations or video surveillance images required in 40 CFR Section 63.670(h) as specified in 40 CFR Section 63.655(i)(9)(ii)(A) through (C) as applicable, for a minimum of 3 years.
- (iii) The 15-minute block average cumulative flows for flare vent gas and, if applicable, total steam, perimeter assist air, and pre-mix assist air specified to be monitored under 40 CFR Section 63.670 (i), along with the date and time interval for the 15-minute block. If multiple monitoring locations are used to determine cumulative vent gas flow, total steam, perimeter assist air, and pre-mix assist air, retain records of the 15-minute block average flows for each monitoring location for a minimum of

**SECTION D. Source Level Requirements**

2 years, and retain the 15-minute block average cumulative flows that are used in subsequent calculations for a minimum of 5 years.

If pressure and temperature monitoring is used, retain records of the 15-minute block average temperature, pressure, and molecular weight of the flare vent gas or assist gas stream for each measurement location used to determine the 15-minute block average cumulative flows for a minimum of 2 years, and retain the 15-minute block average cumulative flows that are used in subsequent calculations for a minimum of 5 years.

(iv) For the flare vent gas compositions specified to be monitored under 40 CFR Section 63.670(j), retain records of individual component concentrations for each compositional analysis for a minimum of 2 years

If a NHV_g is used, retain records of the 15-minute block average values for a minimum of 5 years.

(v) Each 15-minute block average operating parameter calculated following the methods specified in 40 CFR Section 63.670(k) through (n), as applicable.

(vi) All periods during which operating values are outside of the applicable operating limits specified in 40 CFR Sections 63.670(d) through (f) when regulated material is being routed to the flare.

(vii) All periods during which the permittee does not perform flare monitoring according to the procedures in 40 CFR Section 63.670(g) through (j).

(viii) Records of periods when there is flow of vent gas to the flare, but when there is no flow of regulated materials to the flare, including the start and stop time and dates of periods of no regulated material flow.

(ix) Records when the flow of vent gas exceeds the smokeless capacity of the flare, including start and stop times and dates of the flaring event.

(x) Records of the root cause analysis and corrective action analysis conducted as required in 40 CFR Section 63.670(o)(3), including an identification of the affected facility, the date and duration of the event, a statement noting whether the event resulted from the same root causes(s) identified in a previous analysis and either a description of the recommended corrective action(s) or an explanation of why corrective action is not necessary under 40 CFR Section 63.670(o)(5)(i).

(xi) For any corrective action analysis for which implementation of corrective action(s) are required in 40 CFR Section 63.670(o)(5), a description of the corrective action(s) completed within the first 45 days following the discharge and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

V. REPORTING REQUIREMENTS.

015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.108a]
Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007
Recordkeeping and reporting requirements.

As per 40 C.F.R. §60.108a(d), the permittee shall submit an excess emissions report semiannually for all periods of excess emissions according to the requirements of 40 C.F.R. §60.7(c) except that the report shall contain the information specified in 40 C.F.R. §60.108a(d)(1) through (7).

(1) The date that the exceedance occurred;

(2) An explanation of the exceedance;

(3) Whether the exceedance was concurrent with a startup, shutdown, or malfunction of an affected facility or control system; and

(4) A description of the action taken, if any.

**SECTION D. Source Level Requirements**

(5) The information described in 40 C.F.R. §60.108a(c)(6) for all discharges listed in 40 C.F.R. §60.108a(c)(6).

(6) For any periods for which monitoring data are not available, any changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

(7) A written statement, signed by a responsible official, certifying the accuracy and completeness of the information contained in the report.

016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.670]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Requirements for flare control devices.

[Additional authority for this operating permit condition is from 40 CFR Section 63.655.]

(a) For flares subject to 40 CFR Section 63.670, the permittee shall submit Periodic Reports that include the information specified in 40 CFR Section 63.655(g)(11)(i) through (iv), as follows:

(i) Records as specified in 40 CFR Section 63.655(i)(9)(i) for each 15-minute block during which there was at least one minute when regulated material was routed to the flare and no pilot flame was present.

(ii) Visible emission records as specified in 40 CFR §63.655(i)(9)(ii)(C) for each period of 2 consecutive hours during which visible emissions exceeded a total of 5 minutes.

(iii) The 15-minute block periods for which the applicable operating limits specified in 40 CFR §§63.670(d) through (f) were not met. Indicate the date and time for the period, the net heating value operating parameter(s) determined following the methods in 40 CFR Sections 63.670(k) through (n) as applicable.

(iv) For flaring events meeting the criteria in 40 CFR §63.670(o)(3) including the information in 40 CFR §63.655(g)(11)(iv)(A) through (D).

VI. WORK PRACTICE REQUIREMENTS.

017 [25 Pa. Code §127.512]

Operating permit terms and conditions.

The Flare Management Plan and CPMS monitoring plan are incorporated by reference.

018 [25 Pa. Code §127.512]

Operating permit terms and conditions.

Emissions from the LPG truck loading rack shall be captured and sent to the refinery's main flare (Source C103), which utilizes a flare gas recovery system.

019 [25 Pa. Code §129.112]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

020 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.103a]

Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007

Work practice standards.

(a) The flare management plan, developed and implemented by the permittee, must include the information described below.

(1) A listing of all refinery process units, ancillary equipment, and fuel gas systems connected to the flare.

**SECTION D. Source Level Requirements**

(2) An assessment of whether discharges to the flare from the process units, ancillary equipment and fuel gas systems can be minimized. The flare minimization assessment must (at a minimum) consider the items in 40 C.F.R. §60.103a(a)(2)(i) through (iv). The assessment must provide clear rationale in terms of costs (capital and annual operating), natural gas offset credits (if applicable), technical feasibility, secondary environmental impacts and safety considerations for the selected minimization alternative(s) or a statement, with justifications, that flow reduction could not be achieved. Based upon the assessment, the permittee shall identify the minimization alternatives that it has implemented by the due date of the flare management plan (November 11, 2015) and shall include a schedule for the prompt implementation of any selected measures that cannot reasonably be completed as of that date.

(i) Elimination of process gas discharge to the flare through process operating changes or gas recovery at the source.

(ii) Reduction of the volume of process gas to the flare through process operating changes.

(iii) Installation of a flare gas recovery system or, a flare gas recovery system and a co-generation unit, or combined heat and power unit.

(iv) Minimization of sweep gas flow rates and, for the flare with water seals, purge gas flow rates.

(3) A description of the flare containing the information in 40 C.F.R. §60.103a(a)(3)(i) through (vii).

(i) A general description of the flare, including the information in 40 C.F.R. §60.103a(a)(3)(i)(A) through (G).

(A) Whether it is a ground flare or elevated (including height).

(B) The type of assist system (e.g., air, steam, pressure, non-assisted).

(C) Whether it is simple or complex flare tip (e.g., staged, sequential).

(D) Whether the flare is part of a cascaded flare system (and if so, whether the flare is primary or secondary).

(E) Whether the flare serves as a backup to another flare.

(F) Whether the flare is an emergency flare or a non-emergency flare.

(G) Whether the flare is equipped with a flare gas recovery system.

(ii) Description and simple process flow diagram showing the interconnection of the following components of the flare: flare tip (date installed, manufacturer, nominal and effective tip diameter, tip drawing); knockout or surge drum(s) or pot(s) (including dimensions and design capacities); flare header(s) and subheader(s); assist system; and ignition system.

(iii) Flare design parameters, including the maximum vent gas flow rate; minimum sweep gas flow rate; minimum purge gas flow rate (if any); maximum supplemental gas flow rate; maximum pilot gas flow rate; and, if the flare is steam-assisted, minimum total steam rate.

(iv) Description and simple process flow diagram showing all gas lines (including flare, purge (if applicable), sweep, supplemental and pilot gas) that are associated with the flare. For purge, sweep, supplemental and pilot gas, identify the type of gas used. Designate which lines are exempt from sulfur, H₂S or flow monitoring and why (e.g., natural gas, inherently low sulfur, pilot gas). Designate which lines are monitored and identify on the process flow diagram the location and type of each monitor.

(v) For each flow rate, H₂S, sulfur content, pressure or water seal monitor identified in 40 C.F.R. §60.103a(a)(3)(iv), provide a detailed description of the manufacturer's specifications, including, but not limited to, make, model, type, range, precision, accuracy, calibration, maintenance and quality assurance procedures.

(vi) For emergency flares, secondary flares and flares equipped with a flare gas recovery system designed, sized and operated to capture all flows except those resulting from startup, shutdown or malfunction:

**SECTION D. Source Level Requirements**

(A) Description of the water seal, including the operating range for the liquid level.

(B) Designation of the monitoring option elected (flow and sulfur monitoring or pressure and water seal liquid level monitoring).

(vii) For the flare gas recovery system:

(A) A description of the flare gas recovery system, including number of compressors and capacity of each compressor.

(B) A description of the monitoring parameters used to quantify the amount of flare gas recovered.

(C) For systems with staged compressors, the maximum time period required to begin gas recovery with the secondary compressor(s), the monitoring parameters and procedures used to minimize the duration of releases during compressor staging and a justification for why the maximum time period cannot be further reduced.

(4) An evaluation of the baseline flow to the flare. The baseline flow to the flare must be determined after implementing the minimization assessment in 40 C.F.R. §60.103a(a)(2). Baseline flows do not include pilot gas flow or purge gas flow (i.e., gas introduced after the flare's water seal) provided these gas flows remain reasonably constant (i.e., separate flow monitors for these streams are not required). Separate baseline flow rates may be established for different operating conditions provided that the management plan includes:

(i) A primary baseline flow rate that will be used as the default baseline for all conditions except those specifically delineated in the plan;

(ii) A description of each special condition for which an alternate baseline is established, including the rationale for each alternate baseline, the daily flow for each alternate baseline and the expected duration of the special conditions for each alternate baseline; and

(iii) Procedures to minimize discharges to the affected flare during each special condition described in 40 C.F.R. §60.103a(a)(4)(ii), unless procedures are already developed for these cases under 40 C.F.R. §60.103a(a)(5) through (7), as applicable.

(5) Procedures to minimize or eliminate discharges to the flare during the planned startup and shutdown of the refinery process units and ancillary equipment that are connected to the affected flare, together with a schedule for the prompt implementation of any procedures that cannot reasonably be implemented as of the date of the submission of the flare management plan.

(6) Procedures to reduce flaring in cases of fuel gas imbalance (i.e., excess fuel gas for the refinery's energy needs), together with a schedule for the prompt implementation of any procedures that cannot reasonably be implemented as of the date of the submission of the flare management plan.

(7) For flare gas recovery systems, procedures to minimize the frequency and duration of outages of the flare gas recovery system and procedures to minimize the volume of gas flared during such outages, together with a schedule for the prompt implementation of any procedures that cannot reasonably be implemented as of the date of the submission of the flare management plan.

(b) The permittee must keep and comply with a flare management plan. The plan should be updated periodically to account for changes in the operation of the flare, such as new connections to the flare or the installation of a flare gas recovery system, but the plan need be re-submitted to DEP only if the owner or operator adds an alternative baseline flow rate, revises an existing baseline as described in 40 C.F.R. §60.103a(a)(4), installs a flare gas recovery system or is required to change flare designations and monitoring methods as described in 40 C.F.R. §60.107a(g). The permittee must comply with the updated plan as submitted.

All versions of the plan submitted to DEP shall also be submitted to the following address: U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards, Sector Policies and Programs Division, U.S. EPA Mailroom (E143-01), Attention: Refinery Sector Lead, 109 T.W. Alexander Drive, Research Triangle Park, NC 27711. Electronic copies in lieu of

**SECTION D. Source Level Requirements**

hard copies may also be submitted to refinerynsp@epa.gov.

(c) Except as provided in 40 C.F.R. §60.103a(f), the permittee shall conduct a root cause analysis and a corrective action analysis for any discharge to the flare in excess of 14,160 standard cubic meters (m³) (500,000 standard cubic feet (scf)) above the baseline, determined in 40 C.F.R. §60.103a(a)(4), in any 24-hour period.

(d) Except as provided in 40 C.F.R. §60.103a(f), a root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a discharge meeting one of the conditions specified in 40 C.F.R. §60.103a(c)(1). Special circumstances affecting the number of root cause analyses and/or corrective action analyses are provided in 40 C.F.R. §60.103a(d)(1) through (5).

(1) If a single continuous discharge meets any of the conditions specified in 40 C.F.R. §60.103a(c)(1) through (3) for 2 or more consecutive 24-hour periods, a single root cause analysis and corrective action analysis may be conducted.

(2) If a single discharge from the flare triggers a root cause analysis based on the conditions specified in 40 C.F.R. §60.103a(c), a single root cause analysis and corrective action analysis may be conducted.

(3) If the discharge from the flare is the result of a planned startup or shutdown of a refinery process unit or ancillary equipment connected to the flare and the procedures in 40 C.F.R. §60.103a(a)(5) were followed, a root cause analysis and corrective action analysis is not required; however, the discharge must be recorded as described in 40 C.F.R. §60.108a(c)(6) and reported as described in 40 C.F.R. §60.108a(d)(5).

(5) If discharges occur that meet any of the conditions specified in 40 C.F.R. §60.103a(c)(1) for more than one affected facility in the same 24-hour period, initial root cause analyses shall be conducted for each affected facility. If the initial root cause analyses indicate that the discharges have the same root cause(s), the initial root cause analyses can be recorded as a single root cause analysis and a single corrective action analysis may be conducted.

(e) Except as provided in paragraph (f) of this section, the permittee shall implement the corrective action(s) identified in the corrective action analysis conducted pursuant to paragraph (d) of this section in accordance with the applicable requirements in 40 C.F.R. §60.103a(e)(1) through (3).

(1) All corrective action(s) must be implemented within 45 days of the discharge for which the root cause and corrective action analyses were required or as soon thereafter as practicable. If an owner or operator concludes that corrective action should not be conducted, the owner or operator shall record and explain the basis for that conclusion no later than 45 days following the discharge as specified in 40 C.F.R. §60.108a(c)(6)(ix).

(2) For corrective actions that cannot be fully implemented within 45 days following the discharge for which the root cause and corrective action analyses were required, the owner or operator shall develop an implementation schedule to complete the corrective action(s) as soon as practicable.

(3) No later than 45 days following the discharge for which a root cause and corrective action analyses were required, the permittee shall record the corrective action(s) completed to date, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates as specified in 40 C.F.R. §60.108a(c)(6)(x).

(f) Modified flares shall comply with the requirements of 40 C.F.R. §60.103a(c) through (e). This modified flare, accepted applicability of subpart J under a federal consent decree, shall comply with the subpart J requirements as specified in the consent decree, but shall comply with the requirements of 40 C.F.R. §60.103a(h) and the requirements of 40 C.F.R. §60.107a(a)(2).

021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.670]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Requirements for flare control devices.

[Additional authority for this operating permit condition is from 40 CFR Section 63.655.]

Per 40 CFR Section 63.670(o), if a flare has the potential to operate above its smokeless capacity under any circumstance, it shall comply with the provisions in 40 CFR Sections 63.670(o)(1) through (7).

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 022 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

The following sources shall be controlled by the Main Flare (Source ID 103)

Source ID	Source Name
093	LPG Truck Loading Rack
114	RACT Fugitive Equipment (except fugitive emissions not required to be captured for control)
115	NSPS Fugitive Equipment (except fugitive emissions not required to be captured for control)
118	Railcar Loading LPG & Butane
210	Miscellaneous Process Vents
215	NSPS New Fugitive Equipment (except fugitive emissions not required to be captured for control)
501	Spheroid 501
502	Spheroid 502
513	Spheroid 513
T006	MACT Group 1 Tanks routed to Closed Vent System

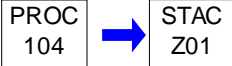
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**SECTION D. Source Level Requirements**

Source ID: 104

Source Name: MARINE VESSEL BALLASTING

Source Capacity/Throughput: 8.500 Th BBL/HR CRUDE OIL

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from this operation shall not exceed 9.2 tons per 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §129.114]

Alternative RACT proposal and petition for alternative compliance schedule

The permittee shall record the following information for each receipt of crude or gasoline at the facility:

- (a) Date of each shipment
- (b) Cargo type and amount;
- (c) Whether or not the vessel has segregated ballast tanks or clean ballast tanks; and
- (d) For each calendar year, calculate the percent of the total volume of receipts of crude oil and gasoline delivered to the facility in vessels which do not ballast or do not emit VOCs when ballasted.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §129.114]

Alternative RACT proposal and petition for alternative compliance schedule

[Additional authority of this condition is also derived from 25 Pa. Code §129.81.]

At least 98% of the total volume of receipts of crude oil and gasoline during each calendar year shall be delivered to the facility in vessels which do not ballast, such as barges, or in vessels which do not emit VOCs when ballasted, such as tankers using segregated ballast tanks.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

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

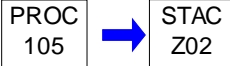
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**SECTION D. Source Level Requirements**

Source ID: 105

Source Name: MARINE VESSEL LOADING

Source Capacity/Throughput: 108.600 Th Gal/HR GASOLINE

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

The permittee shall comply with all applicable requirements specified in 40 C.F.R. Part 63 Subpart Y - National Emissions Standards for Marine Tank Vessel Loading Operations, if the following emission limits are exceeded:

- (a) An individual HAP emissions from this source shall not be equal to or greater than 10 tons per year annually, and/or
- (b) The combined HAP emissions from this source shall not be equal to or greater than 25 tons per year annually.

Throughput Restriction(s).**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.560]****Subpart Y - National Emission Standards for Marine Tank Vessel Tank Loading Operations****Applicability and designation of affected source.**

The marine vessel loading shall be limited to less than 10 million barrels gasoline, or 200 million barrels crude oil per year on a 24-month annual average basis. In the event that the loading throughput increases above the 10-million or 200 million threshold, the permittee shall comply with the applicable requirements of 40 C.F.R. 63 Subpart Y no later than 3 years after exceeding the thresholds.

Control Device Efficiency Restriction(s).**# 003 [25 Pa. Code §129.114]****Alternative RACT proposal and petition for alternative compliance schedule**

Use of marine vapor recovery device to reduce VOCs by at least 98% by weight and route to the fuel gas system.

II. TESTING REQUIREMENTS.

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

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

[Additional authority of this condition is also derived from 25 Pa. Code §129.115.]

The permittee shall monitor and record the amount of gasoline loaded on a monthly basis.

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

[Additional authority of this condition is also derived from 25 Pa. Code §129.115.]

The permittee shall

**SECTION D. Source Level Requirements**

(a) keep records of the amount of gasoline loaded each month, and

(b) calculate the VOC emissions on a monthly basis and 12-month rolling sum. The VOC emissions shall be calculated using the emission factor of 2.6 lb/1000gal gasoline transferred (AP-42 Table 5.2-2 Uncleaned), and 99.9 percent capture efficiency (closed vent system).

V. REPORTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall notify the Department, within 10 days, the throughput and/or emission limit exceedance specified in Emission Restrictions of this section.

VI. WORK PRACTICE REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this condition is also derived from 25 Pa. Code § 129.81.]

The following shall exist while loading of all petroleum distillates, which is a liquid with RVP greater than or equal to 4 psi at standard temperature and pressure, into an organic liquid cargo vessel:

(a) The vapor collection and transport system employed to carry VOCs to the vapor control system is maintained and operated so that it prevents the following:

(1) A reading equal to or greater than 100% of the lower explosive limit (LEL), measured as propane, at 1 inch (2.5 centimeters) from all points on the perimeter of a potential leak source when measured by the method referenced in 25 Pa. Code Section 139.14 (relating to emissions of VOCs) during loading operations.

(2) Avoidable liquid leaks during loading operations.

(3) Visually or audibly detectable leaks in the organic liquid cargo vessel's cargo tanks, hatch covers, storage tanks pressure/vacuum relief valves and associated vapor and liquid lines during loading.

(b) The pressure and vacuum relief valves on the liquid cargo vessel are set to release at no less than 0.7 psig of pressure or 0.3 psig of vacuum or the highest allowable pressure and vacuum as specified in State or local fire codes, the National Fire Prevention Association guidelines or other National consensus standards acceptable to the Department.

VII. ADDITIONAL REQUIREMENTS.

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

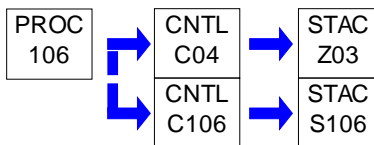
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**SECTION D. Source Level Requirements**

Source ID: 106

Source Name: PROCESS DRAINS & H2O SEP.

Source Capacity/Throughput: 7,710.000 BBL/HR WASTEWATER

**I. RESTRICTIONS.****Control Device Efficiency Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The carbon canisters shall be replaced with fresh carbon when the carbon canister exhaust VOC concentrations monitored reach 500ppm above background levels.

II. TESTING REQUIREMENTS.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.696]

Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems**Performance test methods and procedures and compliance provisions.**

Whenever sources subject to 40 C.F.R. 60 Subpart QQQ that have ceased to treat refinery wastewater for a period of 1 year or more are placed back into service, the owner or operator shall determine compliance with the standards in 60.693-2(a) as follows:

(1) The maximum gap widths and maximum gap areas between the primary seal and the separator wall and between the secondary seal and the separator wall shall be determined individually within 60 calendar days of the initial installation of the floating roof and introduction of refinery wastewater or 60 calendar days after the equipment is placed back into service using the following procedure when the separator is filled to the design operating level and when the roof is floating off the roof supports.

(i) Measure seal gaps around the entire perimeter of the separator in each place where a 0.32 cm (0.125 in.) diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the separator and measure the gap width and perimetrical distance of each such location.

(ii) The total surface area of each gap described in (d)(1)(i) of this section shall be determined by using probes of various widths to measure accurately the actual distance from the wall to the seal and multiplying each such width by its respective perimetrical distance.

(iii) Add the gap surface area of each gap location for the primary seal and the secondary seal individually, divide the sum for each seal by the nominal perimeter of the separator basin and compare each to the maximum gap area as specified in 60.693-2.

(2) The gap widths and total gap area shall be determined using the procedure in paragraph (d)(1) of this section according to the following frequency:

(i) For primary seals, once every 5 years.

(ii) For secondary seals, once every year.

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.695]
Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems
Monitoring of operations.**

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

The concentration level of the organic compounds in the exhaust vent stream from the carbon adsorption system shall be monitored on a regular schedule, and the existing carbon shall be replaced with fresh carbon immediately (within 24 hours) when carbon breakthrough is indicated. The device shall be monitored on a daily basis or at intervals no greater than 20% of the design carbon replacement interval, whichever is greater. As an alternative to conducting this monitoring, the permittee may replace the carbon in the carbon adsorption system with fresh carbon at a regular predetermined time interval that is less than the carbon replacement interval that is determined by the maximum design flow rate and either the organic concentration or the benzene concentration in the gas stream vented to the carbon adsorption system.

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

The permittee shall maintain records of the carbon canister exhaust VOC concentrations.

**# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.697]
Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems
Recordkeeping requirements.**

(a) All records shall be retained for a period of five (5) years after being recorded unless otherwise noted.

(b) Individual Drain Systems

(1) For individual drain systems subject to 40 C.F.R. § 60.692-2, the location, date, and corrective action shall be recorded for each drain when the water seal is dry or otherwise breached, when a drain cap or plug is missing or improperly installed, or other problem is identified that could result in VOC emissions, as determined during the initial and periodic visual or physical inspection.

(2) For junction boxes subject to 40 C.F.R. § 60.692-2, the location, date, and corrective action shall be recorded for inspections required by 40 C.F.R. § 60.692-2(b) when a broken seal, gap, or other problem is identified that could result in VOC emissions.

(3) For sewer lines subject to 40 C.F.R. § 60.692-2 and 40 C.F.R. § 60.693-1(e), the location, date, and corrective action shall be recorded for inspections required by 40 C.F.R. §§ 60.692-2(c) and 60.693-1(e) when a problem is identified that could result in VOC emissions.

(c) For oil-water separators subject to 40 C.F.R. § 60.692-3, the location, date, and corrective action shall be recorded for inspections required by 40 C.F.R. § 60.692-3(a) when a problem is identified that could result in VOC emissions.

(d) For closed vent systems subject to 40 C.F.R. § 60.692-5 and completely closed drain systems subject to 40 C.F.R. § 60.693-1, the location, date, and corrective action shall be recorded for inspections required by 40 C.F.R. § 60.692-5(e) during which detectable emissions are measured or a problem is identified that could result in VOC emissions.

(e) Repairs.

(1) If an emission point cannot be repaired or corrected without a process unit shutdown, the expected date of a successful repair shall be recorded.

(2) The reason for the delay as specified in 40 C.F.R. § 60.692-6 shall be recorded if an emission point or equipment problem is not repaired or corrected in the specified amount of time.

(3) The signature of the permittee (or designee) whose decision it was that repair could not be effected without refinery or

**SECTION D. Source Level Requirements**

process shutdown shall be recorded.

(4) The date of successful repair or corrective action shall be recorded.

(f) Life Records.

(1) A copy of the design specifications for all equipment used to comply with 40 C.F.R. 60, Subpart QQQ, shall be kept for the life of the source in a readily accessible location.

(2) The following information pertaining to the design specifications shall be kept.

- (i) Detailed schematics, and piping and instrumentation diagrams.
- (ii) The dates and descriptions of any changes in the design specifications.

(3) The following information pertaining to the operation and maintenance of closed drain systems and closed vent systems shall be kept in a readily accessible location.

(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions shall be kept for the life of the facility. This documentation is to include a general description of the gas streams that enter the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device.

(ii) The design analysis for the non-regenerative carbon adsorption system shall have considered the vent stream composition, constituent concentration, flow rate, relative humidity, and temperature. The design analysis shall also establish the design exhaust vent stream organic compound concentration level or the design exhaust vent stream benzene concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule. This design analysis documentation shall be maintained for the life of the control device.

(iii) Periods when the closed vent systems and control devices required in 40 C.F.R. § 60.692 are not operated as designed, including periods when a flare pilot does not have a flame shall be recorded and kept for 5 years after the information is recorded.

(iv) Dates of startup and shutdown of the closed vent system and control devices required in 40 C.F.R. § 60.692 shall be recorded and kept for 5 years after the information is recorded.

(v) The dates of each measurement of detectable emissions required in 40 C.F.R. §§ 60.692, 60.693, or 60.692-5 shall be recorded and kept for five (5) years after the information is recorded.

(vi) The background level measured during each detectable emissions measurement shall be recorded and kept for five (5) years after the information is recorded.

(vii) The maximum instrument reading measured during each detectable emission measurement shall be recorded and kept for five (5) years after the information is recorded.

(viii) The permittee using a carbon adsorber shall maintain continuous records of the VOC concentration level or reading of organics of the control device outlet gas stream or inlet and outlet gas stream and records of all 3-hour periods of operation during which the average VOC concentration level or reading of organics in the exhaust gases, or inlet and outlet gas stream, is more than 20 percent greater than the design exhaust gas concentration level, and shall keep such records for five (5) years after the information is recorded. The records shall be maintained consistent with the monitoring requirement in Condition #002 for Source ID 106 in this Section.

(ix) The permittee shall maintain records of the dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time that the existing carbon in the control device is replaced with fresh carbon.

**SECTION D. Source Level Requirements**

- (g) If the permittee elects to install a tightly sealed cap or plug over a drain that is out of active service, the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which indicate the location of such drains.
- (h) For storm water sewer systems subject to the exclusion in 40 C.F.R. § 60.692-1(d)(1), a permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that no wastewater from any process units or equipment is directly discharged to the storm water sewer system.
- (i) For ancillary equipment subject to the exclusion in 40 C.F.R. § 60.692-1(d)(2), the permittee shall keep for the life of a facility in a readily accessible location, plans or specifications which demonstrate that the ancillary equipment does not come in contact with or store oily wastewater.
- (j) For non-contact cooling water systems subject to the exclusion in 40 C.F.R. § 60.692-1(d)(3), the permittee shall keep for the life of the facility in a readily accessible location, plans or specifications which demonstrate that the cooling water does not contact hydrocarbons or oily wastewater and is not recirculated through a cooling tower.
- (k) For oil-water separators subject to 40 C.F.R. § 60.693-2, the location, date, and corrective action shall be recorded for inspections required by 40 C.F.R. §§ 60.693-2(a)(1)(iii)(A) and (B), and shall be maintained for the time period specified below:
- (1) For inspections required by 40 C.F.R. § 60.693-2(a)(1)(iii)(A), ten years after the information is recorded.
 - (2) For inspections required by 40 C.F.R. § 60.693-2(a)(1)(iii)(B), two years after the information is recorded.

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

V. REPORTING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall, in accordance with 40 C.F.R. § 60.4, submit copies of all reports, requests, applications, submittals, and other communication to both EPA and the Department.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.698]**Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems
Reporting requirements.**

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

- (a) The permittee may elect to comply with the provisions of 40 C.F.R. § 60.693 and shall notify the Administrator of the alternative standard selected in the report required in 40 C.F.R. § 60.7.
- (b) The permittee shall submit to the Administrator semiannually a certification that all of the required inspections have been carried out in accordance with these standards.
- (c) A report that summarizes all inspections when a water seal was dry or otherwise breached, when a drain cap or plug was missing or improperly installed, or when cracks, gaps, or other problems were identified that could result in VOC emissions, including information about the repairs or corrective action taken, shall be submitted semiannually to the Administrator.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.115.]

- (d) As applicable, a report shall be submitted semiannually to the Administrator that indicates each 3-hour period of operation during which the average VOC concentration level or reading of organics in the exhaust gases from a carbon adsorber is more than 20 percent greater than the design exhaust gas concentration level or reading. Each occurrence when the carbon in a carbon adsorber system that is not regenerated directly onsite in the control device is not replaced at the predetermined interval specified in § 60.695(a)(3)(ii).

**SECTION D. Source Level Requirements**

(e) If compliance with the provisions of 40 C.F.R. 60, Subpart QQQ, is delayed pursuant to 40 C.F.R. § 60.692-7, the notification required under 40 C.F.R. § 60.7(a)(4) shall include the estimated date of the next scheduled refinery or process unit shutdown after the date of notification and the reason why compliance with the standards is technically impossible without a refinery or process unit shutdown.

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

(a) The individual drain systems shall be installed, checked or inspected, and operated in accordance with 40 C.F.R. §§ 60.692-2 or 60.693-1.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.114(c).]

(b) Each oil-water separator tank shall be equipped and operated with the required control devices in compliance with 40 C.F.R. §§60.692-3 or 60.693-2.

(c) The permittee shall adhere to the manufacturer's recommended practices to ensure the process vapors transferred to the activated carbon canisters meet the minimum control efficiency.

009 [25 Pa. Code §129.55]**Petroleum refineries--specific sources**

This condition applies only to the wastewater separator located in the Advanced Wastewater Treatment Plant (AWWTP).

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

(a) A container having all openings sealed and totally enclosing the liquid contents. Gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

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

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.692-3]**Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems
Standards: Oil-water separators.**

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

(a) This source shall be equipped and operated with a fixed roof, which meets the following specifications, except as provided in 40 C.F.R. § 60.692-2(d) or in 40 C.F.R. § 60.693-2.

(1) The fixed roof shall be installed to completely cover the separator tank, slop oil tank, storage vessel, or other auxiliary equipment with no separation between the roof and the wall.

(2) The vapor space under a fixed roof shall not be purged unless the vapor is directed to a control device.

(3) If the roof has access doors or openings, such doors or openings shall be gasketed, latched, and kept closed at all times during operation of the separator system, except during inspection and maintenance.

(4) Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps occur between the roof and wall and that access doors and other openings are

**SECTION D. Source Level Requirements**

closed and gasketed properly.

(5) When a broken seal or gasket or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than fifteen (15) calendar days after it is identified, except as provided in 40 C.F.R. § 60.692-6.

(b) Each oil-water separator tank or auxiliary equipment with a design capacity to treat more than 16 liters per second (250 gpm) of refinery wastewater shall, in addition to the requirements in paragraph (a) of this section, be equipped and operated with a closed vent system and control device, which meet the requirements of 40 C.F.R. § 60.692-5, except as provided in 40 C.F.R. § 60.692-2(c) or in 40 C.F.R. § 60.693-2.

(c) Slop oil from an oil-water separator tank and oily wastewater from slop oil handling equipment shall be collected, stored, transported, recycled, reused, or disposed of in an enclosed system. Once slop oil is returned to the process unit or is disposed of, it is no longer within the scope of this subpart. Equipment used in handling slop oil shall be equipped with a fixed roof meeting the requirements of paragraph (a) of this section.

(d) Each oil-water separator tank, slop oil tank, storage vessel, or other auxiliary equipment that is required to comply with 40 C.F.R. § 60.692-2(a), and not 40 C.F.R. § 60.692-2(b), may be equipped with a pressure control valve as necessary for proper system operation. The pressure control valve shall be set at the maximum pressure necessary for proper system operation, but such that the valve will not vent continuously.

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.692-5]**Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems****Standards: Closed vent systems and control devices.**

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

(a) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816°C (1,500°F).

(b) Vapor recovery systems (for example, condensers and adsorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater.

(c) Flares used to comply with this subpart shall comply with the requirements of 40 C.F.R. §60.18.

(d) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

(e) (1) Closed vent systems shall be designed and operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined during the initial and semiannual inspections by the methods specified in §60.696.

(2) Closed vent systems shall be purged to direct vapor to the control device.

(3) A flow indicator shall be installed on a vent stream to a control device to ensure that the vapors are being routed to the device.

(4) All gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

(5) When emissions from a closed system are detected, first efforts at repair to eliminate the emissions shall be made as soon as practicable, but not later than 30 calendar days from the date the emissions are detected, except as provided in §60.692-6.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.692-6]**Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems****Standards: Delay of repair.**

(a) Delay of repair of facilities that are subject to the provisions of 40 C.F.R. 60 Subpart QQQ will be allowed if the repair is

**SECTION D. Source Level Requirements**

technically impossible without a complete or partial refinery or process unit shutdown.

(b) Repair of such equipment shall occur before the end of the next refinery or process unit shutdown.

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.693-1]**Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems****Alternative standards for individual drain systems.**

(a) Each completely closed drain system shall be equipped and operated with a closed vent system and control device complying with the requirements of § 60.692-5.

(b) An owner or operator must notify the Administrator in the report required in 40 CFR 60.7 that the owner or operator has elected to construct and operate a completely closed drain system.

(c) If an owner or operator elects to comply with the provisions of this section, then the owner or operator does not need to comply with the provisions of § 60.692-2 or § 60.694.

(d)

(1) Sewer lines shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

(2) The portion of each unburied sewer line shall be visually inspected initially and semiannually thereafter for indication of cracks, gaps, or other problems that could result in VOC emissions.

(3) Whenever cracks, gaps, or other problems are detected, repairs shall be made as soon as practicable, but not later than 15 calendar days after identification, except as provided in § 60.692-6.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.114.]

014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.693-2]**Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems****Alternative standards for oil-water separators.**

(a) Floating roof

(1) Each floating roof shall be equipped with a closure device between the wall of the separator and the roof edge. The closure device is to consist of a primary seal and a secondary seal.

(i) The primary seal shall be a liquid-mounted seal.

(A) A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the separator and the floating roof.

(B) The gap width between the primary seal and the separator wall shall not exceed 3.8 cm (1.5 in.) at any point.

(C) The total gap area between the primary seal and the separator wall shall not exceed 67 cm²/m (3.2 in.²/ft) of separator wall perimeter.

(ii) The secondary seal shall be above the primary seal and cover the annular space between the floating roof and the wall of the separator.

(A) The gap width between the secondary seal and the separator wall shall not exceed 1.3 cm (0.5 in.) at any point.

(B) The total gap area between the secondary seal and the separator wall shall not exceed 6.7 cm²/m (0.32 in.²/ft) of separator wall perimeter.

(iii) The maximum gap width and total gap area shall be determined by the methods and procedures specified in

**SECTION D. Source Level Requirements**

60.696(d).

(A) Measurement of primary seal gaps shall be performed within 60 calendar days after initial installation of the floating roof and introduction of refinery wastewater and once every 5 years thereafter.

(B) Measurement of secondary seal gaps shall be performed within 60 calendar days of initial introduction of refinery wastewater and once every year thereafter.

(iv) The owner or operator shall make necessary repairs within 30 calendar days of identification of seals not meeting the requirements listed in paragraphs (a)(1) (i) and (ii) of this section.

(2) Except as provided in paragraph (a)(4) of this section, each opening in the roof shall be equipped with a gasketed cover, seal, or lid, which shall be maintained in a closed position at all times, except during inspection and maintenance.

(3) The roof shall be floating on the liquid (i.e., off the roof supports) at all times except during abnormal conditions (i.e., low flow rate).

(4) The floating roof may be equipped with one or more emergency roof drains for removal of stormwater. Each emergency roof drain shall be fitted with a slotted membrane fabric cover that covers at least 90 percent of the drain opening area or a flexible fabric sleeve seal.

(5) (i) Access doors and other openings shall be visually inspected initially and semiannually thereafter to ensure that there is a tight fit around the edges and to identify other problems that could result in VOC emissions.

(ii) When a broken seal or gasket on an access door or other opening is identified, it shall be repaired as soon as practicable, but not later than 30 calendar days after it is identified, except as provided in 60.692-6.

(b) The permittee must notify the Administrator in the report required by 40 C.F.R. 60.7 that the owner or operator has elected to construct and operate a floating roof under paragraph (a) of this section.

(c) For portions of the oil-water separator tank where it is infeasible to construct and operate a floating roof, such as the skimmer mechanism and weirs, a fixed roof meeting the requirements of 60.692-3(a) shall be installed.

(d) Except as provided in paragraph (c) of this section, if an owner or operator elects to comply with the provisions of this section, then the owner or operator does not need to comply with the provisions of 60.692-3 or 60.694 applicable to the same facilities.

015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.696]

Subpart QQQ - Standards of Performance for VOC Emissions From Petroleum Refinery Wastewater Systems
Performance test methods and procedures and compliance provisions.

The closed vent system and control device is exempt from 40 C.F.R. § 60.8 and shall use EPA Method 21 to measure the emission concentrations, using 500 ppm as the no detectable emission limit. The instrument shall be calibrated each day before using. The calibration gases shall be:

(a) Zero air (less than 10 ppm of hydrocarbon in air), and

(b) A mixture of either methane or n-hexane and air at a concentration of approximately, but less than, 10,000 ppm methane or n-hexane.

016 [40 CFR Part 61 NESHAPs §40 CFR 61.346]

Subpart FF--National Emission Standard for Benzene Waste Operations
Standards: Individual drain systems.

As specified in 40 C.F.R. § 63.647, each Group 1 wastewater stream shall comply with the requirements of 40 C.F.R. § 61.346 for each process wastewater stream that meets the definition in 40 C.F.R. § 63.341.

(a) Except as provided in 40 C.F.R. § 61.346(b) of this section, the owner or operator shall meet the following standards for

**SECTION D. Source Level Requirements**

each individual drain system in which waste is placed in accordance with 40 C.F.R. § 61.342(c)(1)(ii):

(1) The permittee shall install, operate, and maintain on each drain system opening a cover and closed-vent system that routes all organic vapors vented from the drain system to a control device.

(i) The cover shall meet the following requirements:

(A) The cover and all openings (e.g., access hatches, sampling ports) shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 C.F.R. § 61.355(h).

(B) Each opening shall be maintained in a closed, sealed position (e.g., covered by a lid that is gasketed and latched) at all times that waste is in the drain system except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance, or repair.

(C) If the cover and closed-vent system operate such that the individual drain system is maintained at a pressure less than atmospheric pressure, then paragraph 40 C.F.R. § 61.346(a)(1)(i)(B) does not apply to any opening that meets all of the following conditions:

(1) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(2) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 C.F.R. § 61.355(h); and

(3) The pressure is monitored continuously to ensure that the pressure in the individual drain system remains below atmospheric pressure.

(ii) The closed-vent system and control device shall be designed and operated in accordance with 40 C.F.R. § 61.349.

(2) Each cover seal, access hatch, and all other openings shall be checked by visual inspection initially and quarterly thereafter to ensure that no cracks or gaps occur and that access hatches and other openings are closed and gasketed properly.

(3) Except as provided in 40 C.F.R. § 61.350, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

(b) As an alternative to complying with 40 C.F.R. § 61.346(a), an owner or operator may elect to comply with the following requirements:

(1) Each drain shall be equipped with water seal controls or a tightly sealed cap or plug.

(2) Each junction box shall be equipped with a cover and may have a vent pipe. The vent pipe shall be at least 90 cm (3 ft) in length and shall not exceed 10.2 cm (4 in) in diameter.

(i) Junction box covers shall have a tight seal around the edge and shall be kept in place at all times, except during inspection and maintenance.

(ii) One of the following methods shall be used to control emissions from the junction box vent pipe to the atmosphere:

(A) Equip the junction box with a system to prevent the flow of organic vapors from the junction box vent pipe to the atmosphere during normal operation. An example of such a system includes use of water seal controls on the junction box. A flow indicator shall be installed, operated, and maintained on each junction box vent pipe to ensure that organic vapors are not vented from the junction box to the atmosphere during normal operation.

(B) Connect the junction box vent pipe to a closed-vent system and control device in accordance with 40 C.F.R. § 61.349.

(3) Each sewer line shall not be open to the atmosphere and shall be covered or enclosed in a manner so as to have no visual gaps or cracks in joints, seals, or other emission interfaces.

(4) Equipment installed in accordance with paragraphs 40 C.F.R. §§ 61.346(b)(1), (b)(2), or (b)(3) shall be inspected as follows:

(i) Each drain using water seal controls shall be checked by visual or physical inspection initially and thereafter quarterly for indications of low water levels or other conditions that would reduce the effectiveness of water seal controls.

(ii) Each drain using a tightly sealed cap or plug shall be visually inspected initially and thereafter quarterly to ensure caps or plugs are in place and properly installed.

(iii) Each junction box shall be visually inspected initially and thereafter quarterly to ensure that the cover is in place and to ensure that the cover has a tight seal around the edge.

(iv) The unburied portion of each sewer line shall be visually inspected initially and thereafter quarterly for indication of cracks, gaps, or other problems that could result in benzene emissions.

(5) Except as provided in 40 C.F.R. § 61.350 of this subpart, when a broken seal, gap, crack or other problem is identified, first efforts at repair shall be made as soon as practicable, but not later than 15 calendar days after identification.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.114(c).]

**SECTION D. Source Level Requirements****# 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.647]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Wastewater provisions.**

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

As specified in 40 C.F.R. § 63.647, each Group 1 wastewater stream shall comply with the requirements of 40 C.F.R. 61 §§ 340 through 355, for each process wastewater stream that meets the definition in 40 C.F.R. § 63.341.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.114(c).]

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

(a) Additional requirements under 40 C.F.R. 63, Subpart CC, for this wastewater treatment system can be found in Source ID 128, of this operating permit.

(b) Additional requirements under 40 C.F.R. 61, Subpart FF, for this wastewater treatment system can be found in Source ID 133, of this operating permit.

(c) The regulated components of the Wastewater Treatment Plant are listed below:

- (i) The forebay
- (ii) The oil-water separator (API)
- (iii) The back end
- (iv) Four (4) oil tanks (Tank Nos. 83, 84, 312, and 313)

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

**SECTION D. Source Level Requirements**

Source ID: 111

Source Name: COOLING TOWERS

Source Capacity/Throughput:

60.000 Th BBL/HR

COOLING WATER

PROC
111STAC
Z07**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not use chromium based water treatment chemicals in this source.

VII. ADDITIONAL REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Additional requirements for the cooling towers are specified in the conditions for Source ID 700 - Heat Exchange Systems.

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

**SECTION D. Source Level Requirements**

Source ID: 112

Source Name: PURGING & SAMPLING, ETC

Source Capacity/Throughput:

8.500 Th BBL/HR

CRUDE

PROC
112STAC
Z08**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Equipment leak standards.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441 and 40 C.F.R. § 60.480.]

Each sampling connection system subject to sampling standards pursuant to 40 C.F.R. 60, Subpart VV, or 40 C.F.R. § 63.648(a)(1) shall be equipped with a closed-purged, closed-loop, or closed-vent system, and will comply with the specifications of 40 C.F.R. § 60.482-5(b)(1)-(3).

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 113

Source Name: LPG RECOVERY UNIT

Source Capacity/Throughput:

8.500 Th BBL/HR

CRUDE OIL

PROC
113STAC
Z05**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from this source shall not exceed 4.6 tons in any consecutive 12 month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor VOC emissions from this source according to the applicable LDAR schedule for NSPS sources, as indicated in Source #115, Condition #002.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall record the monitored VOC emissions from this source according to the applicable LDAR schedule for NSPS sources, as indicated in Source #115.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Additional requirements for this source are found in Source ID #115.

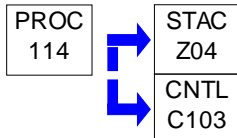
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 114

Source Name: RACT FUGITIVE EQUIPMENT

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.**# 001 [25 Pa. Code §129.58]****Petroleum refineries--fugitive sources**

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

- i. Check yearly, by methods referenced in 25 Pa. Code § 139.14, pump seals and pipeline valves in liquid service.
- ii. Check quarterly by methods referenced in 25 Pa. Code § 139.14, compressor seals, pipeline valves in gaseous service, and pressure relief valves in gaseous service.
- iii. Check monthly, by visual methods, all pump seals.
- iv. Check within 24 hours, by methods referenced in 25 Pa. Code § 139.14, a pump seal from which VOC liquids are observed to be dripping.
- v. Check, by methods referenced in 25 Pa. Code § 139.14, a relief valve within 24 hours after it has vented to the atmosphere.
- vi. Check within 72 hours after repair, by methods referenced in 25 Pa. Code § 139.14, any refinery component that was found leaking.

b. Pressure relief devices which are connected to an operating flare header, vapor recovery devices, inaccessible valves, storage tank valves and valves that are not externally regulated are exempt from the monitoring requirements above.

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

IV. RECORDKEEPING REQUIREMENTS.**# 002 [25 Pa. Code §129.58]****Petroleum refineries--fugitive sources**

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

- i. The name and process unit where the refinery component is located.
- ii. The type of refinery component-- for example, valve, seal.
- iii. The tag number of refinery component.
- iv. The dates on which the leaking refinery component was discovered and repaired.
- v. The date and instrument reading of the recheck procedure after a leaking refinery component was repaired.
- vi. A record of the calibration of the monitoring instrument.
- vii. Those leaks that cannot be repaired until turnaround.
- viii. The total number of refinery components checked and the total number of refinery components found leaking.

**SECTION D. Source Level Requirements**

- b. Copies of the monitoring log shall be retained by the permittee for five (5) years after the date on which the record was made or the report was prepared.
- c. Copies of the monitoring log shall immediately be made available to the Department, upon verbal or written request, at any reasonable time.

V. REPORTING REQUIREMENTS.**# 003 [25 Pa. Code §129.58]****Petroleum refineries--fugitive sources**

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

(a) Submit a report to the Department by the last business day of January, April, July, and October that lists all leaking refinery components that were located during the previous calendar quarter but not repaired within fifteen (15) days, all leaking refinery components awaiting unit turnaround, the total number of refinery components inspected and the total number of refinery components found leaking.

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

004 [25 Pa. Code §129.58]**Petroleum refineries--fugitive sources**

a. The permittee may submit to the Department a list of refinery components the inspection of which would involve a significant element of danger. The Department may exempt the refinery components on this list from the requirements of this section if the permittee can demonstrate to the satisfaction of the Department that a significant element of danger exists which cannot be reasonably eliminated and that these exemptions will not result in a significant reduction in the effectiveness in the control of VOC emissions. Any component so exempted by the Department prior to, or subsequent to, issuance of this permit is exempt from the provisions of 25 Pa. Code § 128.58.

VI. WORK PRACTICE REQUIREMENTS.**# 005 [25 Pa. Code §129.58]****Petroleum refineries--fugitive sources**

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

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

VII. ADDITIONAL REQUIREMENTS.**# 006 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

The following components at the facility are subject to the leak detection and repair (LDAR) requirements applicable to fugitive sources at petroleum refineries, specified in 25 Pa. Code § 129.58. Certain of these components may also be subject to federal LDAR requirements established under 40 C.F.R. 60, Subpart VV (through GGG), or 40 C.F.R. 63, Subpart CC, as appropriate. In accordance with an alternative monitoring plan submitted by the permittee, and approved by the Department on August 24, 1998, a source that is subject to both the provisions of 25 Pa. Code § 129.58 and either federal LDAR requirement, satisfies the requirements of 25 Pa. Code § 129.58 by complying with the provisions of the applicable federal LDAR standard. Therefore, each component at the facility that is subject to an LDAR requirement under state or federal regulations complies with applicable LDAR standards by implementing an LDAR program consistent with the single designated regulatory program. The fugitive monitoring plan developed and maintained on-site by the permittee identifies which portions of each unit are subject to the requirements for fugitive Sources IDs #114, 115, 128 or 215. This section of the permit identifies applicable standards for Source ID #114, which satisfies LDAR obligations through compliance with

**SECTION D. Source Level Requirements**

the provisions of 25 Pa. Code § 129.58.

Alky Unit
Amine Unit
Gasoline Blending
Boiler House
Butane Loading Rack
Crude Units
Desalter System
Diesel Hydrodesulfurization Unit
Diesel Hydrotreating Unit
FCC Unit
FCC Wet Gas Compressor
Flare
Isocracker Unit
Kerosene Hydrodesulfurization Unit
Kerosene Hydrotreating Unit
Lowline Unit
Marine Terminal Vapor Recovery System (VRS)
Naphtha Hydrodesulfurization Unit
Naphtha Unit
Old Yard Flare
Platformer Unit
Propane Railcar Loading
Propane Recovery Unit
Propane Storage
Reformate
Sour Water Stripper
Sulfur Recovery Unit (SRU)
Sun Olin Unit
Tank Farm
Vacuum Stills
VGO Hydrotreating Unit

007 [25 Pa. Code §129.58]

Petroleum refineries--fugitive sources

The permittee may submit an alternative plan for the control of leaks from petroleum refinery equipment to the Department. If the Department finds that the alternative plan will achieve an emission reduction which is equivalent to or greater than the reduction which can be achieved under 25 Pa. Code § 129.58 and that the alternative plan is as enforceable as 25 Pa. Code § 129.58, then the Department will allow the implementation of this alternative plan.

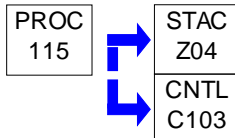
*** **Permit Shield in Effect.** ***

**SECTION D. Source Level Requirements**

Source ID: 115

Source Name: NSPS FUGITIVE EQUIPMENT

Source Capacity/Throughput:

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

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592]
Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries Standards.

The permittee shall comply with the requirements of 40 C.F.R. §§60.482-1 to 60.482-10 at all times.

Control Device Efficiency Restriction(s).

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592]
Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries Standards.

As per 40 C.F.R. §§60.592 and 60.482-10, closed vent systems shall use flares that comply with the requirements of 40 C.F.R. §60.18.

II. TESTING REQUIREMENTS.

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592]
Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries Standards.

The permittee shall comply with the provisions of 40 C.F.R. §60.485 except as provided in 40 C.F.R. §60.593.

(a) In conducting the performance tests required in 40 C.F.R. §60.8, the permittee shall use as reference methods and procedures for the test methods in appendix A of 40 C.F.R. Part 60 or other methods and procedures as specified in this section, except as provided in 40 C.F.R. §60.8(b).

(b) The permittee shall determine compliance with the standards in 40 C.F.R. §§60.482-1 through 60.482-10, 60.483, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The permittee shall determine compliance with the no detectable emission standards in 40 C.F.R. §§60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The permittee shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this

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demonstration, the following methods and procedures shall be used:

- (1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference—see 40 C.F.R. §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.
- (2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
- (3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d) (1) and (2) above shall be used to resolve the disagreement.
- (e) The permittee shall demonstrate that a piece of equipment is in light liquid service by showing that all the following conditions apply:
 - (1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 C.F.R. §60.17) shall be used to determine the vapor pressures.
 - (2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F) is equal to or greater than 20 percent by weight.
 - (3) The fluid is a liquid at operating conditions.
- (f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.
- (g) Compliance with the standards of the Main Flare (C103) assures compliance with 40 CFR §60.485a(g).

III. MONITORING REQUIREMENTS.**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592]****Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries Standards.**

A. 40 C.F.R. §60.482-3 - Standards: Pumps in light liquid service.

- (a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. §60.485(b), except as provided in 40 C.F.R. §60.482-1(c) and (f) and §60.482-3(d), (e), and (f).
- (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 C.F.R. §60.482-1(f).
- (b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
- (2) If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in either 40 C.F.R. §60.482-3(b)(2)(i) or (ii). This requirement does not apply to a pump that was monitored after a previous weekly inspection if the instrument reading for that monitoring event was less than 10,000 ppm and the pump was not repaired since that monitoring event.
- (i) Monitor the pump within 5 days as specified in 40 C.F.R. §60.485(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. The leak shall be repaired using the procedures in 40 C.F.R. §60.482-3(c).

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(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak within 15 days of detection by eliminating the visual indications of liquids dripping.

(c) Pumps with exemptions are specified in 40 C.F.R. §60.482-2(d) through (h).

B. 40 C.F.R. §60.842-7 - Standards: Valves in gas/vapor service and in light liquid service.

(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. §60.485(b) and shall comply with 40 C.F.R. §60.482-7(b) through (e), except as provided in 40 C.F.R. §60.482-7(f), §60.482-1(c) and (f).

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to 40 C.F.R. §60.482-7(a)(2)(i), except for a valve that replaces a leaking valve and except as provided in 40 C.F.R. §§60.482-7(f), (g), and (h), 60.482-1(c).

(i) Monitor the valve as in 40 C.F.R. §60.482-7(a)(1). The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(ii) As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into 2 or 3 subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup.

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

(d) Exemptions to this section are specified in 40 C.F.R. §60.482-7(f) through (h).

C. 40 C.F.R. §60.842-10 - Standards: Closed vent systems and control devices.

(a) The permittee shall monitor the flares to ensure that they are operated and maintained in conformance with their designs.

(b) Except as provided in 40 C.F.R. §60.482-10(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in 40 C.F.R. §60.482-10(b)(1) and (2).

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the requirements specified in 40 C.F.R. §60.482-10(b)(1)(i) and (b)(1)(ii):

(i) Conduct an initial inspection according to the procedures in 40 C.F.R. §60.485(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:

(i) Conduct an initial inspection according to the procedures in 40 C.F.R. §60.485(b); and

(ii) Conduct annual inspections according to the procedures in 40 C.F.R. §60.485(b).

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592]****Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries Standards.**

A. 40 C.F.R. §60.482-10 - Standards: Closed vent systems and control devices.

(a) The permittee shall record the information specified in 40 C.F.R. §60.482-10(a)(1) through (l)(5).

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in 40 C.F.R. §60.486(c).

(4) For each inspection conducted in accordance with 40 C.F.R. §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with 40 C.F.R. §60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

B. The permittee shall comply with the provisions of 40 C.F.R. §60.486 - Recordkeeping requirements.

(a)(1) The permittee shall comply with the recordkeeping requirements of this section.

(2) The permittee may comply with the recordkeeping requirements for the facilities in one recordkeeping system if the system identifies each record by each facility.

(b) When each leak is detected as specified in 40 C.F.R. §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 C.F.R. §60.482-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in 40 C.F.R. §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 C.F.R. §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

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(6) The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and flares described in 40 C.F.R. §60.482-10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in 40 C.F.R. §60.482-10(e), to ensure that the flares are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in 40 C.F.R. §§60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 C.F.R. §§60.482-2, 60.482-3, 60.482-4, and 60.482-5.

(e) The following information pertaining to all equipment subject to the requirements in 40 C.F.R. §§60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 C.F.R. §§60.482-2(e), 60.482-3(i) and 60.482-7(f).

(ii) The designation of equipment as subject to the requirements of 40 C.F.R. §60.482-2(e), §60.482-3(i), or §60.482-7(f) shall be signed by the permittee. Alternatively, the permittee may establish a mechanism with their permitting authority that satisfies this requirement.

(3) A list of equipment identification numbers for pressure relief devices required to comply with 40 C.F.R. §60.482-4.

(4)(i) The dates of each compliance test as required in 40 C.F.R. §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 C.F.R. §60.482-1(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.

(f) The following information pertaining to all valves subject to the requirements of 40 C.F.R. §60.482-7(g) and (h) and to all pumps subject to the requirements of 40 C.F.R. §60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

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- (1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
- (2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
- (g) Not applicable.
- (h) The following information shall be recorded in a log that is kept in a readily accessible location:
 - (1) Design criterion required in 40 C.F.R. §§.60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and
 - (2) Any changes to this criterion and the reasons for the changes.
- (i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 C.F.R. §60.480(d):
 - (1) An analysis demonstrating the design capacity of the affected facility,
 - (2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
 - (3) An analysis demonstrating that equipment is not in VOC service.
- (j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.
- (k) The provisions of 40 C.F.R. §60.7 (b) and (d) do not apply to affected facilities subject to this subpart.

V. REPORTING REQUIREMENTS.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592]
Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries
Standards.

The permittee shall comply with the provisions of 40 C.F.R. §60.487 - Reporting requirements.

- (a) The permittee shall submit semiannual reports to DEP beginning six months after the initial startup date.
- (b) The initial semiannual report to DEP shall include the following information:
 - (1) Process unit identification.
 - (2) Number of valves subject to the requirements of 40 C.F.R. §60.482-7, excluding those valves designated for no detectable emissions under the provisions of 40 C.F.R. §60.482-7(f).
 - (3) Number of pumps subject to the requirements of 40 C.F.R. §60.482-2, excluding those pumps designated for no detectable emissions under the provisions of 40 C.F.R. §60.482-2(e) and those pumps complying with 40 C.F.R. §60.482-2(f).
 - (4) Number of compressors subject to the requirements of 40 C.F.R. §60.482-3, excluding those compressors designated for no detectable emissions under the provisions of 40 C.F.R. §60.482-3(i) and those compressors complying with 40 C.F.R. §60.482-3(h).
- (c) All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 C.F.R. §60.486:

**SECTION D. Source Level Requirements**

- (1) Process unit identification.
- (2) For each month during the semiannual reporting period,
 - (i) Number of valves for which leaks were detected as described in 40 C.F.R. §60.482-7(b) or §60.483-2,
 - (ii) Number of valves for which leaks were not repaired as required in 40 C.F.R. §60.482-7(d)(1),
 - (iii) Number of pumps for which leaks were detected as described in 40 C.F.R. §60.482-2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),
 - (iv) Number of pumps for which leaks were not repaired as required in 40 C.F.R. §60.482-2(c)(1) and (d)(6),
 - (v) Number of compressors for which leaks were detected as described in 40 C.F.R. §60.482-3(f),
 - (vi) Number of compressors for which leaks were not repaired as required in 40 C.F.R. §60.482-3(g)(1), and
 - (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
- (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
- (4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.
- (d) Not applicable.
- (e) The permittee shall report the results of all performance tests in accordance with 40 C.F.R. §60.8 of the General Provisions. The provisions of 40 C.F.R. §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee must notify DEP of the schedule for the initial performance tests at least 30 days before the initial performance tests.
- (f) The requirements of paragraphs (a) through (c) above remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) above, provided that they comply with the requirements established by the State.

VI. WORK PRACTICE REQUIREMENTS.**# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592]****Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries Standards.****A. 40 C.F.R. §60.482-2 - Standards: Pumps in light liquid service.**

As per 40 C.F.R. §60.482(c)(1), when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 C.F.R. §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in 40 C.F.R. §60.482-3(c)(2)(i) and (ii), where practicable.

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

**SECTION D. Source Level Requirements****B. 40 C.F.R. §60.482-3 - Standards: Compressors.**

- (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 C.F.R. §§60.482-1(c) and 60.482-3(h), (i), and (j).
- (b) Each compressor seal system as required in 40 C.F.R. §60.482-3(a) shall be:
- (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
 - (2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 C.F.R. §60.482-10; or
 - (3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
- (c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.
- (d) Each barrier fluid system as described in 40 C.F.R. §60.482-3(a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
- (e)(1) Each sensor as required in 40 C.F.R. §60.482-3(d) shall be checked daily or shall be equipped with an audible alarm.
- (2) The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- (f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 C.F.R. §60.482-3(e)(2), a leak is detected.
- (g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 C.F.R. §60.482-9.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (h) Exemptions to this section are specified in 40 C.F.R. §60.482-3(h) through (j).

C. 40 C.F.R. §60.482-4 - Standards: Pressure relief devices in gas/vapor service.

- (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 C.F.R. §60.485(c).
- (b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 C.F.R. §60.482-9.
- (2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 C.F.R. §60.485(c).
- (c) Exemptions to this section are specified in 40 C.F.R. §60.482-4(c) and (d).

D. 40 C.F.R. §60.482-5 - Standards: Sampling connection systems.

- (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 C.F.R. §§60.482-1(c) and 60.482-5(c).

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(b) Each closed-purge, closed-loop, or closed-vent system as required in 40 C.F.R. §60.482-5(a) shall comply with the requirements specified in 40 C.F.R. §60.482-5(b)(1) through (4).

(1) Gases displaced during filling of the sample container are not required to be collected or captured.

(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.

(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.

(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either 40 C.F.R. §60.482-5(b)(4)(i), (ii), (iii), or (iv).

(i) Return the purged process fluid directly to the process line.

(ii) Collect and recycle the purged process fluid to a process.

(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of 40 C.F.R. §60.482-10.

(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) A waste management unit as defined in 40 C.F.R. §63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 C.F.R. part 63, subpart G, applicable to Group 1 wastewater streams;

(B) A treatment, storage, or disposal facility subject to regulation under 40 C.F.R. part 262, 264, 265, or 266;

(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 C.F.R. part 261;

(D) A waste management unit subject to and operated in compliance with the treatment requirements of 40 C.F.R. §61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 C.F.R. §§61.343 through 61.347; or

(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 C.F.R. part 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 C.F.R. part 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of 40 C.F.R. §60.482-5(a) and (b).

E. 40 C.F.R. §60.842-6 - Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 C.F.R. §60.482-1(c) and §60.842-6(d) and (e).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 C.F.R. §60.842-6(a) at all other times.

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(d) Exemptions to this section are specified in 40 C.F.R. §60.482-6(d) and (e).

F. 40 C.F.R. §60.482-7 - Standards: Valves in gas/vapor service and in light liquid service.

(a)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 C.F.R. §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(b) First attempts at repair include, but are not limited to, the following best practices where practicable:

- (1) Tightening of bonnet bolts;
- (2) Replacement of bonnet bolts;
- (3) Tightening of packing gland nuts;
- (4) Injection of lubricant into lubricated packing.

G. 40 C.F.R. §60.482-8 - Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

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

- (1) The permittee shall monitor the equipment within 5 days by the method specified in 40 C.F.R. §60.485(b) and shall comply with the requirements of 40 C.F.R. §60.482-8(b) through (d).
- (2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 C.F.R. §60.482-9.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under 40 C.F.R. §§60.482-2(c)(2) and 60.482-7(e).

H. 40 C.F.R. §60.482-9 - Standards: Delay of repair.

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

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

- (1) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

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(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 C.F.R. §60.482-10.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump or valve that remains in service, the pump or valve may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

I. 40 C.F.R. §60.482-10 - Standards: Closed vent systems and control devices.

(a) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 C.F.R. §60.482-10(b).

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(b) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(c) Exemptions to this section are specified in 40 C.F.R. §60.482-10(i) through (k).

(d) Closed vent systems and the flares shall be operated at all times when emissions may be vented to them.

VII. ADDITIONAL REQUIREMENTS.**# 008 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

The following specific processes at the facility are subject to the leak detection and repair (LDAR) requirements specified in 40 C.F.R. 60, Subpart VV. Certain of these components may also be subject to 25 Pa. Code §129.58 and/or 40 C.F.R. 63, Subpart CC, as appropriate. In accordance with an alternative monitoring plan submitted by the permittee, and approved by the Department on August 24, 1998, a source that is subject to both the provisions of 25 Pa. Code §129.58 and 40 C.F.R. 60, Subpart GGG, satisfies the requirements of 25 Pa. Code § 129.58 by complying with the provisions of 40 C.F.R. 60, Subpart VV. Therefore, each component at the facility that is subject to an LDAR requirement under state or federal regulations complies with applicable LDAR standards by implementing an LDAR program consistent with the single, most stringent, designated regulatory program. The fugitive monitoring plan developed and maintained on-site by the permittee identifies which portions of each unit are subject to fugitive Sources IDs #114, 115, 128, or 215. This section of the permit identifies applicable standards for Source ID #115, which satisfies LDAR obligations through compliance with the provisions of 40 C.F.R. 60, Subpart VV.

Alky Unit

Diesel Hydrotreating Unit

Kerosene Hydrotreating Unit

**SECTION D. Source Level Requirements**

Propane Railcar Loading
Propane Storage
FCC Wet Gas Compressor
Propane Recovery Unit (Source ID 113)

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.590]**Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries****Applicability and designation of affected facility.**

(a) The group of all the equipment (defined in 40 C.F.R. §60.591) within a process unit is an affected facility.

(b) Any affected facility under paragraph (a) of this section that commences construction or modification after January 4, 1983, is subject to the requirements of this subpart.

(c) Addition or replacement of equipment (defined in 40 C.F.R. §60.591) for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.591]**Subpart GGG - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries****Definitions.**

Equipment means each valve, pump, pressure relief device, sampling connection system, open-ended valve or line, and flange or other connector in VOC service. For the purposes of recordkeeping and reporting only, compressors are considered equipment.

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

**SECTION D. Source Level Requirements**

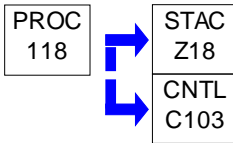
Source ID: 118

Source Name: RAILCAR LOADING LPG & BUTANE

Source Capacity/Throughput:

N/A

LPG & BUTANE

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC Emissions from the loading of butane and propane shall not exceed 3.94 tons in any 12-consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this condition is also derived from 25 Pa. Code §129.115.]

(a) The number of rail cars that vent to the atmosphere during loading, as well as the amount of propane or butane loaded shall be recorded on a monthly basis.

(b) The permittee shall calculate the emissions from the rail car loading each month, and perform calculations to demonstrate compliance with the 12 month rolling limit.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §129.114]

Alternative RACT proposal and petition for alternative compliance schedule

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

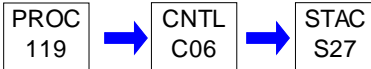
Source ID: 119

Source Name: PLATFORMER REGENERATOR

Source Capacity/Throughput:

N/A

PLATINUM CATALYST

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

The emissions of hydrochloric acid from the catalyst regenerator shall not exceed 0.37 tons of HCl in any 12 consecutive month period.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1567]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my requirements for inorganic HAP emissions from catalytic reforming units?**

Uncontrolled emissions of HCl shall be reduced by 97%, by weight, corrected to 3 percent oxygen.

II. TESTING REQUIREMENTS.**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1571]****Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****How and when do I conduct a performance test or other initial compliance demonstration?**

The permittee may change the established operating limit by meeting the following requirements:

- (a) to change an established operating permit limit for a continuous parameter monitoring system by doing an additional performance test, a performance test in conjunction with an engineering assessment, or an engineering assessment to verify that, at the new operating limit, the permittee is in compliance with the applicable emission limitation;
- (b) establish a revised operating limit for the continuous parameter monitoring system if the permittee makes any change in process or operating conditions that could affect control system performance or the permittee changes designated conditions after the last performance or compliance tests were done. The permittee can establish the revised operating limit as described in (a), above.

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

The continuous monitoring system shall consist of a thermocouple on the inlet and outlet of the hydrogen chloride absorption system in order to measure the temperature of the inlet and outlet of the hydrogen chloride absorption system.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1567]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my requirements for inorganic HAP emissions from catalytic reforming units?**

The permittee shall:

- (a) operate, and maintain a continuous monitor of the inlet gas temperature to the hydrogen chloride absorption system; and
- (b) demonstrate continuous compliance with the average daily inlet temperature limit of not to exceed 350°F.

**SECTION D. Source Level Requirements**

(c) monitor the inlet and outlet chloride levels on the catalyst on a weekly basis in accordance with the facility's Operation, Maintenance, and Monitoring plan.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1569]

Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

What are my requirements for HAP emissions from bypass lines?

The permittee shall visually inspect the blind flange on the bypass line at least once a month.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1572]

Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

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

(a) The permittee must operate, and maintain the inlet thermocouple according to the following:

(1) the thermocouple must have valid hourly average data from at least 75 percent of the hours during which the process operated; and

(2) the thermocouple must determine and record the hourly average of all recorded readings and the daily average of all recorded readings for each operating day. The daily average must cover a 24-hour period if operation is continuous or the number of hours of operation per day if operation is not continuous.

(b) The permittee must monitor and collect data according to the following:

(1) The permittee must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times the affected source is operating.

(2) The permittee may not use data recorded during required quality assurance or control activities (including, as applicable, calibration checks and require zero and span adjustments) for purposes of this regulation, including data averages and calculations, for fulfilling a minimum data availability requirement, if applicable. The permittee must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

IV. RECORDKEEPING REQUIREMENTS.**# 008 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

Sufficient data shall be recorded, in a format approved by the Department, so that compliance with the conditions in this operating permit can be determined.

(a) The permittee shall keep a copy of all stack tests that are required by this operating permit.

(b) The permittee shall keep monthly, and 12 consecutive month, records of the emissions of hydrochloric acid from the regenerator.

(c) The permittee shall keep a record of the monitoring that is required by this operating permit.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1569]

Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

What are my requirements for HAP emissions from bypass lines?

The permittee shall record the results of the monthly monitoring of the bypass line including whether the blind is maintained in the correct position such that the vent stream cannot be diverted through the bypass line.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1576]

Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

What records must I keep, in what form, and for how long?

(a) The permittee must retain the following:

(1) A copy of each notification and report that the company submitted to comply with 40 C.F.R. Part 63, Subpart UUU, including all documentation supporting any Notification of Compliance Status that the company submitted;

**SECTION D. Source Level Requirements**

- (2) Records of performance tests and performance evaluations as required in 40 CFR Section 63.10(b)(2)(viii).
- (b) The permittee must keep records required by Tables 27, 28, and 39 of 40 C.F.R. 63, Subpart UUU to show continuous compliance with each emission limitation that applies to the source.
- (c) The permittee must keep a current copy of the operation, maintenance, and monitoring plan onsite and available for inspection. The permittee must keep records to show continuous compliance with the procedures in the operation, maintenance, and monitoring plan.
- (d) The permittee must keep the records of any changes that affect emission control system performance including, but not limited to, the location at which the vent stream is introduced into the flame zone for a boiler or process heater.
- (e) The permittee's records must be in a form suitable and readily available for expeditious review.
- (f) The permittee must keep each record for five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. These records must be kept on site for at least two (2) years, after which they may be kept off site for the remaining 3 years.

V. REPORTING REQUIREMENTS.**# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1570]****Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my general requirements for complying with this subpart?**

- (a) The permittee shall report each instance of the following:
- (1) chloride limit exceedances; and
 - (2) inlet temperature exceedances, including periods of startup, shutdown, and malfunction. The report shall also include each instance in which it did not meet the work practice standards in 40 C.F.R. 63, Subpart UUU. These deviations must be reported according to the requirements in 40 C.F.R. § 63.1575.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1575]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What reports must I submit and when?**

- (a) The permittee must submit each report semiannually as outlined in Table 43 of 40 C.F.R. Part 63, Subpart UUU.
- (b) The compliance reports may be submitted along with the semi-annual compliance certification reports required by Section C, of this operating permit.
- (c) The compliance report must contain the information required in paragraphs (c)(1) through (4):
- (1) company name and address;
 - (2) statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
 - (3) date of report and beginning and ending dates of the reporting period; and
 - (4) if there are no deviations from any emission limitation that applies and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period.

**SECTION D. Source Level Requirements**

(d) For each deviation from the inlet temperature to the hydrogen chloride absorber the semiannual compliance report must contain the information in 40 CFR §63.1575(c)(1) through (3), and 40 CFR §63.1575 (d)(1) through (4).

(1) the total operating time of each affected source during the reporting period;

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

(3) information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with daily calibration checks); and

(4) information concerning the chloride exceedances, and either the parameter monitor reading during the deviation or a description of how you deviated from the work practice standard.

(e) The permittee also must include the information in 40 CFR §63.1575(f)(1)(i) or (ii) in each compliance report, if applicable;

(1) a copy of any performance test done during the reporting period on this source. The report may be included in the next semiannual report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, the permittee must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method.

(2) any requested change in the applicability of an emission standard (e.g., the permittee wants to change from the HCl concentration standard to percent reduction for catalytic reforming units) in the compliance report. All information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements must be included.

(f) The permittee may submit reports required by other regulations in place of, or as part of, the compliance report if they contain the required information.

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

(a) The permittee shall limit the chloride level of the sorbent entering the gas adsorption to 1.35%, or less, calculated as a weekly average.

(b) The permittee shall limit the chloride level of the sorbent exiting the gas adsorption system to 1.8%, or less, calculated as a weekly average.

014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1566]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my requirements for organic HAP emissions from catalytic reforming units?**

(a) The permittee shall reduce uncontrolled emissions of total organic compounds (TOC) or nonmethane TOC from the process vent by 98 percent by weight using a control device or to a concentration of 20 ppmv (dry basis as hexane), corrected to 3 percent oxygen, whichever is less stringent.

(b) Compliance with the above can be demonstrated by venting emissions to a boiler or process heater to comply with the percent reduction or concentration emission limitation. The vent stream must be introduced into the flame zone, or any other location that will achieve the percent reduction or concentration standard.

**SECTION D. Source Level Requirements****# 015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1567]****Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my requirements for inorganic HAP emissions from catalytic reforming units?**

The permittee shall:

- (a) maintain an operation, maintenance, and monitoring plan according to the requirements in 40 C.F.R. § 63.1574(f) and operate at all times according to the procedures in the plan.
- (b) demonstrate continuous compliance with the work practice standard in paragraph (a), above, by maintaining records to document conformance with the procedures in the operation, maintenance and monitoring plan.

016 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1569]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my requirements for HAP emissions from bypass lines?**

The permittee must demonstrate continuous compliance with each work practice standard in Table 36 of 40 C.F.R. 63, Subpart UUU that applies according to the requirements in Table 39 of 40 C.F.R. 63, Subpart UUU.

Compliance with the procedures in the operation, maintenance, and monitoring plan shall demonstrate compliance with the above.

017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1570]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my general requirements for complying with this subpart?**

At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

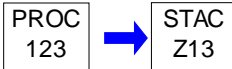
Source ID: 123

Source Name: #66 EXT.FLOAT 43M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 124

Source Name: #67 EXT.FLOAT 43M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
124STAC
Z14**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

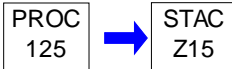
Source ID: 125

Source Name: #68 EXT.FLOAT 43M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T005 (External floating roof, NSPS Kb tanks).

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

**SECTION D. Source Level Requirements**

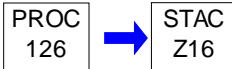
Source ID: 126

Source Name: #95 EXT.FLOAT 59M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT CC Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT CC Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

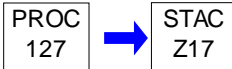
Source ID: 127

Source Name: #96 EXT.FLOAT 59M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

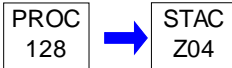
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 128

Source Name: MACT FUGITIVES

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Equipment leak standards.**

(a) As per 40 C.F.R. §63.640(p)(1), equipment leaks that are also subject to the provisions of 40 C.F.R. parts 60 and 61 standards promulgated before September 4, 2007, are required to comply only with the provisions specified in this subpart.

(b) As per 40 C.F.R. §63.648(a), the permittee shall comply with the provisions of 40 C.F.R. part 60 subpart VV.

Control Device Efficiency Restriction(s).**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Equipment leak standards.**

Emissions from closed vent systems shall comply with the provisions of 40 CFR §63.648. On and after January 30, 2019, any flares receiving gas from the fuel gas system must be in compliance with 40 CFR §63.670.

II. TESTING REQUIREMENTS.**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Equipment leak standards.**

The permittee shall comply with test methods and procedures in accordance with 40 C.F.R. §60.485.

(a) In conducting the performance tests required in 40 C.F.R. §60.8, the permittee shall use as reference methods and procedures for the test methods in appendix A of 40 C.F.R. Part 60 or other methods and procedures as specified in this section, except as provided in 40 C.F.R. §60.8(b).

(b) The permittee shall determine compliance with the standards in 40 C.F.R. §§60.482-1 through 60.482-10, 60.483-1 and 60.483-2, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The permittee shall determine compliance with the no detectable emission standards in 40 C.F.R. §§60.482-2(e), 60.482-3(i), 60.482-4, 60.482-7(f), and 60.482-10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The permittee shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e.,

**SECTION D. Source Level Requirements**

that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference—see § 60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

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

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

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

(1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 C.F.R. §60.17) shall be used to determine the vapor pressures.

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

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

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

(g) Compliance with the standards of the Main Flare (C103) assures compliance with 40 CFR §60.485a(g).

III. MONITORING REQUIREMENTS.**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Equipment leak standards.**

A. 40 C.F.R. §60.482-3 - Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. §60.485(b), except as provided in 40 C.F.R. §60.482-1(c) and (f) and §60.482-3(d), (e), and (f).

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 C.F.R. §60.482-1(f).

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in either 40 C.F.R. §60.482-3(b)(2)(i) or (ii). This requirement does not apply to a pump that was monitored after a previous weekly inspection if the instrument reading for that monitoring event was less than 10,000 ppm and the pump was not repaired since that monitoring event.

(i) Monitor the pump within 5 days as specified in 40 C.F.R. §60.485(b). If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. The leak shall be repaired using the procedures in 40 C.F.R. §60.482-3(c).

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(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak within 15 days of detection by eliminating the visual indications of liquids dripping.

(c) Pumps with exemptions are specified in 40 C.F.R. §60.482-2(d) through (h).

B. 40 C.F.R. §60.842-7 - Standards: Valves in gas/vapor service and in light liquid service.

(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 C.F.R. §60.485(b) and shall comply with 40 C.F.R. §60.482-7(b) through (e), except as provided in 40 C.F.R. §60.482-7(f) and §60.482-1(c) and (f).

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to 40 C.F.R. §60.482-7(a)(2)(i), except for a valve that replaces a leaking valve and except as provided in 40 C.F.R. §60.482-7(f), (g), and (h), and 60.482-1(c).

(i) Monitor the valve as in 40 C.F.R. §60.482-7(a)(1). The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(ii) As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into 2 or 3 subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup.

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

(d) Exemptions to this section are specified in 40 C.F.R. §60.482-7(f) through (h).

C. 40 C.F.R. §60.842-10 - Standards: Closed vent systems and control devices.

(a) The permittee shall monitor the flares to ensure that they are operated and maintained in conformance with their designs.

(b) Except as provided in 40 C.F.R. §60.482-10(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified in 40 C.F.R. §60.482-10(b)(1) and (2).

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the permittee shall comply with the requirements specified in 40 C.F.R. §60.482-10(b)(1)(i) and (b)(1)(ii):

(i) Conduct an initial inspection according to the procedures in 40 C.F.R. §60.485(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the permittee shall:

(i) Conduct an initial inspection according to the procedures in 40 C.F.R. §60.485(b); and

(ii) Conduct annual inspections according to the procedures in 40 C.F.R. §60.485(b).

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Equipment leak standards.**

A. 40 C.F.R. §60.482-10 - Standards: Closed vent systems and control devices.

(a) The permittee shall record the information specified in 40 C.F.R. §60.482-10(a)(1) through (l)(5).

(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in 40 C.F.R. §60.486(c).

(4) For each inspection conducted in accordance with 40 C.F.R. §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with 40 C.F.R. §60.482-10(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

B. The permittee shall comply with the provisions of 40 C.F.R. §60.486 - Recordkeeping requirements.

(a)(1) The permittee shall comply with the recordkeeping requirements of this section.

(2) The permittee may comply with the recordkeeping requirements for the facilities in one recordkeeping system if the system identifies each record by each facility.

(b) When each leak is detected as specified in 40 C.F.R. §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 C.F.R. §60.482-7(c) and no leak has been detected during those 2 months.

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in 40 C.F.R. §§60.482-2, 60.482-3, 60.482-7, and 60.482-8, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in 40 C.F.R. §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

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(6) The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and flares described in 40 C.F.R. §60.482-10 shall be recorded and kept in a readily accessible location:

(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in 40 C.F.R. §60.482-10(e), to ensure that the flares are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

(4) Periods when the closed vent systems and control devices required in 40 C.F.R. §§60.482-2, 60.482-3, 60.482-4, and 60.482-5 are not operated as designed, including periods when a flare pilot light does not have a flame.

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in 40 C.F.R. §§60.482-2, 60.482-3, 60.482-4, and 60.482-5.

(e) The following information pertaining to all equipment subject to the requirements in 40 C.F.R. §§60.482-1 to 60.482-10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.

(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 C.F.R. §§ 60.482-2(e), 60.482-3(i) and 60.482-7(f).

(ii) The designation of equipment as subject to the requirements of 40 C.F.R. §60.482-2(e), §60.482-3(i), or §60.482-7(f) shall be signed by the permittee. Alternatively, the permittee may establish a mechanism with their permitting authority that satisfies this requirement.

(3) A list of equipment identification numbers for pressure relief devices required to comply with 40 C.F.R. §60.482-4.

(4)(i) The dates of each compliance test as required in 40 C.F.R. §§60.482-2(e), 60.482-3(i), 60.482-4, and 60.482-7(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(6) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 C.F.R. §60.482-1(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.

(f) The following information pertaining to all valves subject to the requirements of 40 C.F.R. §60.482-7(g) and (h) and to all pumps subject to the requirements of 40 C.F.R. §60.482-2(g) shall be recorded in a log that is kept in a readily accessible location:

**SECTION D. Source Level Requirements**

- (1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
- (2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
- (g) Not applicable.
- (h) The following information shall be recorded in a log that is kept in a readily accessible location:
- (1) Design criterion required in 40 C.F.R. §§60.482-2(d)(5) and 60.482-3(e)(2) and explanation of the design criterion; and
- (2) Any changes to this criterion and the reasons for the changes.
- (i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 C.F.R. §60.480(d):
- (1) An analysis demonstrating the design capacity of the affected facility,
- (2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
- (3) An analysis demonstrating that equipment is not in VOC service.
- (j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.
- (k) The provisions of 40 C.F.R. §60.7 (b) and (d) do not apply to affected facilities subject to this subpart.

V. REPORTING REQUIREMENTS.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]
Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Equipment leak standards.

The permittee shall comply with the provisions of 40 C.F.R. §60.487 - Reporting requirements.

- (a) The permittee shall submit semiannual reports to DEP beginning six months after the initial startup date.
- (b) The initial semiannual report to DEP shall include the following information:
- (1) Process unit identification.
- (2) Number of valves subject to the requirements of 40 C.F.R. §60.482-7, excluding those valves designated for no detectable emissions under the provisions of 40 C.F.R. §60.482-7(f).
- (3) Number of pumps subject to the requirements of 40 C.F.R. §60.482-2, excluding those pumps designated for no detectable emissions under the provisions of 40 C.F.R. §60.482-2(e) and those pumps complying with 40 C.F.R. §60.482-2(f).
- (4) Number of compressors subject to the requirements of 40 C.F.R. §60.482-3, excluding those compressors designated for no detectable emissions under the provisions of 40 C.F.R. §60.482-3(i) and those compressors complying with 40 C.F.R. §60.482-3(h).
- (c) All semiannual reports to the Administrator shall include the following information, summarized from the information in 40 C.F.R. §60.486:

**SECTION D. Source Level Requirements**

- (1) Process unit identification.
- (2) For each month during the semiannual reporting period,
 - (i) Number of valves for which leaks were detected as described in 40 C.F.R. §60.482-7(b) or §60.483-2,
 - (ii) Number of valves for which leaks were not repaired as required in 40 C.F.R. §60.482-7(d)(1),
 - (iii) Number of pumps for which leaks were detected as described in 40 C.F.R. §60.482-2(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii),
 - (iv) Number of pumps for which leaks were not repaired as required in 40 C.F.R. §60.482-2(c)(1) and (d)(6),
 - (v) Number of compressors for which leaks were detected as described in 40 C.F.R. §60.482-3(f),
 - (vi) Number of compressors for which leaks were not repaired as required in 40 C.F.R. §60.482-3(g)(1), and
 - (vii) The signature of the permittee (or designate) whose decision it was that a repair could not be effected without a process shutdown is not required to be recorded. Instead, the name of the person whose decision it was that a repair could not be effected without a process shutdown shall be recorded and retained for 2 years.
- (3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
- (4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.
- (d) Not applicable.
- (e) The permittee shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of 40 C.F.R. §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that the permittee must notify DEP of the schedule for the initial performance tests at least 30 days before the initial performance tests.
- (f) The requirements of paragraphs (a) through (c) above remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) above, provided that they comply with the requirements established by the State.

VI. WORK PRACTICE REQUIREMENTS.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]
Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Equipment leak standards.

A. 40 C.F.R. §60.482-2 - Standards: Pumps in light liquid service.

As per 40 C.F.R. §60.482(c)(1), when a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 C.F.R. §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described in 40 C.F.R. §60.482-3(c)(2)(i) and (ii), where practicable.

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

**SECTION D. Source Level Requirements****B. 40 C.F.R. §60.482-3 - Standards: Compressors.**

- (a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 C.F.R. §60.482-1(c) and 40 C.F.R. §60.482-3(h), (i), and (j).
- (b) Each compressor seal system as required in 40 C.F.R. §60.482-3(a) shall be:
- (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
 - (2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 C.F.R. §60.482-10; or
 - (3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
- (c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.
- (d) Each barrier fluid system as described in 40 C.F.R. §60.482-3(a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
- (e)(1) Each sensor as required in 40 C.F.R. §60.482-3(d) shall be checked daily or shall be equipped with an audible alarm.
- (2) The permittee shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
- (f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 C.F.R. §60.482-3(e)(2), a leak is detected.
- (g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 C.F.R. §60.482-9.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (h) Exemptions to this section are specified in 40 C.F.R. §60.482-3(h) through (j).

C. 40 C.F.R. §60.482-4 - Standards: Pressure relief devices in gas/vapor service.

- (a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 C.F.R. §60.485(c).
- (b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 C.F.R. §60.482-9.
- (2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 C.F.R. §60.485(c).
- (c) Exemptions to this section are specified in 40 C.F.R. §60.482-4(c) and (d).

D. 40 C.F.R. §60.482-5 - Standards: Sampling connection systems.

- (a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 C.F.R. §60.482-1(c) and §60.482-5(c).

**SECTION D. Source Level Requirements**

(b) Each closed-purge, closed-loop, or closed-vent system as required in 40 C.F.R. §60.482-5(a) shall comply with the requirements specified in 40 C.F.R. §60.482-5(b)(1) through (4).

(1) Gases displaced during filling of the sample container are not required to be collected or captured.

(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.

(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.

(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either 40 C.F.R. §60.482-5(b)(4)(i), (ii), (iii), or (iv).

(i) Return the purged process fluid directly to the process line.

(ii) Collect and recycle the purged process fluid to a process.

(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of 40 C.F.R. §60.482-10.

(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) A waste management unit as defined in 40 C.F.R. §63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 C.F.R. part 63, subpart G, applicable to Group 1 wastewater streams;

(B) A treatment, storage, or disposal facility subject to regulation under 40 C.F.R. part 262, 264, 265, or 266;

(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 C.F.R. part 261;

(D) A waste management unit subject to and operated in compliance with the treatment requirements of 40 C.F.R. §61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 C.F.R. §§61.343 through 61.347; or

(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 C.F.R. part 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 C.F.R. part 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of 40 C.F.R. §60.482-5(a) and (b).

E. 40 C.F.R. §60.842-6 - Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 C.F.R. §60.482-1(c) and §60.842-6(d) and (e).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 C.F.R. §60.842-6(a) at all other times.

**SECTION D. Source Level Requirements**

(d) Exemptions to this section are specified in 40 C.F.R. §60.482-6(d) and (e).

F. 40 C.F.R. §60.482-7 - Standards: Valves in gas/vapor service and in light liquid service.

(a)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 C.F.R. §60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(b) First attempts at repair include, but are not limited to, the following best practices where practicable:

- (1) Tightening of bonnet bolts;
- (2) Replacement of bonnet bolts;
- (3) Tightening of packing gland nuts;
- (4) Injection of lubricant into lubricated packing.

G. 40 C.F.R. §60.482-8 - Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

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

- (1) The permittee shall monitor the equipment within 5 days by the method specified in 40 C.F.R. §60.485(b) and shall comply with the requirements of 40 C.F.R. §60.482-8(b) through (d).
- (2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 C.F.R. §60.482-9.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under 40 C.F.R. §§60.482-2(c)(2) and 60.482-7(e).

H. 40 C.F.R. §60.482-9 - Standards: Delay of repair.

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

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

- (1) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

**SECTION D. Source Level Requirements**

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 40 C.F.R. §60.482-10.

(d) Delay of repair for pumps will be allowed if:

(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump or valve that remains in service, the pump or valve may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

I. 40 C.F.R. §60.482-10 - Standards: Closed vent systems and control devices.

(a) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 C.F.R. §60.482-10(b).

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(b) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(c) Exemptions to this section are specified in 40 C.F.R. §60.482-10(i) through (k).

(d) Closed vent systems and the flares shall be operated at all times when emissions may be vented to them.

VII. ADDITIONAL REQUIREMENTS.**# 008 [25 Pa. Code §127.512]****Operating permit terms and conditions.**

The following units at the facility are subject to the leak detection and repair (LDAR) requirements applicable to fugitive sources at petroleum refineries, specified in 40 C.F.R. 63, Subpart CC. Certain of these components may also be subject to 25 Pa. Code §129.58, and/or federal LDAR requirements established under 40 C.F.R. 60, Subpart VV (through GGG), as appropriate. In accordance with an alternative monitoring plan submitted by the permittee, and approved by the Department on August 24, 1998, a source that is subject to both the provisions of 25 Pa. Code §129.58 and 40 C.F.R. 63, Subpart CC, satisfies the requirements of 25 Pa. Code § 129.58 by complying with the provisions of 40 C.F.R. 63, Subpart CC. Therefore, each component at the facility that is subject to an LDAR requirement under state or federal regulations complies with applicable LDAR standards by implementing an LDAR program consistent with the LDAR provisions of 40 C.F.R. 63, Subpart CC. The fugitive monitoring plan developed and maintained on-site by the permittee identifies which portions of each unit are subject to the requirements for fugitive sources (IDs #112, 114, 115, 128, and 215). This section of the permit identifies applicable standards for Source ID #128, which satisfies LDAR obligations through compliance with the provisions of 40 C.F.R. 63, Subpart CC.

Alky Unit

Amine Unit

**SECTION D. Source Level Requirements**

Gasoline Blending
Crude Units
Diesel Hydrodesulfurization Unit
FCC Unit
Isocracker Unit
Kerosene Hydrodesulfurization Unit
Marine Terminal Vapor Recovery System (VRS)
Naphtha Hydrodesulfurization Unit
Naphtha Unit
Platformer Unit
Reformate
Sulfur Recovery Unit (SRU)
Sun Olin Unit
Tank Farm
VGO Hydrotreating Unit

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.640]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Applicability and designation of affected source.**

(a) As per 40 C.F.R. §63.640(p)(1), after the compliance dates specified in 40 C.F.R. §63.640(h), equipment leaks that are also subject to the provisions of 40 C.F.R. Parts 60 and 61 standards promulgated before September 4, 2007, are required to comply only with the provisions specified in this subpart.

(b) As per 40 C.F.R. §63.640(q), for overlap of subpart CC with State regulations (25 Pa. Code §129.58), DEP allows consolidation of the monitoring, recordkeeping, and reporting requirements under this subpart with the monitoring, recordkeeping, and reporting requirements under other applicable requirements in 40 C.F.R. parts 60, 61, or 63, and in any 40 C.F.R. part 52 approved State implementation plan.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Equipment leak standards.**

As per 40 C.F.R. §60.482-1,

(a) The permittee shall demonstrate compliance with the requirements of 40 C.F.R. §§60.482-1 through 60.482-10 for all equipment within 180 days of initial startup.

(b) Compliance with 40 C.F.R. §§60.482-1 to 60.482-10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 C.F.R. §60.485.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Reporting and recordkeeping requirements.**

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

The permittee shall comply with the recordkeeping and reporting provisions in (a) through (f) of this condition.

(a) 40 CFR §§ 60.486 and 60.487, except as specified (a)(1) of this condition; or 40 CFR §§ 63.181 and 63.182, except for 40 CFR § 63.182(b), (c)(2), and (c)(4).

(1) The signature of the permittee (or designate) whose decision it was that a repair could not be effected without a process shutdown is not required to be recorded. Instead, the name of the person whose decision it was that a repair could not be effected without a process shutdown shall be recorded and retained for 2 years.

(b) The Notification of Compliance Status report required by 40 CFR § 63.182(c) and the initial semiannual report required by 40 CFR § 60.487(b) shall be submitted within 150 days of the compliance date specified in 40 CFR § 63.640(h).

**SECTION D. Source Level Requirements**

(c) The permittee who determines that a compressor qualifies for the hydrogen service exemption in 40 CFR § 63.648 shall also keep a record of the demonstration required by 40 CFR § 63.648.

(d) The permittee must keep a list of identification numbers for valves that are designated as leakless per 40 CFR § 63.648(c)(10).

(e) The permittee must identify, either by list or location (area or refining process unit), equipment in organic HAP service less than 300 hours per year within refining process units subject to 40 CFR, Subpart FF.

(f) The permittee must keep a list of reciprocating pumps and compressors determined to be exempt from the seal requirements as per 40 CFR § 63.648(f) and (i).

(g) The permittee, who wishes to use an alternative monitoring method, shall submit an application to DEP as described in 40 CFR §§ 63.8(f)(4)(ii) and 63.654(h).

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

**SECTION D. Source Level Requirements**

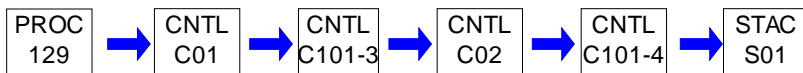
Source ID: 129

Source Name: DISULFIDE OXIDIZER SEPARATOR VENT

Source Capacity/Throughput:

1.000 Gal/HR

PETROLEUM PRODUCTS

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.643]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Miscellaneous process vent provisions.**

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

In accordance with 40 CFR §63.643(a)(2), the vent stream shall be introduced into the combustion zone of the CO Boiler (Source ID C01) to reduce organic HAP emissions by 98 weight-percent or to a concentration of 20 ppmv on a dry basis, corrected to 3% oxygen, whichever is less stringent.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.114.]

II. TESTING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.645]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Test methods and procedures for miscellaneous process vents.**

The permittee shall comply with the applicable test methods and procedures specified in 40 C.F.R. §63.645.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Reporting and recordkeeping requirements.**

As per 40 C.F.R. §63.655(i), each permittee of a source subject to this subpart shall keep copies of all applicable reports and records required by 40 CFR Part 63 Subpart CC for at least 5 years except as otherwise specified in 40 CFR §63.655(i)(1) through (12) of this section. All applicable records shall be maintained in such a manner that they can be readily accessed within 24 hours. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, flash drive, floppy disk, magnetic tape, or microfiche.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

Source ID: 130

Source Name: PEABODY HEATER

Source Capacity/Throughput: 74.000 MMBTU/HR
74.000 MCF/HR NATURAL GAS

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

001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

NOx emissions from this heater shall not exceed 7.6 tons per 12-month rolling sum.

Fuel Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall fire natural gas only.

[Compliance with this restriction assures compliance with 25 Pa. Code §123.13]

Throughput Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source shall only be used during FCC unit (Source ID 101) start-up and warm idle operation.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority of this condition is also derived from 25 Pa. Code §129.115.]

The permittee shall monitor for this source:

(a) The operating hours; and

(b) The amount of fuel consumed using either a fuel flow meter, or based on the operating hours and maximum heat input.

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

[Additional authority of this permit condition is also derived from 25 Pa. Code §129.115.]

The permittee shall keep the following records of this source:

- (a) The operation hours each day the source is operating.
- (b) The amount of fuel consumed each day the source is operating, using a flow meter, or based on the operating hours and maximum heater input.
- (c) The average firing rate in MMBtu/hr each month and the NO_x emissions on a monthly and 12-month rolling basis.
- (d) The maintenance conducted on the source and air pollution control devices.

V. REPORTING REQUIREMENTS.

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

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

[Additional authority of this condition is also derived from 25 Pa. Code §129.112.]

The permittee shall operate and maintain this unit in accordance with manufacturer's specifications and good operating practices for the control of emissions from this unit.

VII. ADDITIONAL REQUIREMENTS.**# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7575]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What definitions apply to this subpart?**

Due to direct heat transfer, Peabody Heater (Source ID 130) is not subject to the requirements of 40 C.F.R. 63 Subpart DDDDD as per the definition of Process Heaters specified in 40 C.F.R. §63.7575.

*** Permit Shield in Effect. ***

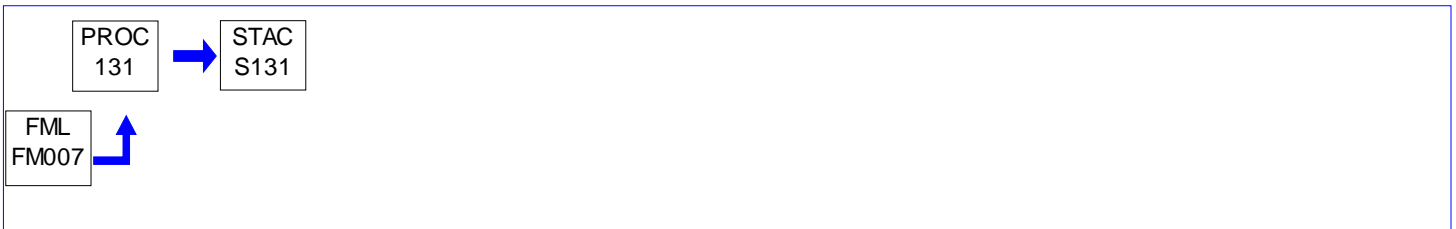
**SECTION D. Source Level Requirements**

Source ID: 131

Source Name: AWWTP EMERGENCY GENERATOR

Source Capacity/Throughput: 100.000 Gal/HR

Diesel Fuel

**I. RESTRICTIONS.****Operation Hours Restriction(s).**

001 [25 Pa. Code §129.112]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule

The engine shall be operated less than 500 hours in a 12-month rolling period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate the difference between the actual emissions from the engine during the period from May 1 through September 30 and the allowable emissions for that period.

V. REPORTING REQUIREMENTS.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6645]

Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines**What notifications must I submit and when?**

The permittee must submit an initial notification that shall include the information in §63.9(b)(2)(i) through (v), and a statement that the stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §129.112]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 005 [25 Pa. Code §129.203]****Stationary internal combustion engines.**

(a) The permittee shall calculate the difference between the actual emissions from the unit during the period from May 1 through September 30 and the allowable emissions for that period.

(b) The permittee shall calculate allowable emissions by multiplying the cumulative hours of operations for the unit for the period by the horsepower rating of the unit and by the applicable emission rate of 2.3 grams of NOx per brake horsepower-hour.

006 [25 Pa. Code §129.204]**Emission accountability.**

(a) The permittee shall determine actual emissions in accordance with one of the following:

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

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

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

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

(C) An alternate calculation and recordkeeping procedure based upon emissions testing and correlations with operating parameters. The permittee shall demonstrate that the alternate procedure does not underestimate actual emissions throughout the allowable range of operating conditions. The alternate calculation and recordkeeping procedures must be approved by the Department, in writing, prior to implementation.

(b) The permittee shall surrender to the Department one NOx allowance, as defined in 25 Pa. Code §145.2 (relating to definitions), for each ton of NOx by which the combined actual emissions exceed the allowable emissions of the units subject to this section at a facility from May 1 through September 30. The surrendered NOx allowances shall be of current year vintage. For the purpose of determining the amount of allowances to surrender, any remaining fraction of a ton equal to or greater than 0.50 ton is deemed to equal 1 ton and any fraction of a ton less than 0.50 ton is deemed to equal zero tons.

(c) If the combined allowable emissions from units subject to this section at a facility from May 1 through September 30 exceed the combined actual emissions from units subject to this section at the facility during the same period, the owner or operator may deduct the difference or any portion of the difference from the amount of actual emissions from units subject to this section at the owner or operator's other facilities.

(d) By November 1 of each year thereafter, the permittee shall surrender the required NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:

(1) The serial number of each NOx allowance surrendered.

(2) The calculations used to determine the quantity of NOx allowances required to be surrendered.

(e) If the permittee fails to comply with 25 Pa. Code §129.204(e), the permittee shall by December 31 surrender three NOx allowances of the current or later year vintage for each NOx allowance that was required to be surrendered by November 1 of that year.

(f) The surrender of NOx allowances under subsection 25 Pa. Code §129.204(f) does not affect the liability of the permittee for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.

**SECTION D. Source Level Requirements**

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

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

[Note: On July 6, 2011, EPA promulgated the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. The CSAPR provisions of 40 CFR Part 97, Subpart AAAAA (relating to CSAPR NOx Annual Trading Program), replaced the provisions of 40 CFR Part 96, Subpart AA (relating to CAIR NOx Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart EEEEE (relating to CSAPR NOx Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NOx Ozone Season Trading Program and CSAPR NOx Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart GGGGG (relating to CSAPR NOx Ozone Season Group 3 Trading Program), to replace the provisions of 40 CFR Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season (though DEP will accept CSAPR NOx Ozone Season Group 2 allowances of current year vintage from other states, if available). Accordingly, the permittee shall surrender CSAPR NOx Annual allowances and either CSAPR NOx Ozone Season Group 2 allowances or CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 CFR §§ 97.402, 97.802, and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

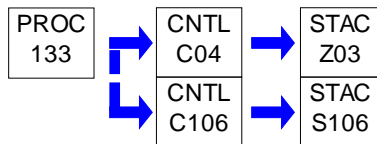
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 133

Source Name: BENZENE WASTE OPERATIONS

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

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

Laboratory Audits ----

The permittee shall conduct audits of each laboratory, that performs analyses of the permittee's samples taken in response to the benzene waste operations NESHAPs (40 C.F.R. Part 61 Subpart FF) (BWON) at least once every two years. The permittee shall also conduct an audit of any new laboratory that is proposed to be used for analyses of BWON samples prior to such use. The audit's goal is to ensure that proper analytical and quality assurance/quality control procedures are followed.

The permittee may retain third parties to conduct these audits or use audits conducted by others as its own, but the responsibility and obligation to ensure that the laboratory meets the relevant requirements are solely the permittee's.

002 [40 CFR Part 61 NESHAPs §40 CFR 61.355]**Subpart FF--National Emission Standard for Benzene Waste Operations****Test methods, procedures, and compliance provisions.**

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

(a) The permittee shall comply with the 6BQ compliance option outlined within 40 CFR Section 61.342(e)(2) and shall not change to the 2 Mg compliance option outlined within 40 CFR Section 61.342(c).

The permittee shall consult with EPA and the Department before making any change not expressly prohibited by this condition.

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

The permittee shall monitor for breakthroughs between the primary and secondary carbon canisters in accordance with the frequency specified in 40 C.F.R. §61.354(d) and monitor the outlet of the secondary canister on a monthly basis or at its design replacement interval, whichever is less.

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

The permittee shall monitor for breakthroughs between the primary and secondary carbon canisters in accordance with the frequency specified in 40 C.F.R. §61.354(d) and monitor the outlet of the secondary canister on a monthly basis or at its design replacement interval, whichever is less.

"Breakthrough" between a primary and secondary canister is defined as any reading equal to or greater than either 50 ppm of VOC or 1 ppm benzene.

**SECTION D. Source Level Requirements****# 005 [40 CFR Part 61 NESHAPs §40 CFR 61.343]****Subpart FF--National Emission Standard for Benzene Waste Operations****Standards: Tanks.**

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

Each fixed-roof, seal, access door, and all other openings shall be checked by visual inspection, initially and quarterly thereafter, to ensure that no cracks or gaps occur and that access doors and other openings are closed and gasketed properly.

006 [40 CFR Part 61 NESHAPs §40 CFR 61.345]**Subpart FF--National Emission Standard for Benzene Waste Operations****Standards: Containers.**

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

Each cover and all openings for containers subject to 40 C.F.R. 61, Subpart FF, shall be visually inspected, initially and quarterly thereafter, to ensure that they are closed and gasketed properly.

007 [40 CFR Part 61 NESHAPs §40 CFR 61.354]**Subpart FF--National Emission Standard for Benzene Waste Operations****Monitoring of operations.**

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

Except for a treatment process or waste stream complying with 40 C.F.R. § 61.348(d), the permittee shall monitor each treatment process or wastewater treatment system unit to ensure the unit is properly operated and maintained by one of the following procedures:

(a) Measure the benzene concentration of the waste stream exiting the treatment process complying with 40 C.F.R. §61.348(a)(1)(i) at least once per month by collecting and analyzing one or more samples using the procedures specified in 40 C.F.R. §61.355(c)(3).

(b) Operate, calibrate, and maintain according to manufacturer's specifications equipment to continuously monitor and record a process parameter(s) for the treatment process or wastewater treatment system unit that indicated proper system operation. The permittee shall inspect at least once each operating day the data recorded by the monitoring equipment to ensure that the unit is operating properly.

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

Benzene Spills ----

The permittee shall review spills to determine if more than 10 lbs of benzene waste were generated in any 24-hour period. Such spills which exceed 10 lbs of benzene waste shall be included the refinery's total annual benzene (TAB) and uncontrolled benzene quantity calculations.

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

The permittee shall maintain records

(1) identifying all secondary carbon canister installations, and the date of installation and operation of each secondary carbon canister

(2) in accordance with 40 C.F.R. §61.356(j)(10), all carbon canisters not regenerated directly on site in the control device is used, then the permittee shall maintain records of dates and times when the control device is monitored, when breakthrough is measured, and shall record the date and time when the existing carbon in the control device is replaced with fresh carbon.

**SECTION D. Source Level Requirements****# 010 [40 CFR Part 61 NESHAPs §40 CFR 61.356]****Subpart FF--National Emission Standard for Benzene Waste Operations
Recordkeeping requirements.**

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

(a) When transferring waste offsite to another facility for treatment in accordance with 40 C.F.R. § 61.342(f), the permittee shall maintain documentation for each offsite waste shipment that includes the following information: Date waste is shipped offsite, quantity of waste shipped offsite, name and address of the facility receiving the waste, and a copy of the notice sent with the waste shipment.

(b) When control equipment is used in accordance with 40 C.F.R. §§61.343 through 347, the permittee shall maintain the engineering design documentation for all control equipment that is installed on the waste management unit. The documentation shall be retained for the life of the control equipment.

(c) For any treatment process or wastewater treatment system in accordance with 40 C.F.R. §61.348, the permittee shall retain, for the life of the unit, a signed statement by the permittee certifying that the unit is designed to operate at the documented performance level when the waste stream entering the unit is at the highest waste stream flow rate and benzene content expected to occur.

(d) The permittee shall maintain a record for each visual inspection required by 40 C.F.R. §§61.343 through 347 that identifies a problem which could result in benzene emissions. The record shall include the date of the inspection, waste management unit and control equipment location where the problem is identified, a description of the problem, a description of the corrective action taken, and the date the corrective action was completed.

011 [40 CFR Part 61 NESHAPs §40 CFR 61.356]**Subpart FF--National Emission Standard for Benzene Waste Operations
Recordkeeping requirements.**

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

The permittee shall maintain records that identify each waste stream at the facility subject to 40 C.F.R. 61, Subpart FF, and indicate whether or not the waste stream is controlled for benzene emissions in accordance with 40 C.F.R. 61, Subpart FF. In addition, the following records shall be maintained:

(a) For each waste stream not controlled for benzene emissions in accordance with 40 C.F.R. 61, Subpart FF, the records shall include all test results, measurements, calculations, and other documentation used to determine the following information for the waste stream: waste stream identification, water content, whether or not the waste stream is a process wastewater stream, annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

(b) For each waste stream exempt from 40 C.F.R. §61.342(c)(1) in accordance with 40 C.F.R. §61.342(c)(3), the records shall include all measurements, calculations, and other documentation used to determine that the sum of the total annual benzene quantity in all exempt waste streams does not exceed 2.0 Mg/yr in accordance with 40 C.F.R. §61.342(c)(3)(ii).

(c) Where waste streams are controlled for benzene emissions in accordance with 40 C.F.R. §61.342(e), the records shall include for each waste stream all measurements, including the locations of the measurements, calculations, and other documentation used to determine that the total benzene quantity does not exceed 6.0 Mg/yr.

012 [40 CFR Part 61 NESHAPs §40 CFR 61.356]**Subpart FF--National Emission Standard for Benzene Waste Operations
Recordkeeping requirements.**

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

(a) The permittee shall maintain a record of each test of no detectable emissions required by 40 C.F.R. §§61.343 through 347 and 61.349. The record shall include the following information:

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- (1) The date the test was performed,
 - (2) The background level measured during test, and,
 - (3) The maximum concentration indicated by the instrument reading measured for each potential leak interface.
- (b) If detectable emissions are measured at a leak interface, then the record shall also include the waste management unit, control equipment, and the leak interface location where detectable emissions were measured, a description of the problem, a description of the corrective action taken and the date the corrective action was completed.
- (c) For each treatment process and wastewater treatment system unit operated to comply with 40 C.F.R. §61.348, the permittee shall maintain documentation that includes the following information regarding the unit shutdown:
- (1) Dates of startup and shutdown of the unit.
 - (2) If the measurements of waste stream benzene concentration are performed in accordance with 40 C.F.R. §61.354(a)(1), the permittee shall maintain records that include the date each test is performed and all test results.
 - (3) If a process parameter(s) is continuously monitored in accordance with 40 C.F.R. §61.354(a)(2), the permittee shall maintain records that include a description of the operating parameter(s) to be maintained to ensure that the unit will be operated in conformance with these standards and the unit's design specifications, and an explanation of the criteria used for selection of that parameter(s). This documentation shall be kept for the life of the unit.
 - (4) Periods when the unit is not operated as designed.
- (d) The permittee who elects to install and operate the control equipment in 40 C.F.R. §61.351 shall comply with the record keeping requirements in 40 C.F.R. §60.115b.

V. REPORTING REQUIREMENTS.**# 013 [40 CFR Part 61 NESHAPs §40 CFR 61.357]****Subpart FF--National Emission Standard for Benzene Waste Operations
Reporting requirements.**

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

(a) The following reports shall be submitted to the Administrator:

- (1) Beginning on the date that the equipment necessary to comply with these standards has been certified, the permittee shall submit, annually to the Administrator, a report that updates the information listed in 40 C.F.R. §§61.357(a)(1) through (3) is not changed in the following year, the permittee may submit a statement to that effect.
- (2) If the permittee elects to comply with the requirements of 40 C.F.R. §61.342(c)(3)(ii), then the report required by (a)(1), above, shall include a table identifying each waste stream chosen for exemption and the total annual benzene quantity in these exempted streams.
- (3) If the permittee elects to comply with the alternative requirements of 40 C.F.R. §61.342(d), then the report required by 40 C.F.R. §§61.357(d)(2), shall include a table presenting the following information for each waste stream:
 - (i) For each waste stream identified as not being controlled for benzene emissions in accordance with the requirements of 40 C.F.R. 61, Subpart FF; the table shall report the following information for the waste stream as determined at the point of waste generation: Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.
 - (ii) For each waste stream identified as being controlled for benzene emissions in accordance with the requirements of 40 C.F.R. 61, Subpart FF; the table shall report the following information for the waste stream as determined at the applicable location described in 40 C.F.R. §61.355(k)(2): Annual waste quantity, range of benzene concentrations, annual average flow-weighted benzene concentration, and annual benzene quantity.

**SECTION D. Source Level Requirements**

(b) Beginning three (3) months after the date that the equipment necessary to comply with these standards had been certified in accordance with (a)(1), above, the permittee shall submit quarterly to the Administrator a certification that all of the required inspections have been carried out in accordance with the requirements of 40 C.F.R. 61, Subpart FF.

(c) Beginning three (3) months after the date that the equipment necessary to comply with these standards has been certified, the permittee shall submit a quarterly report to the Administrator that includes if the treatment process is monitored in accordance with 40 C.F.R. §61.354(a)(1), then each period of operation during which the concentration of benzene in the monitored waste stream exiting the unit is equal to or greater than 10 ppmw.

(d) Beginning one year after the date that the equipment necessary to comply with these standards had been certified in accordance with 40 C.F.R. §§61.357(d)(1), the permittee shall submit annually, to the Administrator, a report that summarizes all inspections required by 40 C.F.R. §§61.342 through 354 during which detectable emissions are measured or a problem that could result in benzene emissions is identified, including information about the repairs or corrective action taken.

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

[Additional authority for this permit condition is from 40 CFR Part 61 Subpart FF.]

Carbon Canisters ----

The permittee shall comply with the following requirements wherever carbon canisters are utilized as a control device for Source ID 133, unless the applicable federal, state, or local regulations have more stringent definitions, standards, limitations, or work practices, then those will apply instead:

1. The permittee shall not use single carbon canisters, except as described in No. 6 below.
2. The permittee shall maintain records identifying all secondary carbon canister installations, and the date and time of installation and operation of each secondary carbon canister.
3. The permittee shall monitor for breakthroughs between the primary and secondary carbon canisters in accordance with the frequency specified in 40 C.F.R. §61.354(d) and monitor the outlet of the secondary canister on a monthly basis or at its design replacement interval, whichever is less.

Any new dual canister shall be monitored for breakthrough at least 7 days after installation.

4. A "breakthrough" between a primary and secondary canister is defined as any reading equal to or greater than either 50 ppm of VOC or 1 ppm benzene.

5. The permittee shall replace the original primary carbon canister "immediately" when breakthrough is detected. The original secondary carbon canister will become the new primary canister and a fresh carbon canister will become the new secondary canister.

"Immediately" means eight (8) hours for canisters of 55 gallons or less and twenty-four (24) hours for canisters greater than 55 gallons.

6. The permittee may utilize properly sized single canisters for short-term operations such as with temporary storage tanks or as temporary control devices. Breakthrough, in this case, is defined as any reading of VOC or benzene above background. The permittee shall replace the single carbon canister "immediately" (within 8 hours for canisters smaller than or equal to 55 gal, and within 24 hours for canisters larger than 55 gal) when breakthrough is detected.

The permittee shall monitor for breakthrough from single carbon canisters each business day (Monday through Friday, excluding legal holidays) that there is actual flow to the carbon canister.

If flow to a single canister is discontinued, such a canister may not be placed back into BWON vapor control service until it

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has been properly re-generated.

7. The permittee shall maintain a supply of fresh carbon canisters at the Trainer Refinery at all times.
8. Records must be maintained for all carbon canisters in accordance with 40 C.F.R. §61.356(j)(10).

015 [25 Pa. Code §127.441]**Operating permit terms and conditions.****BWON Sampling Plan Requirements ----**

The permittee shall maintain a benzene waste operations sampling plan that outlines the procedures used to estimate quarterly and annual uncontrolled benzene quantities. The sampling plan must identify:

1. All uncontrolled waste streams that count toward the 6 BQ calculation and contain greater than 0.05 Mg/yr of benzene.
2. The proposed sampling locations and methods for flow calculations to be used in calculating projected quantity calculations under the terms below

The sampling plan shall require collecting at least three samples from all waste streams in the proposed locations each calendar quarter.

By no later than ninety (90) days after the permittee determines that the sampling plan no longer provides an accurate estimate of the quarterly and annual uncontrolled benzene quantities, the permittee shall submit to the Department and the EPA a revised plan for approval. In the first full calendar quarter after submitting the revised plan, the permittee shall implement the revised plan. The permittee shall continue to implement the revised plan unless and until the Department or the EPA disapproves the revised plan.

At the end of each calendar quarter and based on sampling results and approved flow calculations, the permittee shall calculate a quarterly and projected annual uncontrolled benzene quantity. The permittee shall use the average of the three samples collected at the sampling locations. If the calculations do not identify potential exceedances of the 6 BQ compliance option, the permittee shall note them along with any corrective actions in the Title V semiannual deviation report.

016 [25 Pa. Code §127.441]**Operating permit terms and conditions.****Breakthrough Studies ----**

The permittee may conduct a study, at any time, to modify the "breakthrough" definition of 50 ppm VOC or 1 ppm benzene for particular dual carbon canister systems. Such a study, shall last no less than 2 years and shall be performed as follows:

1. The permittee shall select a total of ten dual carbon canisters for which it may seek a change in the definition of "breakthrough". In making the selection, the permittee shall review the frequency with which each primary carbon canister historically has been changed out and include in the study, to the extent possible, dual canister systems in which the life expectancy of the primary canisters varies. The permittee shall include, if possible, at least five dual carbon canisters where the life expectancy of the primary canister is approximately one month or less.
2. The permittee shall submit to the Department and the EPA a study proposal that identifies the location and size of each of the selected dual carbon canisters and the historical life expectancy of the primary canister in each series. Unless the Department and EPA provide comments within ninety (90) days after receipt of the permittee's proposal, the permittee may immediately thereafter commence the study ("Study Commencement") and will notify the Department of the date of such Study Commencement.
3. By no later than seven days after Study Commencement, the permittee shall monitor each of the selected dual carbon

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canister systems for breakthrough between the primary and secondary carbon canisters and for emissions from the secondary canister. Thereafter, the permittee shall monitor for breakthrough between the primary and secondary canisters in accordance with the frequency specified in 40 CFR §61.354(d).

4. On the first monitoring occasion in which breakthrough between the primary and secondary canister reaches 50 ppm or greater of VOC or 5 ppm benzene, the permittee shall monitor, on that same day, emissions from the secondary canister. On a daily basis thereafter, the permittee shall monitor emissions from both the primary and secondary canister.

5. Within eight (8) hours of detecting VOC or benzene emissions above background from the secondary canister under Paragraph 4 of this study's requirements, the permittee shall replace the original primary canister with a fresh carbon canister (the original secondary carbon canister will then become the new primary carbon canister and the fresh carbon canister will become the secondary canister). The provisions of this study's requirements (not the standard requirements for carbon canisters within this permit) will apply to the timing of the replacement of any primary canister that is a subject of this study, for so long as the carbon canister is monitored for purposes of the study. After the carbon canister no longer is monitored for purposes of this study, the standard requirements for carbon canisters within this permit will again govern the timing of the replacement of the primary canisters, unless and until the Department and EPA approve redefining the meaning of "breakthrough".

6. Contemporaneously with each monitoring event undertaken a written record of the time, date, and monitoring results shall be maintained by the permittee.

7. For each dual carbon canister included in this study, the permittee shall conduct the monitoring specified in this study for at least two years.

8. The permittee shall submit a report on the study to the Department and EPA within ninety (90) days of completing the study. Such report will include, but is not limited to, all monitoring data, the replacement dates of the primary carbon canisters, and the permittee's recommendations regarding the concentration of VOCs or benzene that may be emitted from the primary canister in a dual series before VOCs and/or benzene above background are emitted from the secondary canister. By no later than sixty (60) days after receipt of the report, the Department and EPA will evaluate the "breakthrough" definition and assess whether any revisions are necessary.

9. Based on data generated under the breakthrough study, and other relevant and available information, the Department may, in consultation with the permittee, determine that a revised definition of "breakthrough" is more appropriate for all or a subset of the carbon canister systems employed at the facility. Any such revised definition will apply thirty (30) days after notice of such determination.

017 [25 Pa. Code §129.55]**Petroleum refineries--specific sources**

This condition applies only to the wastewater separator located in the Advanced Waste Water Treatment Plant (AWWTP).

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

(a) A container having all openings sealed and totally enclosing the liquid contents. Gauging and sampling devices shall be gas-tight except when gauging or sampling is taking place.

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

**SECTION D. Source Level Requirements****# 018 [40 CFR Part 61 NESHAPs §40 CFR 61.342]****Subpart FF--National Emission Standard for Benzene Waste Operations****Standards: General.**

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

The permittee shall include the following benzene quantities in their calculations:

- (a) Wastes that are exempted from control under 40 C.F.R. §61.342(c)(2) and (3) are included in the calculation of the total annual benzene quantity if they have an annual average water content greater than 10%, or if they are mixed with water or other wastes at any time and the mixture has an annual average water content greater than 10%.
- (b) The benzene in a material subject to 40 C.F.R. 61, Subpart FF, that is sold shall be included in the calculation of the total annual benzene quantity if the material has an annual average water content greater than 10%.
- (c) Benzene in wastes generated by remediation activities conducted at the facility, such as the excavation of contaminated soil, pumping and treatment of groundwater, and the recovery of product from soil or groundwater, are not to be included in the calculation of total annual benzene quantity for the facility. If the facility's total annual benzene quantity is greater than 10 Mg/yr or greater, wastes generated by remediation activities are subject to the requirements of 40 C.F.R. §61.342(c)-(h).

019 [40 CFR Part 61 NESHAPs §40 CFR 61.342]**Subpart FF--National Emission Standard for Benzene Waste Operations****Standards: General.**

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

The permittee shall manage and treat facility waste (including remediation and process unit turnaround waste) with a flow-weighted annual average water content of 10% or greater, on a volume basis as total water, and each waste stream that is mixed with water or wastes at any time such that the resulting mixture has an annual water content greater than 10%, in accordance with the following:

- (1) The benzene quantity for the wastes described in 40 C.F.R. §61.342(b), must be equal to or less than 6.0 Mg/yr, as determined in 40 C.F.R. §61.355(k). Wastes as described in this condition that are transferred offsite shall be included in the determination of benzene quantity as provided in 40 C.F.R. §61.355(k).
- (2) The determination of benzene quantity for each waste stream defined in this condition shall be made in accordance with 40 C.F.R. §61.355(k).

020 [40 CFR Part 61 NESHAPs §40 CFR 61.343]**Subpart FF--National Emission Standard for Benzene Waste Operations****Standards: Tanks.**

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

For a tank that meets all the conditions specified in (a), below, the permittee may elect to comply with (c), below, as an alternative to the requirements specified in 40 C.F.R. §61.343(a)(1).

(a) The waste managed in the tank applicable to 40 C.F.R. §61.343, shall meet all of the following conditions:

- (1) Each waste stream managed in the tank must have a flow-weighted annual average water content less than or equal to 10% water, on a volume basis as total water.
- (2) The waste managed in a tank either:
 - (i) Has a maximum organic vapor pressure less than 0.75 psi;
 - (ii) Has a maximum organic vapor pressure less than 4.0 psi and is managed in a tank having a design capacity less than 40,000 gal; or

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(iii) Has a maximum organic vapor pressure less than 11.1 psi and is managed in a tank having a design capacity less than 20,000 gal.

(b) The permittee shall operate and maintain a fixed roof as specified in 40 C.F.R. §61.343(a)(1)(i).

(c) For each tank complying with this subcondition (a) above, one or more devices which vent directly to the atmosphere may be used on the tank provided each device remains in a closed, sealed position during normal operation except when the device needs to vent to prevent physical damage or permanent deformation of the tank or cover resulting from filling or emptying the tank, diurnal temperature changes, atmospheric pressure changes or malfunction of the unit in accordance with good engineering and safety practices for handling flammable, explosive or other hazardous materials.

021 [40 CFR Part 61 NESHAPs §40 CFR 61.343]**Subpart FF--National Emission Standard for Benzene Waste Operations
Standards: Tanks.**

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

Except as provided in (a) or (b) below, when a broken seal or gasket or other problem is identified, or when detectable emissions are measured, first efforts at repair shall be made as soon as practicable, but no later than 45 calendar days after identification.

(a) Delay of repair of facilities or units that are subject to the provisions of 40 C.F.R. 61, Subpart FF, will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

(b) Repair of such equipment shall occur before the end of the next facility or unit shutdown.

022 [40 CFR Part 61 NESHAPs §40 CFR 61.343]**Subpart FF--National Emission Standard for Benzene Waste Operations
Standards: Tanks.**

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

Except as provided in 40 C.F.R. §61.343(b) and in 40 C.F.R. §61.351, the permittee shall meet the following standards for each tank in which the waste stream is placed in accordance with 40 C.F.R. §61.342(c)(1)(ii). The standards to tanks apply to the treatment of the waste stream in a tank, including dewatering.

The permittee shall operate and maintain a fixed-roof and closed-vent system that routes all organic vapors vented from the tank to a control device.

(a) The fixed-roof tanks shall meet the following requirements:

(1) The cover and all openings shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by the methods specified in 40 C.F.R. §61.355(h).

(2) Each opening shall be maintained in a closed, sealed position at all times that waste is in the tank except when it is necessary to use the opening for waste sampling or removal, or for equipment inspection, maintenance or repair.

(3) If the cover and closed vent-system operate such that the tank is maintained at a pressure less than atmospheric pressure, then 40 C.F.R. §61.334(a)(1)(i)(b) does not apply to any opening that meets all of the following conditions:

(i) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(ii) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and at least once per year thereafter by the methods specified in 40 C.F.R. §61.355(h), and;

(iii) The pressure is monitored continuously to ensure that the pressure in the tank remains below atmospheric pressure.

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(b) The closed-vent system and control device shall be designed and operated in accordance with the requirements of 40 C.F.R. §61.349.

023 [40 CFR Part 61 NESHAPs §40 CFR 61.345]**Subpart FF--National Emission Standard for Benzene Waste Operations****Standards: Containers.**

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

For covers and closed-vent systems that operate such that the container is maintained at a pressure less than atmospheric, the permittee may operate the system with an opening that is not sealed and kept closed at all times if the following conditions are met:

(a) The purpose of the opening is to provide dilution air to reduce the explosion hazard;

(b) The opening is designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, as determined initially and thereafter at least once per year by methods specified in 40 C.F.R. §61.355(h); and

(c) The pressure is monitored continuously to ensure that the pressure in the container remains below atmospheric pressure.

024 [40 CFR Part 61 NESHAPs §40 CFR 61.345]**Subpart FF--National Emission Standard for Benzene Waste Operations****Standards: Containers.**

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

The permittee shall meet the following standards for each container in which regulated benzene waste is placed in accordance with 40 C.F.R. §61.342(c)(1)(ii):

(a) A cover shall be installed, operated, and maintained on each container used to handle, transfer, or store waste in accordance with the following:

(1) The cover and all openings shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially and thereafter at least once per year by the methods specified in 40 C.F.R. §61.355(h).

(2) Except as provided in 40 C.F.R. §61.345(a)(4), each opening shall be maintained in a closed, sealed position at all times that waste is in the container except when it is necessary to use the opening for waste loading, removal, inspection, or sampling.

(b) When a waste is transferred into a container by pumping, the permittee shall perform the transfer using a submerged fill pipe. The fill pipe outlet shall extend to within two fill pipe diameters of the bottom of the container while the container is being loaded. During loading of the waste, the cover shall remain in place and all openings shall be maintained in a closed, sealed position except for those openings required for the submerged fill pipe, those openings required for venting of the container to prevent physical damage or permanent deformation of the container or cover, and any openings complying with 40 C.F.R. §61.345(a)(4).

(c) Treatment of a waste in a container, including aeration, thermal or other treatment, shall be performed by the permittee in a manner such that whenever it is necessary for the container to be open while the waste is being treated, the container is located under a cover (enclosure) with a closed-vent system that routes all organic vapors vented from the container to a control device, except for the cover and closed-vent system that meet requirements in 40 C.F.R. §61.345(a)(4).

(1) The cover and all openings shall be designed to operate with no detectable emissions as indicated by an instrument reading of less than 500 ppmv above background, initially, and thereafter at least once per year by the methods specified in 40 C.F.R. §61.355(h).

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(2) The closed-vent system and control device shall be designed and operated in accordance with 40 C.F.R. §61.349.

025 [40 CFR Part 61 NESHAPs §40 CFR 61.348]**Subpart FF--National Emission Standard for Benzene Waste Operations
Standards: Treatment processes.**

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

(a) Each seal, access door and all other openings shall be checked by visual inspections initially and quarterly thereafter to ensure that no cracks or gaps occur and that openings are closed and gasketed properly.

(b) If the treatment process or wastewater treatment system unit has any openings, all such openings shall be sealed and kept closed at all times when waste is being treated, except during inspection and maintenance.

026 [40 CFR Part 61 NESHAPs §40 CFR 61.348]**Subpart FF--National Emission Standard for Benzene Waste Operations
Standards: Treatment processes.**

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

Except as provided in (d) below, the permittee shall treat the waste stream in accordance with the following requirements:

(a) The permittee shall operate and maintain a treatment process that removes benzene from the waste stream to a level less than 10 ppmw on a flow-weighted annual average basis.

(b) For the purpose of complying with the requirements specified in (a), above, the intentional or unintentional reduction in the benzene concentration of a waste stream by dilution of the waste stream with other wastes or materials is not allowed.

(c) The permittee may aggregate or mix together individual waste streams to create a combined waste stream for the purpose of facilitating treatment of waste to comply with the requirements of (a), above, except as provided in (d), below.

(d) If the permittee aggregates or mixes any combination of process wastewater or product tank drawdown subject to 40 C.F.R. §61.342(c)(1) together with other waste streams to create a combined waste stream for the purpose of facilitating management or treatment of waste in a wastewater treatment system, then the wastewater treatment system shall be operated in accordance with 40 C.F.R. §61.348(b). The provisions of this condition apply to above-ground wastewater treatment systems as well as those that are at or below ground level.

027 [40 CFR Part 61 NESHAPs §40 CFR 61.350]**Subpart FF--National Emission Standard for Benzene Waste Operations
Standards: Delay of repair.**

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

(a) Delay of repair of facilities or units that are subject to the provisions of 40 C.F.R. 61, Subpart FF will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

(b) Repair of such equipment shall occur before the end of the next facility or unit shutdown.

028 [40 CFR Part 61 NESHAPs §40 CFR 61.351]**Subpart FF--National Emission Standard for Benzene Waste Operations
Alternative standards for tanks.**

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

(a) As an alternative to the standards for tanks specified in 40 C.F.R. §61.343, the permittee may elect to comply with one of the following:

(1) A fixed roof and internal floating roof meeting the requirements in 40 C.F.R. §60.112b(a)(1);

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(2) An external floating roof meeting the requirements in 40 C.F.R. §60.112b(a)(2);

(3) An alternative means of emission limitation as described in 40 C.F.R. §60.114b.

(b) If the permittee elects to comply with the provisions of this condition, then the permittee is exempt from the provisions of 40 C.F.R. §61.343.

029 [40 CFR Part 61 NESHAPs §40 CFR 61.355]**Subpart FF--National Emission Standard for Benzene Waste Operations****Test methods, procedures, and compliance provisions.**

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

The total annual benzene quantity, from facility waste, shall be calculated according to the applicable requirements of 40 C.F.R. §61.355, and the Recordkeeping Requirements for this source.

030 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.647]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Wastewater provisions.**

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

As specified in 40 C.F.R. §63.647, each Group 1 wastewater stream shall comply with the requirements of 40 C.F.R. §§61.340 through 61.355, for each process wastewater stream that meets the definition in 40 C.F.R. §63.641.

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

[Additional authority for this permit condition is from 40 CFR Part 61 Subpart FF.]

BWON Training and Procedures ----

The permittee must conduct annual training for all employees and contractors asked to draw benzene waste samples at the Trainer Refinery.

The permittee must develop and maintain standard operating procedures for all control equipment used to comply with 40 C.F.R. Part 61 Subpart FF and provide training to any operators assigned to such control equipment. This training must be provided prior to an operator assuming this duty and "refresher" training must be provided at least once every three years.

Records shall be maintained of all employees and contractors who receive training for benzene waste sampling or operation of control equipment relevant to the benzene waste operations NESHAPs (40 C.F.R. Part 61 Subpart FF) (BWON).

032 [40 CFR Part 61 NESHAPs §40 CFR 61.345]**Subpart FF--National Emission Standard for Benzene Waste Operations****Standards: Containers.**

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

Except as provided in (a) or (b), below, when a broken seal, gasket, or other problem is identified, first efforts at repair shall be made as soon as practicable but not later than fifteen (15) calendar days after indication.

(a) Delay of repair of facilities or units that are subject to the provisions of 40 C.F.R. 61, Subpart FF, will be allowed if the repair is technically impossible without a complete or partial facility or unit shutdown.

(b) Repair of such equipment shall occur before the end of the next facility or unit shutdown.

**SECTION D. Source Level Requirements****# 033 [40 CFR Part 61 NESHAPs §40 CFR 61.348]****Subpart FF--National Emission Standard for Benzene Waste Operations****Standards: Treatment processes.**

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

The Administrator may request at any time the permittee demonstrate that a treatment process or wastewater treatment system unit meets the applicable requirements specified in 40 C.F.R. §61.348(a)(1) by collecting and analyzing samples using the procedures specified in 40 C.F.R. §61.355(c)(3).

034 [40 CFR Part 61 NESHAPs §40 CFR 61.353]**Subpart FF--National Emission Standard for Benzene Waste Operations****Alternative means of emission limitation.**

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

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in benzene emissions at least equivalent to the reduction in benzene emissions from the source achieved by the applicable design, equipment, work practice, or operational requirements in 40 C.F.R. §§61.342 through 349, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for the purposes of compliance with that requirement. The notice may condition the permission on requirements related to the operation and maintenance of the alternative means.

(b) Any notice under (a), above, shall be published only after a public notice and an opportunity for a hearing.

(c) Any person seeking permission under this condition shall collect, verify, and submit to the Administrator information showing that the alternative means achieves equivalent emission reductions.

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

**SECTION D. Source Level Requirements**

Source ID: 134

Source Name: #132 INT.FLOAT 15M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
134STAC
Z24**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T001 (MACT Group 1, Internal Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 136

Source Name: #151 EXT.FLOAT 53M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
136STAC
Z26**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 137

Source Name: #152 INT. FLOAT 61M BBL

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
137STAC
Z27**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from this source shall not exceed 5.06 tons per year, based on a 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate and maintain records of VOC emissions for this source on a monthly and 12-month rolling sum basis.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 138

Source Name: #153 EXT.FLOAT 53M BBLS

Source Capacity/Throughput:

N/A

TVP < 1.5 PSIA

PROC
138STAC
Z28**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Total VOC emissions from this source shall not exceed 0.7 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall keep records of type of material, and throughput on a monthly basis.

(b) The permittee shall calculate VOC emissions from this tank, using a Department approved method, to demonstrate compliance with the 12 consecutive month total.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 139

Source Name: #154A INT. FLOAT 105M BBLS

Source Capacity/Throughput:

N/A

TVP < 13.0 PSIA

PROC
139STAC
Z139**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Total VOC emissions from this source shall not exceed 4.0 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Throughput type, and amount, shall be recorded on a monthly basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate VOC emissions from this tank, using a Department approved method, to demonstrate compliance with the 12 consecutive month total.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Additional applicable requirements for this source can be found in Source T007 (Internal Floating Roof NSPS Kb Tanks).

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

**SECTION D. Source Level Requirements**

Source ID: 140

Source Name: #155 INT. FLOAT 63M BBLS.

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
140STAC
Z30**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 141

Source Name: #156 EXT.FLOAT 53M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
141STAC
Z31**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 142

Source Name: #157 EXT.FLOAT 77M BBLS

Source Capacity/Throughput:

N/A

TVP < 1.5 PSIA

PROC
142STAC
Z32**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

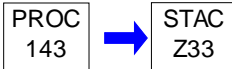
Source ID: 143

Source Name: #159 EXT.FLOAT 79M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

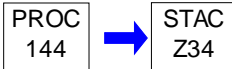
Source ID: 144

Source Name: #161 EXT.FLOAT 86M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 145

Source Name: #162 EXT.FLOAT 82M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
145STAC
Z35**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 146

Source Name: #163 EXT.FLOAT 82M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
146STAC
Z36**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

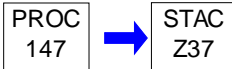
Source ID: 147

Source Name: #164 EXT.FLOAT 83M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

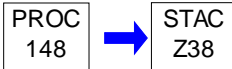
Source ID: 148

Source Name: #165 EXT.FLOAT 82M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 149

Source Name: #166 EXT.FLOAT 83M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
149STAC
Z39**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 150

Source Name: #168 INT. FLOAT 79M BBLS.

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
150STAC
Z40**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from this source shall not exceed 2.89 tons per year, based on a 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate and maintain records of VOC emissions for this source on a monthly and 12-month rolling sum basis.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

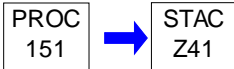
Source ID: 151

Source Name: #169 EXT.FLOAT 78M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

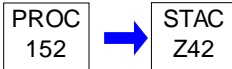
Source ID: 152

Source Name: #170 EXT.FLOAT 71M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T005 (External Floating Roof, NSPS Kb Tanks).

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

**SECTION D. Source Level Requirements**

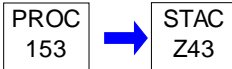
Source ID: 153

Source Name: #171 INT. FLOAT 83M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T001 (MACT Group 1, Internal Floating Roof Tanks).

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

**SECTION D. Source Level Requirements**

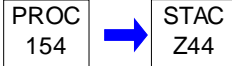
Source ID: 154

Source Name: #172 EXT.FLOAT 81M BBLS

Source Capacity/Throughput:

N/A

TVP < 1.5 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T002 (MACT Group 1, External Floating Roof Tanks), or Source T003 (MACT Group 2 Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

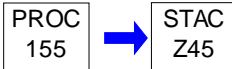
Source ID: 155

Source Name: #174 EXT.FLOAT 154M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 156

Source Name: #175 EXT.FLOAT 151M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
156STAC
Z46**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 157

Source Name: #178 EXT.FLOAT 80M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
157STAC
Z47**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

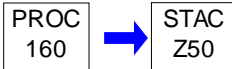
Source ID: 160

Source Name: #181 EXT.FLOAT 129M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

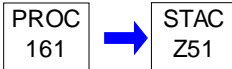
Source ID: 161

Source Name: #182 EXT.FLOAT 129M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

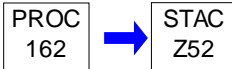
Source ID: 162

Source Name: #184 EXT.FLOAT 26M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T005 (External Floating Roof, NSPS Kb Tanks).

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

**SECTION D. Source Level Requirements**

Source ID: 163

Source Name: #185 EXT.FLOAT 150M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
163STAC
Z53**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

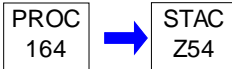
Source ID: 164

Source Name: #186 EXT.FLOAT 151M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks), Source T004 (State-Only External Floating Roof Tanks), or Source T002 (MACT Group 1, External Floating Roof Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 165

Source Name: #93 EXT.FLOAT 244M BBL

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
165STAC
Z65**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Total VOC emissions from this source shall not exceed 6.5 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Throughput type and amount shall be recorded on a monthly basis.

(b) The permittee shall calculate VOC emissions from this tank, using a Department approved method, to demonstrate compliance with the 12 consecutive month total.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T002 ((MACT Group 1, External Floating Roof Tanks), and T005 (External Floating Roof, NSPS Kb Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 166

Source Name: #94 EXT.FLOAT 243M BBL

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
166STAC
Z66**I. RESTRICTIONS.****Emission Restriction(s).**

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Total VOC emissions from this source shall not exceed 6.5 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Throughput type, and amount, shall be recorded on a monthly basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate VOC emissions from this tank, using a Department approved method, to demonstrate compliance with the 12 consecutive month total.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T002 ((MACT Group 1, External Floating Roof Tanks), and T005 (External Floating Roof, NSPS Kb Tanks), as applicable.

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

**SECTION D. Source Level Requirements**

Source ID: 167

Source Name: #65 FIXED ROOF TANK 9 M BBL

Source Capacity/Throughput:

Conditions for this source occur in the following groups: D2 RENEWABLES TANKAGE GROUP

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Total VOC emissions from this source shall not exceed 1.81 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate VOC emissions from Tank 65 using the equations in USEPA AP-42 Chapter 7.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain the following records for this source:

- (a) Type of material stored and the relative vapor pressure of material stored.
- (b) Material throughput on a monthly basis.
- (c) VOC emissions from the tank, on a monthly basis and 12-month rolling sum.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Section D under Source ID T003 (MACT Group 2 Tanks) and in Section E under "D2 Renewables Tankage Group."

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

**SECTION D. Source Level Requirements**

Source ID: 168

Source Name: #445 FIXED ROOF TANK 7 M BBL

Source Capacity/Throughput:

Conditions for this source occur in the following groups: D2 RENEWABLES TANKAGE GROUP

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Total VOC emissions from this source shall not exceed 1.52 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate VOC emissions from Tank 445 using the equations in USEPA AP-42 Chapter 7.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain the following records for this source:

- (a) Type of material stored and the relative vapor pressure of material stored.
- (b) Material throughput on a monthly basis.
- (c) VOC emissions from the tank, on a monthly basis and 12-month rolling sum.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Section D under Source ID T003 (MACT Group 2 Tanks) and in Section E under "D2 Renewables Tankage Group."

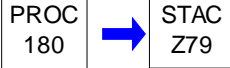
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 180

Source Name: #54 CONE ROOF TK 54M BBLS

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from Tank 54 (Source ID 180) shall not exceed 3.59 tons per 12-month rolling sum, calculated on a monthly basis.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 190

Source Name: #134 INT. FLOAT 15M BBLS

Source Capacity/Throughput:

N/A

TVP < 11.1 PSIA

PROC
190STAC
Z80**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T007 (Internal Floating Roof NSPS Kb Tanks).

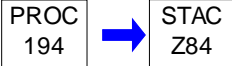
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 194

Source Name: #160 INT. FLOAT 85 MBLS

Source Capacity/Throughput: 85.000 Th BBL/HR JET A KEROSENE

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from this source shall not exceed 0.3 tons in any 12 consecutive month period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor and record the volatile organic liquid throughput for this storage vessel each month.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of

(a) The volatile organic liquid throughput for this storage vessel on a monthly basis

(b) VOC emissions from this tank, calculated using the Department approved method, on a monthly basis and the 12 rolling sum.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Additional applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks).

(b) To be exempt from the Provisions of 40 C.F.R. 60 Subparts A and Kb, and 25 Pa. Code §129.56, the storage vessel shall

**SECTION D. Source Level Requirements**

only store volatile organic liquids with a maximum true vapor pressure less than 0.5 psia.

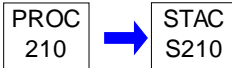
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 210

Source Name: MISCELLANEOUS PROCESS VENTS

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.643]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Miscellaneous process vent provisions.**

(a) The permittee of a Group 1 miscellaneous process vent as defined in 40 CFR §63.641 shall comply with the requirements of either §63.643(a)(1) or (2), or if applicable, 40 CFR §63.643(c). The permittee of a miscellaneous process vent that meets the conditions in 40 CFR §63.643(c) is only required to comply with the requirements of 40 CFR §63.643(c) and 40 CFR §63.655(g)(13) and (i)(12) for that vent.

(b) A permittee may designate a process vent as a maintenance vent if the vent is only used as a result of startup, shutdown, maintenance, or inspection of equipment where equipment is emptied, depressurized, degassed or placed into service. The permittee does not need to designate a maintenance vent as a Group 1 or Group 2 miscellaneous process vent nor identify maintenance vents in a Notification of Compliance Status Report. The permittee must comply with the applicable requirements in 40 CFR §63.643(c)(1) through (3) for each maintenance vent beginning August 1, 2018.

(1) Prior to venting to the atmosphere, process liquids are removed from the equipment as much as practical and the equipment is depressured to a control device, fuel gas system, or back to the process until one of the following conditions, as applicable, is met.

(i) The vapor in the equipment served by the maintenance vent has a lower explosive limit (LEL) of less than 10 percent.

(ii) If there is no ability to measure the LEL of the vapor in the equipment based on the design of the equipment, the pressure in the equipment served by the maintenance vent is reduced to 5 psig or less. Upon opening the maintenance vent, active purging of the equipment cannot be used until the LEL of the vapors in the maintenance vent (or inside the equipment if the maintenance is a hatch or similar type of opening) equipment is less than 10 percent.

(iii) The equipment served by the maintenance vent contains less than 72 pounds of VOC.

(iv) If the maintenance vent is associated with equipment containing pyrophoric catalyst (e.g., hydrotreaters and hydrocrackers) at refineries that do not have a pure hydrogen supply, the LEL of the vapor in the equipment must be less than 20 percent, except for one event per year not to exceed 35 percent.

(2) Except for maintenance vents complying with the alternative in 40 CFR §63.643(c)(1)(iii), the permittee must determine the LEL or, if applicable, equipment pressure using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

(3) For maintenance vents complying with the alternative in 40 CFR §63.643(c)(1)(iii), the permittee shall determine mass of VOC in the equipment served by the maintenance vent based on the equipment size and contents after considering any contents drained or purged from the equipment. Equipment size may be determined from equipment design specifications. Equipment contents may be determined using process knowledge.

II. TESTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.644]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Monitoring provisions for miscellaneous process vents.**

(a) Except as provided in 40 CFR §63.644(b), each permittee of a Group 1 miscellaneous process vent that uses a combustion device to comply with the requirements in 40 CFR §63.643(a) shall install the monitoring equipment specified in 40 CFR §63.644(a)(1), (2), (3), or (4), depending on the type of combustion device used. All monitoring equipment shall be installed, calibrated, maintained, and operated according to manufacturer's specifications or other written procedures that provide adequate assurance that the equipment will monitor accurately and, except for CPMS installed for pilot flame monitoring, must meet the applicable minimum accuracy, calibration and quality control requirements specified in table 13 of 40 CFR Part 63, Subpart CC.

(b) The permittee of a Group 1 miscellaneous process vent may request approval to monitor parameters other than those listed in 40 CFR §63.644(a). The request shall be submitted according to the procedures specified in 40 CFR §63.655(h). Approval shall be requested of the permittee:

(1) Uses a control device other than an incinerator, boiler, process heater, or flare; or

(2) Uses one of the control devices listed in 40 CFR §63.644(a) but seeks to monitor a parameter other than those specified in 40 CFR §63.644(a).

(c) The permittee of a Group 1 miscellaneous process vent using a vent system that contains bypass lines that could divert a vent stream away from the control device used to comply with 40 CFR §63.644(a) either directly to the atmosphere or to a control device that does not comply with the requirements in 40 CFR §63.643(a) shall comply with either 40 CFR §63.644(c)(1) or (2). Use of the bypass at any time to divert a Group 1 miscellaneous process vent stream to the atmosphere or to a control device that does not comply with the requirements in 40 CFR §63.643(a) is an emissions standards violation. Equipment such as low leg drains and equipment subject to 40 CFR §63.648 are not subject to 40 CFR §63.644(c).

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

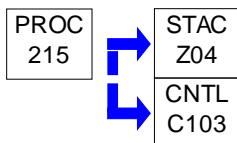
Source ID: 215

Source Name: NSPS NEW FUGITIVE EQUIPMENT

Source Capacity/Throughput:

8.500 Th BBL/HR

CRUDE OIL

**I. RESTRICTIONS.****Control Device Efficiency Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]****Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.**

As per 40 CFR §60.482-10a

(a) If closed vent systems and control devices are used to comply with provisions of 40 CFR 60 Subpart GGGa, the permittee shall comply with the provisions of 40 CFR §60.482-7a.

(b) As per 40 CFR §60.482-10a(d), flares shall comply with the requirements of 40 CFR §60.18.

(c) As per 40 CFR §60.482-10a(e), the permittee shall monitor the flares to ensure that they are operated and maintained in conformance with their designs.

(d) As per 40 CFR §60.482-10a(m), closed vent systems and control devices used to comply with provisions of 40 CFR 60 Subpart GGGa shall be operated at all times when emissions may be vented to them.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]**Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.**

(1) When a valve leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 C.F.R. §60.482-9a.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

II. TESTING REQUIREMENTS.**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]****Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.**

As per 40 CFR §60.485a,

(a) The permittee shall, in conducting the performance tests required in 40 CFR §60.8, use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR §60.485a, except as provided in 40 CFR §60.8(b).

(b) The permittee shall determine compliance with the standards in 40 CFR §§60.482-1a through 60.482-10a, 60.483a, and 60.484a as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21 of appendix A-7 of 40 CFR 60. The following calibration gases

**SECTION D. Source Level Requirements**

shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and
(ii) A mixture of methane or n-hexane and air at a concentration no more than 2,000 ppm greater than the leak definition concentration of the equipment monitored. If the monitoring instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,000 ppm above the concentration specified as a leak, and the highest scale shall be calibrated with a calibration gas that is approximately equal to 10,000 ppm. If only one scale on an instrument will be used during monitoring, the permittee need not calibrate the scales that will not be used during that day's monitoring.

(2) A calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day. Check the instrument using the same calibration gas(es) that were used to calibrate the instrument before use. Follow the procedures specified in Method 21 of appendix A-7 of 40 CFR 60, Section 10.1, except do not adjust the meter readout to correspond to the calibration gas value. Record the instrument reading for each scale used as specified in 40 CFR §60.486a(e)(7). Calculate the average algebraic difference between the three meter readings and the most recent calibration value. Divide this algebraic difference by the initial calibration value and multiply by 100 to express the calibration drift as a percentage. If any calibration drift assessment shows a negative drift of more than 10 percent from the initial calibration value, then all equipment monitored since the last calibration with instrument readings below the appropriate leak definition and above the leak definition multiplied by (100 minus the percent of negative drift/divided by 100) must be re-monitored. If any calibration drift assessment shows a positive drift of more than 10 percent from the initial calibration value, then, at the owner/operator's discretion, all equipment since the last calibration with instrument readings above the appropriate leak definition and below the leak definition multiplied by (100 plus the percent of positive drift/divided by 100) may be re-monitored.

(c) The permittee shall determine compliance with the no-detectable-emission standards in 40 CFR §§60.482-2a(e), 60.482-3a(i), 60.482-4a, 60.482-7a(f), and 60.482-10a(e) as follows:

(1) The requirements of 40 CFR §60.485a(b) shall apply.

(2) Method 21 of appendix A-7 of 40 CFR 60 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The permittee shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260-73, 91, or 96, E168-67, 77, or 92, E169-63, 77, or 93 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

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

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Department disagrees with the judgment, 40 CFR §60.485a(d)(1) and (2) shall be used to resolve the disagreement.

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

(1) The vapor pressure of one or more of the organic components is greater than 0.3 kPa at 20 °C (1.2 in. H₂O at 68 °F). Standard reference texts or ASTM D2879-83, 96, or 97 (incorporated by reference—see 40 CFR §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure organic components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in.

**SECTION D. Source Level Requirements**

H₂O at 68 °F) is equal to or greater than 20 percent by weight.

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

(f) Samples used in conjunction with 40 CFR §60.485a(d), (e), and (g) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) Compliance with the standards of the Main Flare (C103) assures compliance with 40 CFR §60.485a(g).

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

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

$$\%VL = (VL / VT) * 100$$

Where:

%VL = Percent leaking valves.

VL = Number of valves found leaking.

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

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

(3) The number of valves leaking shall include valves for which repair has been delayed.

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

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

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

III. MONITORING REQUIREMENTS.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]
Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Standards.

(a) As per 40 CFR §60.482-2a(a),

(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485a(b), except as provided in 40 CFR §60.482-1a(c) and (f) and 40 CFR §60.482-2a(d), (e), and (f).

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR §60.482-1a(f).

(b) As per 40 CFR §60.482-2a(b),

(1) The instrument reading that defines a leak is specified below:

(i) 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers;

(ii) 2,000 ppm or greater for all other pumps.

(2) If there are indications of liquids dripping from the pump seal, the permittee shall follow the procedure specified in either paragraph (i) or (ii) below. This requirement does not apply to a pump that was monitored after a previous weekly inspection

**SECTION D. Source Level Requirements**

and the instrument reading was less than the concentration specified in paragraph (b)(1)(i) or (ii) above, whichever is applicable.

(i) Monitor the pump within 5 days as specified in 40 CFR §60.485a(b). A leak is detected if the instrument reading measured during monitoring indicates a leak as specified in paragraph (b)(1)(i) or (ii) above, whichever is applicable. The leak shall be repaired using the procedures in 40 CFR §60.482-2a(c).

(ii) Designate the visual indications of liquids dripping as a leak, and repair the leak using either the procedures in 40 CFR §60.482-2a(c) or by eliminating the visual indications of liquids dripping.

(c) As per §60.482-2a(c),

(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9a.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. First attempts at repair include, but are not limited to, the practices described below, where practicable.

(i) Tightening the packing gland nuts;

(ii) Ensuring that the seal flush is operating at design pressure and temperature.

(d) As per 40 CFR §60.482-2a(d), each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of 40 CFR §60.482-2a(a), provided the requirements specified in below are met.

(1) Each dual mechanical seal system is:

(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or

(ii) Equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10a; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4)(i) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(ii) If there are indications of liquids dripping from the pump seal at the time of the weekly inspection, the permittee shall follow the procedure specified in either paragraph (A) or (B) below prior to the next required inspection.

(A) Monitor the pump within 5 days as specified in 40 CFR §60.485a(b) to determine if there is a leak of VOC in the barrier fluid. If an instrument reading of 2,000 ppm or greater is measured, a leak is detected.

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

(5)(i) Each sensor as described in 40 CFR §60.482-2a(d)(3) is checked daily or is equipped with an audible alarm.

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

(iii) If the sensor indicates failure of the seal system, the barrier fluid system, or both, based on the criterion established in 40 CFR §60.482-2a(d)(5)(ii), a leak is detected.

(6)(i) When a leak is detected pursuant to 40 CFR §60.482-2a(d)(4)(ii)(A), it shall be repaired as specified in 40 CFR §60.482-2a(c).

(ii) A leak detected pursuant to 40 CFR §60.482-2a(d)(5)(iii) shall be repaired within 15 days of detection by eliminating the conditions that activated the sensor.

(iii) A designated leak pursuant to 40 CFR §60.482-2a(d)(4)(ii)(B) shall be repaired within 15 days of detection by eliminating visual indications of liquids dripping.

**SECTION D. Source Level Requirements**

(e) 40 CFR §60.482-2a(e), any pump that is designated, as described in 40 CFR §60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-2a(a), (c), and (d) if the pump:

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

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

(3) Is tested for compliance with 40 CFR §60.482-2a(e)(2) initially upon designation, annually, and at other times requested by the Department.

(f) As per 40 CFR §60.482-2a(f), if any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10a, it is exempt from 40 CFR §60.482-2a (a) through (e).

(g) As per 40 CFR §60.482-2a(g), any pump that is designated, as described in 40 CFR §60.486a(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of 40 CFR §60.482-2a(a) and (d)(4) through (6) if:

(1) The permittee of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-2a(a); and

(2) The permittee of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times, but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in 40 CFR §60.482-2a(c) if a leak is detected.

(h) As per 40 CFR §60.482-2a(h), any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of 40 CFR §60.482-2a(a)(2) and (d)(4), and the daily requirements of 40 CFR §60.482-2a(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]

Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.

As per §60.482-7a,

(a)(1) Each valve shall be monitored monthly to detect leaks by the methods specified in 40 CFR §60.485a(b) and shall comply with 40 CFR §60.482-7a(b) through (e), except as provided in 40 CFR §§60.482-7a(f), (g), and (h), 60.482-1a(c) and (f), and 60.483-1a and 60.483-2a.

(2) A valve that begins operation in gas/vapor service or light liquid service after the initial startup date for the process unit must be monitored according to paragraph (i) or (ii) below, except for a valve that replaces a leaking valve and except as provided in 40 CFR §§60.482-7a(f), (g), and (h), 60.482-1a(c), and 60.483-1a and 60.483-2a.

(i) Monitor the valve as in 40 CFR §60.482-7a(a)(1). The valve must be monitored for the first time within 30 days after the end of its startup period to ensure proper installation.

(ii) If the existing valves in the process unit are monitored in accordance with 40 CFR §§60.483-1a or 60.483-2a, count the new valve as leaking when calculating the percentage of valves leaking as described in 40 CFR §60.483-2a(b)(5). If less than 2.0 percent of the valves are leaking for that process unit, the valve must be monitored for the first time during the next scheduled monitoring event for existing valves in the process unit or within 90 days, whichever comes first.

(b) If an instrument reading of 500 ppm or greater is measured, a leak is detected.

(c)(1)(i) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

**SECTION D. Source Level Requirements**

- (ii) As an alternative to monitoring all of the valves in the first month of a quarter, the permittee may elect to subdivide the process unit into two or three subgroups of valves and monitor each subgroup in a different month during the quarter, provided each subgroup is monitored every 3 months. The permittee must keep records of the valves assigned to each subgroup.
- (2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
- (d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in 40 CFR §60.482-9a.
- (2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
- (e) First attempts at repair include, but are not limited to, the following best practices where practicable:
- (1) Tightening of bonnet bolts;
 - (2) Replacement of bonnet bolts;
 - (3) Tightening of packing gland nuts;
 - (4) Injection of lubricant into lubricated packing.
- (f) Any valve that is designated, as described in 40 CFR §60.486a(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-7a(a) if the valve:
- (1) Has no external actuating mechanism in contact with the process fluid,
 - (2) Is operated with emissions less than 500 ppm above background as determined by the method specified in 40 CFR §60.485a(c), and
 - (3) Is tested for compliance with 40 CFR §60.482-7a(f)(2) initially upon designation, annually, and at other times requested by the Department.
- (g) Any valve that is designated, as described in 40 CFR §60.486a(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7a(a) if:
- (1) The permittee of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with 40 CFR §60.482-7a(a), and
 - (2) The permittee of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
- (h) Any valve that is designated, as described in 40 CFR §60.486a(f)(2), as a difficult-to-monitor valve is exempt from the requirements of 40 CFR §60.482-7a(a) if:
- (1) The permittee of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
 - (2) The process unit within which the valve is located has less than 3.0 percent of its total number of valves designated as difficult-to-monitor by the permittee.
 - (3) The permittee of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

IV. RECORDKEEPING REQUIREMENTS.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]
Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006

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

As per 40 CFR §60.486a,

(a) The permittee

(1) shall comply with the recordkeeping requirements of 40 CFR §60.486a.

(2) may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility, if more than one affected facility are subject to the provisions of 40 CFR 60 Subpart GGGa.

(3) shall record the information specified below for each monitoring event required by 40 CFR §§60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a.

(i) Monitoring instrument identification.

(ii) Operator identification.

(iii) Equipment identification.

(iv) Date of monitoring.

(v) Instrument reading.

(b) When each leak is detected as specified in 40 CFR §§60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR §60.482-7a(c) and no leak has been detected during those 2 months.

(3) The identification on equipment, except on a valve or connector, may be removed after it has been repaired.

(c) When each leak is detected as specified in 40 CFR §§60.482-2a, 60.482-3a, 60.482-7a, 60.482-8a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

(4) Maximum instrument reading measured by Method 21 of appendix A-7 of 40 CFR 60 at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping.

(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the permittee (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

**SECTION D. Source Level Requirements**

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in 40 CFR §60.482-10a shall be recorded and kept in a readily accessible location:

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

(e) The following information pertaining to all equipment subject to the requirements in 40 CFR §§60.482-1a to 60.482-10a shall be recorded in a log that is kept in a readily accessible location:

- (1) A list of identification numbers for equipment subject to the requirements of 40 CFR 60 Subpart GGGa.
- (2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of 40 CFR §§60.482-2a(e), 60.482-3a(i), and 60.482-7a(f).

(ii) The designation of equipment as subject to the requirements of 40 CFR §§60.482-2a(e), 60.482-3a(i), or 60.482-7a(f) shall be signed by the permittee. Alternatively, the permittee may establish a mechanism with their permitting authority that satisfies this requirement.
- (3) A list of equipment identification numbers for pressure relief devices required to comply with 40 CFR §60.482-4a.
- (4) (i) The dates of each compliance test as required in 40 CFR §§60.482-2a(e), 60.482-3a(i), 60.482-4a, and 60.482-7a(f).
(ii) The background level measured during each compliance test.
(iii) The maximum instrument reading measured at the equipment during each compliance test.
- (5) A list of identification numbers for equipment in vacuum service.
- (6) A list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR §60.482-1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr.
- (7) The date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service.
- (8) Records of the information specified below for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of appendix A-7 of 40 CFR 60 and 40 CFR §60.485a(b).
 - (i) Date of calibration and initials of operator performing the calibration.
 - (ii) Calibration gas cylinder identification, certification date, and certified concentration.
 - (iii) Instrument scale(s) used.
 - (iv) A description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A-7 of 40 CFR 60.
 - (v) Results of each calibration drift assessment required by 40 CFR §60.485a(b)(2) (i.e., instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value).
 - (vi) If the permittee makes their own calibration gas, a description of the procedure used.
- (10) Records of each release from a pressure relief device subject to 40 CFR §60.482-4a.

**SECTION D. Source Level Requirements**

(f) The following information pertaining to all valves subject to the requirements of 40 CFR §60.482-7a(g) and (h), all pumps subject to the requirements of 40 CFR §60.482-2a(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector.

(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

(g) The following information shall be recorded for valves complying with 40 CFR §60.483-2a:

(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

(h) The following information shall be recorded in a log that is kept in a readily accessible location:

(1) Design criterion required in 40 CFR §§60.482-2a(d)(5) and 60.482-3a(e)(2) and explanation of the design criterion; and
(2) Any changes to this criterion and the reasons for the changes.

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR §60.480a(d):

(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

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

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

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]

Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.

As per 40 CFR §60.482-10a(l), the permittee shall keep records with the information specified below:

(a) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(b) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(c) For each inspection during which a leak is detected, a record of the information specified in 40 CFR §60.486a(c).

(d) For each inspection conducted in accordance with 40 CFR §60.485a(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(e) For each visual inspection conducted in accordance with 40 CFR §60.482-7a(f)(1)(ii) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

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

This source is subject to Subpart GGGa of Standards of Performance for New Stationary Sources and shall comply with all applicable requirements of the Subpart. 40 CFR §§60.4 requires submission of copies of all requests, reports, applications, submittals, and other communications to both EPA and the Department. The EPA copies shall be forwarded to:

Office of Air and Radiation Division (3ED21)
United States Environmental Protection Agency
Region 3
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]**Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.**

As per 40 CFR §60.487a,

(a) The permittee shall submit semiannual reports to the Department beginning 6 months after the initial startup date.

(b) The initial semiannual report to the Department shall include the following information:

(1) Process unit identification.

(2) Number of valves subject to the requirements of 40 CFR §60.482-7a, excluding those valves designated for no detectable emissions under the provisions of 40 CFR §60.482-7a(f).

(3) Number of pumps subject to the requirements of 40 CFR §60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of 40 CFR §60.482-2a(e) and those pumps complying with 40 CFR §60.482-2a(f).

(4) Number of compressors subject to the requirements of 40 CFR §60.482-3a, excluding those compressors designated for no detectable emissions under the provisions of 40 CFR §60.482-3a(i) and those compressors complying with 40 CFR §60.482-3a(h).

(c) All semiannual reports to the Department shall include the following information, summarized from the information in 40 CFR §60.486a:

(1) Process unit identification.

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in 40 CFR §§60.482-7a(b) or 60.483-2a,

(ii) Number of valves for which leaks were not repaired as required in 40 CFR §60.482-7a(d)(1),

(iii) Number of pumps for which leaks were detected as described in 40 CFR §60.482-2a(b), (d)(4)(ii)(A) or (B), or

(d)(5)(iii),

(iv) Number of pumps for which leaks were not repaired as required in 40 CFR §60.482-2a(c)(1) and (d)(6),

(v) Number of compressors for which leaks were detected as described in 40 CFR §60.482-3a(f),

(vi) Number of compressors for which leaks were not repaired as required in 40 CFR §60.482-3a(g)(1),

(vii) As per 40 CFR §60.487a(c)(2)(xi), the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to 40 CFR §60.487a(b) if changes have occurred since the initial report or

**SECTION D. Source Level Requirements**

subsequent revisions to the initial report.

(d) As per 40 CFR §60.487a(e), the permittee shall report the results of all performance tests in accordance with 40 CFR §60.8 of the General Provisions. The provisions of 40 CFR §60.8(d) do not apply, except that the permittee must notify the Department of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(e) As per 40 CFR §60.487a(f), the requirements of 40 CFR §60.487a(a) through (c) remain in force until and unless EPA, in delegating enforcement authority to a state under section 111(c) of the CAA, approves reporting requirements or an alternative means of compliance surveillance adopted by such state. In that event, affected sources within the state will be relieved of the obligation to comply with the requirements of 40 CFR §60.487a(a) through (c), provided that they comply with the requirements established by the state.

VI. WORK PRACTICE REQUIREMENTS.**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]****Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.**

As per 40 CFR §60.482-6a,

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in 40 CFR §§60.482-1a(c), and 60.482-6a(d) and (e).

(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with 40 CFR §60.482-6a(a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of §60.482-6a (a), (b), and (c).

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in 40 CFR §60.482-6a(a) through (c) are exempt from the requirements of 40 CFR §60.482-6a (a) through (c).

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]**Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.**

As per 40 CFR §60.482-4a,

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in 40 CFR §60.485a(c).

(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in 40 CFR §60.482-9a.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in 40 CFR §60.485a(c).

**SECTION D. Source Level Requirements**

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 40 CFR §60.482-10a is exempted from the requirements of 40 CFR §60.482-4a(a) and (b).

(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of 40 CFR §60.482-4a(a) and (b), provided the permittee complies with the requirements in 40 CFR §60.482-4a(d)(2).

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR §60.482-9a.

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]**Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.**

As per 40 CFR §60.482-8a

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

(1) The permittee shall monitor the equipment within 5 days by the method specified in 40 CFR §60.485a(b) and shall comply with the requirements of 40 CFR §60.482-7a (b) through (d).

(2) The permittee shall eliminate the visual, audible, olfactory, or other indication of a potential leak within 5 calendar days of detection.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9a.

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under 40 CFR §§60.482-2a(c)(2) and 60.482-7a(e).

013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]**Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.**

As per 40 CFR §60.482-9a

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

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves and connectors will be allowed if:

(1) The permittee demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device

**SECTION D. Source Level Requirements**

complying with 40 CFR §60.482-10a.

(d) Delay of repair for pumps will be allowed if:

- (1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
- (2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

(f) When delay of repair is allowed for a leaking pump, valve, or connector that remains in service, the pump, valve, or connector may be considered to be repaired and no longer subject to delay of repair requirements if two consecutive monthly monitoring instrument readings are below the leak definition.

014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]

Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.

As per 40 CFR §60.482-3a,

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in 40 CFR §§60.482-1a(c) and 60.482-3a(h), (i), and (j).

(b) Each compressor seal system as required in 40 CFR §60.482-3a(a) shall be:

- (1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
- (2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of 40 CFR §60.482-10a; or
- (3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in 40 CFR §60.482-3a(a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e)(1) Each sensor as required in 40 CFR §60.482-3a(d) shall be checked daily or shall be equipped with an audible alarm.

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

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under 40 CFR §60.482-3a(e)(2), a leak is detected.

(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in 40 CFR §60.482-9a.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of 40 CFR §60.482-3a(a) and (b), if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of 40 CFR §60.482-10a, except as provided in 40 CFR §60.482-3a(i).

**SECTION D. Source Level Requirements**

(i) Any compressor that is designated, as described in 40 CFR §60.486a(e)(1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of 40 CFR §60.482-3a(a) through (h) if the compressor:

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

(2) Is tested for compliance with 40 CFR §60.482-3a(i)(1) initially upon designation, annually, and at other times requested by the Department.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of 40 CFR §60.14 or §60.15 is exempt from 40 CFR §60.482-3a(a) through (e) and (h), provided the permittee demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of 40 CFR §60.482-3a(a) through (e) and (h).

015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]

Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.

(a) As per 40 CFR §60.482-10a(f), except as provided in 40 CFR §60.482-7a(i) through (k), the permittee shall conduct annual visual inspections for visible, audible, or olfactory indications of leaks for each closed vent system.

(b) As per 40 CFR §60.482-10a(g), leaks, as indicated by an instrument reading greater than 500 ppmv above background or by visual inspections, shall be repaired as soon as practicable except as provided in 40 CFR §60.482-7a(h).

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(c) As per 40 CFR §60.482-10a(h), delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(d) As per 40 CFR §60.482-10a(i), if a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of 40 CFR §60.482-7a(f)(1)(i) and (f)(2).

(e) As per 40 CFR §60.482-10a(j), any parts of the closed vent system that are designated, as described in 40 CFR §60.482-7a(l)(1), as unsafe to inspect are exempt from the inspection requirements of 40 CFR §60.482-7a(f)(1)(i) and (f)(2) if they comply with the requirements specified below:

(1) The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR §60.482-7a(f)(1)(i) or (f)(2); and

(2) The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(i) As per 40 CFR §60.482-10a(k), any parts of the closed vent system that are designated, as described in 40 CFR §60.482-7a(l)(2), as difficult to inspect are exempt from the inspection requirements of 40 CFR §60.482-7a(f)(1)(i) and (f)(2) if they comply with the requirements specified below:

(1) The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through 40 CFR §§60.14 or 60.15, or the permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to

**SECTION D. Source Level Requirements**

inspect; and

(3) The permittee has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]
Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Standards.

As per 40 CFR §60.482-5a,

(a) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in 40 CFR §§60.482-1a(c) and 60.482-5a(c).

(b) Each closed-purge, closed-loop, or closed-vent system as required in 40 CFR §60.482-5a(a) shall comply with the requirements specified below:

(1) Gases displaced during filling of the sample container are not required to be collected or captured.

(2) Containers that are part of a closed-purge system must be covered or closed when not being filled or emptied.

(3) Gases remaining in the tubing or piping between the closed-purge system valve(s) and sample container valve(s) after the valves are closed and the sample container is disconnected are not required to be collected or captured.

(4) Each closed-purge, closed-loop, or closed-vent system shall be designed and operated to meet requirements in either 40 CFR §60.482-5a (b)(4)(i), (ii), (iii), or (iv).

(i) Return the purged process fluid directly to the process line.

(ii) Collect and recycle the purged process fluid to a process.

(iii) Capture and transport all the purged process fluid to a control device that complies with the requirements of 40 CFR §60.482-10a.

(iv) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) A waste management unit as defined in 40 CFR §63.111, if the waste management unit is subject to and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;

(B) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266;

(C) A facility permitted, licensed, or registered by a state to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261;

(D) A waste management unit subject to and operated in compliance with the treatment requirements of 40 CFR 61.348(a), provided all waste management units that collect, store, or transport the purged process fluid to the treatment unit are subject to and operated in compliance with the management requirements of 40 CFR §§61.343 through 61.347; or

(E) A device used to burn off-specification used oil for energy recovery in accordance with 40 CFR part 279, subpart G, provided the purged process fluid is not hazardous waste as defined in 40 CFR part 261.

(c) In-situ sampling systems and sampling systems without purges are exempt from the requirements of 40 CFR §60.482-5a (a) and (b).

VII. ADDITIONAL REQUIREMENTS.

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

The following specific process at the facility are subject to the leak detection and repair (LDAR) requirements specified in 40

**SECTION D. Source Level Requirements**

C.F.R. 60, Subpart GGGa. Certain of these components may also be subject to 25 Pa. Code §129.58 and/or 40 C.F.R. 63, Subpart CC, as appropriate. In accordance with an alternative monitoring plan submitted by the permittee, and approved by the Department on August 24, 1998, a source that is subject to both the provisions of 25 Pa. Code §129.58 and 40 C.F.R. 60, Subpart GGGa, satisfies the requirements of 25 Pa. Code § 129.58 by complying with the provisions of 40 C.F.R. 60, Subpart GGGa. Therefore, each component at the facility that is subject to an LDAR requirement under state or federal regulations complies with applicable LDAR standards by implementing an LDAR program consistent with the single, most stringent, designated regulatory program. The fugitive monitoring plan developed and maintained on-site by the permittee identifies which portions of each unit are subject to fugitive Sources IDs #114, 115, 128, or 215. This section of the permit identifies applicable standards for Source ID #215, which satisfies LDAR obligations through compliance with the provisions of 40 C.F.R. 60, Subpart GGGa.

543 Crude Unit
 544 Crude Unit
 544 Vacuum Unit
 Boiler 9
 Boiler 10
 Boiler 14
 Flare Gas Recovery
 VGO
 Ultra-Low Sulfur Gasoline Unit
 LPG Truck Loading Rack
 Soybean Oil (RBDSO)

018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]

Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.

(a) As per 40 CFR §60.482-1a(b), compliance with 40 CFR §§60.482-1a to 60.482-10a will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in 40 CFR §60.485a.

(b) As per 40 CFR §60.482-1a(d), equipment that is in vacuum service is excluded from the requirements of 40 CFR §§60.482-2a through 60.482-10a if it is identified as required in 40 CFR §60.486a(e)(5).

(c) As per 40 CFR §60.482-1a(e), equipment that the permittee designates as being in VOC service less than 300 hr/yr is excluded from the requirements of 40 CFR §§60.482-2a through 60.482-10a if it is identified as required in 40 CFR §60.486a(e)(6) and it meets any of the conditions specified below:

- (1) The equipment is in VOC service only during startup and shutdown, excluding startup and shutdown between batches of the same campaign for a batch process.
- (2) The equipment is in VOC service only during process malfunctions or other emergencies.
- (3) The equipment is backup equipment that is in VOC service only when the primary equipment is out of service.

(d) As per 40 CFR §60.482-1a(f)

(1) if a dedicated batch process unit operates less than 365 days during a year, the permittee may monitor to detect leaks from pumps, valves, and open-ended valves or lines at the frequency specified in the following table instead of monitoring as specified in 40 CFR §§60.482-2a, 60.482-7a, and 60.483.2a:

Operating time (percent of hours during year)	Equivalent monitoring frequency time		
	Monthly	Quarterly	Semiannually
0 to < 25	Quarterly	Annually	Annually
25 to < 50	Quarterly	Semiannually	Annually
50 to < 75	Bimonthly	Three quarters	Semiannually

**SECTION D. Source Level Requirements**

75 to 100

Monthly Quarterly Semiannually

(2) Pumps and valves that are shared among two or more batch process units that are subject to this subpart may be monitored at the frequencies specified in 40 CFR §60.482-1a(f)(1), provided the operating time of all such process units is considered.

(3) The monitoring frequencies specified in 40 CFR §60.482-1a(f)(1) are not requirements for monitoring at specific intervals and can be adjusted to accommodate process operations. The permittee may monitor at any time during the specified monitoring period (e.g., month, quarter, year), provided the monitoring is conducted at a reasonable interval after completion of the last monitoring campaign. Reasonable intervals are defined below:

- (i) When monitoring is conducted quarterly, monitoring events must be separated by at least 30 calendar days.
- (ii) When monitoring is conducted semiannually (i.e., once every 2 quarters), monitoring events must be separated by at least 60 calendar days.
- (iii) When monitoring is conducted in 3 quarters per year, monitoring events must be separated by at least 90 calendar days.
- (iv) When monitoring is conducted annually, monitoring events must be separated by at least 120 calendar days.

019 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.592a]**Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 Standards.**

The permittee shall comply with

- (a) the requirements of 40 CFR §§60.482-1a to 60.482-10a.
- (b) the provisions of 40 CFR §60.485a except as provided in 40 CFR §60.593a.
- (c) the provisions of 40 CFR §§60.486a and 60.487a.

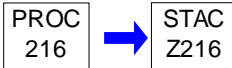
*** **Permit Shield in Effect.** ***

**SECTION D. Source Level Requirements**

Source ID: 216

Source Name: CONSENT DECREE FUGITIVE EQUIPMENT (2012)

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

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

LDAR Enhanced Leak Definitions and Monitoring Frequency ----

The permittee shall utilize an internal leak definition of no greater than 500 ppm VOC for each valve in light liquid and/or gas/vapor service, excluding pressure relief devices. Monitoring of these light liquid and gas/vapor valves must be conducted on a quarterly basis, other than difficult to monitor or unsafe to monitor valves, unless more frequent monitoring is required by applicable federal, state, regional, and/or local requirements. No monitoring skip periods are permitted.

The permittee shall utilize an internal leak definition of no greater than 2,000 ppm for each pump in light liquid and/or gas/vapor service. Monitoring of these light liquid pumps must be conducted on a monthly basis, unless more frequent monitoring is required by applicable federal, state, regional, and/or local requirements. Skipping of monitoring periods is not permitted.

The permittee shall record, track, repair, and re-monitor all leaks in excess of the internal leak definitions. The permittee shall make a first attempt to repair and re-monitor all components within five calendar days and will either complete the repairs and re-monitor the leaks or place such component on the Trainer Refinery delay of repair list within 30 days, unless state, regional, or local rules specify more stringent first attempt periods.

The permittee has the option to not include the monitoring of affected valves and pumps involved in documented maintenance, startup, or shutdown activity as a scheduled monitoring activity, provided the permittee follows the monitoring schedule below:

1. For events involving 1000 or fewer valves and pumps, monitor within one week of the documented maintenance, startup or shutdown activity
2. For events involving 1000-5000 valves and pumps, monitor within two weeks of the documented maintenance, startup, or shutdown activity.
3. For events involving greater than 5000 valves and pumps, monitor within four weeks of the documented maintenance, startup, or shutdown activity.

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

Enhanced Requirements for Monitoring Equipment ----

The permittee shall maintain an electronic database for storing and reporting LDAR data at the Trainer Refinery. The

**SECTION D. Source Level Requirements**

database will include, data identifying the date and time of the monitored event, and the operator and instrument used in the monitored event. The permittee shall use data loggers and/or electronic data collection devices during all Method 21 LDAR monitoring. The permittee, or designated contractor, shall use its best efforts to transfer by the end of the next business day the data from the data logging device to the electronic database. Paper logs may be used where necessary, or more feasible, for Method 21 monitoring. The data must include a time and date stamp and identify the operator/monitoring technician and instrument used. Monroe will use its best efforts to transfer any manually recorded monitoring data to the electronic database within seven days of monitoring.

All data generated by LDAR monitoring technicians must be reviewed daily for quality assurance/quality control (QA/QC). At least once per calendar quarter, Monroe will perform a QA/QC review of any monitoring data that will include, but not limited to:

1. Number of components monitored per technician
2. Time between monitoring events
3. Abnormal data patterns

The permittee shall conduct all calibrations of LDAR monitoring equipment with methane gas, in accordance with 40 CFR, Part 60, EPA Reference Test Method 21. Monroe will conduct calibration drift assessments of LDAR monitoring equipment at the end of each monitoring shift using approximately 500 ppm of calibration gas. If any calibration drift assessment after the initial calibration shows a negative drift of more than 10% from the previous calibration, Monroe will re-monitor all valves that had a reading greater than 100 ppm and all pumps that had a reading greater than 500 ppm since the last calibration. Monroe will retain its calibration records for two years after performing the calibration.

V. REPORTING REQUIREMENTS.

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

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

Written Refinery - Wide LDAR Program ----

The permittee shall develop and maintain a written LDAR program for the Trainer Refinery that will include all process units subject to federal, state, regional, and local LDAR regulations. The program shall include:

1. A refinery-wide leak rate goal that will be a target for achievement on a process-unit-by-process-unit basis,
2. Identification of all equipment in light liquid and/or in gas/vapor service that has the potential to leak VOCs, HAPs, VHAPs, and benzene within refinery process units,
3. Procedures for identifying leaking equipment within process units that are owned and maintained by the refinery,
4. Procedures for repairing and keeping track of leaking equipment,
5. A process for new and replacement equipment to that would consider installation of equipment that will minimize leaks and/or eliminate chronic leakers,
6. A description of the LDAR monitoring organization and the person or position that is responsible for LDAR management and has the authority to implement LDAR improvements at the refinery, and
7. Procedures to ensure the components subject to LDAR, including components added during maintenance and construction, are incorporated into the LDAR program.

**SECTION D. Source Level Requirements****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.****Enhanced Repair and Delay of Repair Requirements ----**

The permittee must take the following actions for any equipment that it intends to place on the "delay of repair" list:

1. Require electronic or written sign-off by the unit supervisor within 30 days of the identification of a leak that requires the equipment to qualify for delayed repair under applicable regulations.
2. Include equipment that is placed on the "delay of repair" list in Monroe's regular LDAR monitoring.
3. Use its best efforts to isolate and repair pumps identified as leaking at the applicable regulatory leak definition or when applicable per the requirements of Condition #001(b) of this section.

In addition to the items listed above, the permittee must take the following actions for leaking valves, other than control valves and pressure relief valves, which are required to be repaired:

1. Perform the "drill and tap" or equivalent repair method within 30 days if the valve is leaking at a rate of 10,000 ppm or greater, rather than place it on the "delay of repair" list unless the permittee can demonstrate there is a safety or major environmental concern by attempting to repair the leak in this manner
2. After two unsuccessful attempts to repair a leaking valve through the "drill and tap" method, Monroe may place it on the "delay of repair" list

If the permittee plans to use a new valve repair method that is not currently used in the refining industry, the EPA will need to be advised before implementation. A valve is considered a "chronic leaker" if it leaks above 5,000 ppm twice in any consecutive four quarters, unless the valve has not leaked in the six consecutive quarters prior to the relevant process unit turnaround. The permittee and the Department may agree to modifications of chronic leaker requirements.

VII. ADDITIONAL REQUIREMENTS.**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.****LDAR Employee Training Requirements ----**

The permittee must implement the following training programs at the Trainer Refinery:

1. LDAR training for any personnel who have been newly-assigned to LDAR responsibilities,
2. Annual LDAR training for all employees and contractors that are specifically assigned to LDAR responsibilities, such as monitoring technicians, database users with permission to modify LDAR data, QA/QC personnel and the LDAR coordinator, and
3. For all other operations and maintenance personnel that are not specifically assigned to LDAR responsibilities, such as operators and mechanics performing valve packing and designated unit supervisors reviewing for delay of repair work, an initial training covering LDAR's relevancy to their specific duties must be completed and a refresher training shall be completed every three years, and

All contractors performing LDAR work must make their training information and records available to the permittee.

006 [25 Pa. Code §127.441]**Operating permit terms and conditions.****LDAR Program Audits ----**

- (a) The permittee shall conduct LDAR program audits that will include but not be limited to:

**SECTION D. Source Level Requirements**

1. Comparative monitoring,
 2. Records review to ensure monitoring and repairs are performed in a required timeframe,
 3. Tagging,
 4. Data management, and
 5. Observation of the LDAR technicians' calibration and monitoring techniques.
- (b) The permittee shall conduct LDAR program audits at least every two (2) years as follows:
1. A third-party audit every 2 years.
 2. An internal audit every 2 years after each third-party audit.
 3. A third-party audit may be substituted for the internal audit in (b)(1), provided an LDAR audit occurs every 2 years.

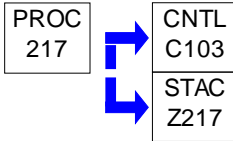
*** **Permit Shield in Effect.** ***

**SECTION D. Source Level Requirements**

Source ID: 217

Source Name: MACT CC MAINTENANCE VENTS

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.643]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Miscellaneous process vent provisions.**

(a) A permittee may designate a process vent as a maintenance vent if the vent is only used as a result of startup, shutdown, maintenance, or inspection of equipment where equipment is emptied, depressurized, degassed or placed into service. The permittee does not need to designate a maintenance vent as a Group 1 or Group 2 miscellaneous process vent. The permittee must comply with the applicable requirements in 40 CFR §63.643(c)(1) through (3) for each maintenance vent beginning August 1, 2018.

(1) Prior to venting to the atmosphere, process liquids are removed from the equipment as much as practical and the equipment is depressured to a control device, fuel gas system, or back to the process until one of the following conditions, as applicable, is met.

(i) The vapor in the equipment served by the maintenance vent has a LEL of less than 10 percent.

(ii) If there is no ability to measure the LEL of the vapor in the equipment based on the design of the equipment, the pressure in the equipment served by the maintenance vent is reduced to 5 psig or less. Upon opening the maintenance vent, active purging of the equipment cannot be used until the LEL of the vapors in the maintenance vent (or inside the equipment if the maintenance is a hatch or similar type of opening) equipment is less than 10 percent

(iii) The equipment served by the maintenance vent contains less than 72 pounds of VOC.

(iv) If the maintenance vent is associated with equipment containing pyrophoric catalyst (e.g., hydrotreaters and hydrocrackers) at refineries that do not have a pure hydrogen supply, the LEL of the vapor in the equipment must be less than 20 percent, except for one event per year not to exceed 35 percent.

(2) Except for maintenance vents complying with the alternative in 40 CFR §63.643(c)(1)(iii), the permittee must determine the LEL or, if applicable, equipment pressure using process instrumentation or portable measurement devices and follow procedures for calibration and maintenance according to manufacturer's specifications.

(3) For maintenance vents complying with the alternative in 40 CFR §63.643(c)(1)(iii), the permittee shall determine mass of VOC in the equipment served by the maintenance vent based on the equipment size and contents after considering any contents drained or purged from the equipment. Equipment size may be determined from equipment design specifications. Equipment contents may be determined using process knowledge.

II. TESTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.**

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

IV. RECORDKEEPING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Reporting and recordkeeping requirements.**

(a) For maintenance vents subject to the requirements in 40 CFR §63.643(c), Periodic Reports must include the information specified in 40 CFR §63.655(g)(13)(i) through (iv) for any release exceeding the applicable limits in 40 CFR §63.643(c)(1). For the purposes of this reporting requirement the permittee complying with 40 CFR §63.643(c)(1)(iv) must report each venting event for which the lower explosive limit is 20% or greater, if complying with §63.643(c)(1)(iv) each venting event conducted under those provisions must be reported and explanation for each event as to why utilization of this alternative was required must be included.

(b) For each maintenance vent opening subject to the requirements in 40 CFR §63.643(c), the permittee shall keep applicable records specified at 40 CFR §63.655(i)(12)(i) through (v).

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

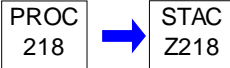
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 218

Source Name: MACT CC PRESSURE RELIEF DEVICES

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.648]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Equipment leak standards.**

(a) Except as specified in 40 CFR §63.648(j)(4), the permittee must comply with the requirements specified in 40 CFR §63.648(j)(1) and (2) for pressure relief devices, such as relief valves or rupture disks, in organic HAP gas or vapor service instead of the pressure relief device requirements of 40 CFR §60.482-4 or 40 CFR §63.165, as applicable. Except as specified in 40 CFR §63.648(j)(4) and (5), the permittee must also comply with the requirements specified in 40 CFR §63.648 (j)(3) for all pressure relief devices in organic HAP service.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Reporting and recordkeeping requirements.**

(a) For each pressure relief device subject to the pressure release management work practice standards in 40 CFR §63.648(j)(3), the permittee shall keep the records specified in 40 CFR §63.655 (i)(11)(i) through (iii). For each pilot-operated pressure relief device subject to the requirements at 40 CFR §63.648(j)(4)(ii) or (iii), the permittee shall keep the records specified in 40 CFR §63.655(i)(11)(iv).

(b) The permittee subject to the equipment leaks standards in 40 CFR §63.648 shall comply with the recordkeeping and reporting provisions in 40 CFR §63.655(d)(1) through (d)(6).

(c) For pressure relief devices subject to the requirements 40 CFR §63.648(j), Periodic Reports must include the information specified in 40 CFR §63.655(g)(10)(i) through (iii).

(d) For pressure relief devices in organic HAP service subject to the requirements in 40 CFR §63.648(j)(3)(i) and (ii) on or after January 30, 2019, the Notification of Compliance Status report shall include the information specified in 40 CFR §63.655(f)(1)(vii)(A) and (B), which includes:

(A) A description of the monitoring system to be implemented, including the relief devices and process parameters to be monitored, and a description of the alarms or other methods by which operators will be notified of a pressure release.

(B) A description of the prevention measures to be implemented for each affected pressure relief device.

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

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 300

Source Name: MISCELLANEOUS MACT GROUP 2 TANKS

Source Capacity/Throughput:

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

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

The applicable requirements for this source can be found in Source T003 (MACT Group 2 Tanks).

002 [25 Pa. Code §127.503]**Application information.**

As of the issuance date of this permit, this source consists of the following individual fixed roof storage tanks that are subject to MACT group 2 fixed roof tanks requirements:

- DEP Source ID 180, capacity - 54 M barrels
- DEP Source ID 181, capacity - 54 M barrels
- DEP Source ID 182, capacity - 54 M barrels
- DEP Source ID 195, capacity - 93 M barrels
- DEP Source ID 376A, capacity - 140 M barrels
- DEP Source ID T62, capacity - 10 M barrels
- DEP Source ID 184, capacity - 8 M barrels
- DEP Source ID T83, capacity - 500 barrels
- DEP Source ID T84, capacity - 1 M barrels
- DEP Source ID T143, capacity - 9 M barrels
- DEP Source ID T144, capacity - 9 M barrels
- DEP Source ID T145, capacity - 10 M barrels
- DEP Source ID T146, capacity - 10 M barrels

**SECTION D. Source Level Requirements**

- DEP Source ID T147, capacity - 10 Mbarrels
- DEP Source ID T148, capacity - 10 Mbarrels
- DEP Source ID 193, capacity - 56 Mbarrels
- DEP Source ID T33T1, capacity - 500 barrels
- DEP Source ID T81, capacity - 300 barrels
- DEP Source ID T82, capacity - 516 barrels
- DEP Source ID TMET1, capacity - 150 barrels
- Tank number 82TK2
- Tank number 312
- Tank number 313

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

**SECTION D. Source Level Requirements**

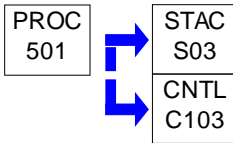
Source ID: 501

Source Name: SPHEROID 501 (1.26 MM GAL)

Source Capacity/Throughput:

N/A

LIGHT ISOCRACATE

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T006.

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

**SECTION D. Source Level Requirements**

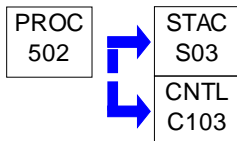
Source ID: 502

Source Name: SPHEROID 502 (1.26 MM GAL)

Source Capacity/Throughput:

N/A

LIGHT ISOCRACATE

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T006.

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

**SECTION D. Source Level Requirements**

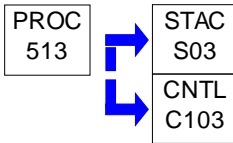
Source ID: 513

Source Name: SPHEROID 513 (1.26 MM GAL)

Source Capacity/Throughput:

N/A

LIGHT ISOCRACATE

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The applicable requirements for this source can be found in Source T006.

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

**SECTION D. Source Level Requirements**

Source ID: 700

Source Name: HEAT EXCHANGE SYSTEMS

Source Capacity/Throughput:

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.**# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.654]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Heat exchange systems.**

[Additional authority of this condition is also derived from 25 Pa. Code §129.114.]

The permittee must perform monitoring to identify leaks of total strippable volatile organic compounds (VOC) from each heat exchange system according to the procedures in paragraphs (1) through (6) below.

(1) For each closed loop recirculating heat exchange system, collect and analyze a sample from either of the location(s):

(i) Each cooling tower return line or any representative riser within the cooling tower prior to exposure to air for each heat exchange system; or

(ii) Selected heat exchanger exit line(s) so that each heat exchanger or group of heat exchangers within a heat exchange system is covered by the selected monitoring location(s).

(2) For each once-through heat exchange system, collect and analyze a sample from the location(s) described in paragraph (2)(i) below. The permittee may also elect to collect and analyze an additional sample from the location(s) described in paragraph (2)(ii) below.

(i) Selected heat exchanger exit line(s) so that each heat exchanger or group of heat exchangers within a heat exchange system is covered by the selected monitoring location(s). The selected monitoring location may be at a point where discharges from multiple heat exchange systems are combined provided that the combined cooling water flow rate at the monitoring location does not exceed 40,000 gallons per minute.

(ii) The inlet water feed line for a once-through heat exchange system prior to any heat exchanger. If multiple heat exchange systems use the same water feed (i.e., inlet water from the same primary water source), the permittee may monitor at one representative location and use the monitoring results for that sampling location for all heat exchange systems that use that same water feed.

(3) Monitoring method. Determine the total strippable hydrocarbon concentration (in parts per million by volume (ppmv) as methane) at each monitoring location using the "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see § 63.14) using a flame ionization detector (FID) analyzer for on-site determination as described in Section 6.1 of the Modified El Paso Method.

(4) Monitoring frequency and leak action level for existing sources. For a heat exchange system at an existing source, the permittee must comply with the monitoring frequency and leak action level as defined in paragraph (4)(i) below or comply with the monitoring frequency and leak action level as defined in paragraph (4)(ii) below . The permittee may choose to comply with paragraph (4)(i) below for some heat exchange systems and comply with paragraph (4)(ii) below for other heat exchange systems. However, for each affected heat exchange system, the permittee must elect one monitoring alternative that will apply at all times. If the permittee intends to change the monitoring alternative that applies to a heat exchange

**SECTION D. Source Level Requirements**

system, the permittee must notify DEP 30 days in advance of such a change. All "leaks" identified prior to changing monitoring alternatives must be repaired. The monitoring frequencies specified in paragraphs (4)(i) and (ii) below also apply to the inlet water feed line for a once-through heat exchange system, if monitoring of the inlet water feed is elected as provided in paragraph (2)(ii) below.

(i) Monitor monthly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv.

(ii) Monitor quarterly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 3.1 ppmv unless repair is delayed as provided in 40 CFR §63.654(f). If a repair is delayed, monitor monthly.

(5) Monitoring frequency and leak action level for new sources. For a heat exchange system at a new source, the owner or operator must monitor monthly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 3.1 ppmv.

(6) Leak definition. A leak is defined as described in 40 CFR §63.654(c)(6)(i) or (c)(6)(ii) of this section, as applicable.

(i) For once-through heat exchange systems for which the inlet water feed is monitored as described in 40 CFR §63.654(c)(2)(ii) of this section, a leak is detected if the difference in the measurement value of the sample taken from a location specified in 40 CFR §63.654(c)(2)(i) of this section and the measurement value of the corresponding sample taken from the location specified in 40 CFR §63.654(c)(2)(ii) of this section equals or exceeds the leak action level.

(ii) For all other heat exchange systems, a leak is detected if a measurement value of the sample taken from a location specified in either paragraph 40 CFR §63.654(c)(1)(i), (c)(1)(ii), or (c)(2)(i) of this section equals or exceeds the leak action level.

IV. RECORDKEEPING REQUIREMENTS.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.654]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Heat exchange systems.

[Additional authority of this condition is also derived from 25 Pa. Code §129.114.]

To delay a repair, the permittee must record the following information.

(1) The reason(s) for delaying repair.

(2) A schedule for completing the repair as soon as practical.

(3) The date and concentration of the leak as first identified and the results of all subsequent monthly monitoring events during the delay of repair.

(4) An estimate of the potential strippable hydrocarbon emissions from the leaking heat exchange system or heat exchanger for each required delay of repair monitoring interval following the procedures in paragraphs (4)(i) through (iv) below.

(i) Determine the leak concentration as specified in 40 C.F.R. §63.654(c) and convert the stripping gas leak concentration (in ppmv as methane) to an equivalent liquid concentration, in parts per million by weight (ppmw), using equation 7-1 from "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see 40 C.F.R. §63.14) and the molecular weight of 16 grams per mole (g/mol) for methane.

**SECTION D. Source Level Requirements**

(ii) Determine the mass flow rate of the cooling water at the monitoring location where the leak was detected. If the monitoring location is an individual cooling tower riser, determine the total cooling water mass flow rate to the cooling tower. Cooling water mass flow rates may be determined using direct measurement, pump curves, heat balance calculations, or other engineering methods. Volumetric flow measurements may be used and converted to mass flow rates using the density of water at the specific monitoring location temperature or using the default density of water at 25 degrees Celsius, which is 997 kilograms per cubic meter or 8.32 pounds per gallon.

(iii) For delay of repair monitoring intervals prior to repair of the leak, calculate the potential strippable hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the monitoring interval by multiplying the leak concentration in the cooling water, ppmw, determined in (4)(i) above, by the mass flow rate of the cooling water determined in (4)(ii) above and by the duration of the delay of repair monitoring interval. The duration of the delay of repair monitoring interval is the time period starting at midnight on the day of the previous monitoring event or at midnight on the day the repair would have had to be completed if the repair had not been delayed, whichever is later, and ending at midnight of the day the of the current monitoring event.

(iv) For delay of repair monitoring intervals ending with a repaired leak, calculate the potential strippable hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the final delay of repair monitoring interval by multiplying the duration of the final delay of repair monitoring interval by the leak concentration and cooling water flow rates determined for the last monitoring event prior to the re-monitoring event used to verify the leak was repaired. The duration of the final delay of repair monitoring interval is the time period starting at midnight of the day of the last monitoring event prior to re-monitoring to verify the leak was repaired and ending at the time of the re-monitoring event that verified that the leak was repaired.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Reporting and recordkeeping requirements.

[Additional authority of this condition is also derived from 25 Pa. Code §129.115.]

The permittee shall comply with the recordkeeping requirements of this section and retain these records for 5 years.

(i) Identification of all petroleum refinery process unit heat exchangers at the facility and the average annual HAP concentration of process fluid or intervening cooling fluid estimated when developing the Notification of Compliance Status report.

(ii) Identification of all heat exchange systems subject to the monitoring requirements in 40 C.F.R. §63.654 and identification of all heat exchange systems that are exempt from the monitoring requirements according to the provisions in 40 C.F.R. §63.654(b). For each heat exchange system that is subject to the monitoring requirements in 40 C.F.R. §63.654, this must include identification of all heat exchangers within each heat exchange system, and, for closed-loop recirculation systems, the cooling tower included in each heat exchange system.

(iii) Results of the following monitoring data for each required monitoring event:

- (A) Date/time of event.
- (B) Barometric pressure.
- (C) El Paso air stripping apparatus water flow milliliter/minute (ml/min) and air flow, ml/min, and air temperature, °Celsius.
- (D) FID reading (ppmv).
- (E) Length of sampling period.
- (F) Sample volume.
- (G) Calibration information identified in Section 5.4.2 of the "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see 40 C.F.R. §63.14).

(iv) The date when a leak was identified, the date the source of the leak was identified, and the date when the heat exchanger was repaired or taken out of service.

**SECTION D. Source Level Requirements**

(v) If a repair is delayed, the reason for the delay, the schedule for completing the repair, the heat exchange exit line flow or cooling tower return line average flow rate at the monitoring location (in gallons/minute), and the estimate of potential strippable hydrocarbon emissions for each required monitoring interval during the delay of repair.

V. REPORTING REQUIREMENTS.**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Reporting and recordkeeping requirements.**

[Additional authority of this condition is also derived from 25 Pa. Code §129.115.]

(a) For heat exchange systems subject to 40 CFR Part 63, Subpart CC, Periodic Reports must include the information specified in 40 CFR §63.655(g)(9) which includes the following information:

(i) The number of heat exchange systems at the plant site subject to the monitoring requirements in 40 C.F.R. §63.654.

(ii) The number of heat exchange systems at the plant site found to be leaking.

(iii) For each monitoring location where the total strippable hydrocarbon concentration was determined to be equal to or greater than the applicable leak definitions specified in 40 C.F.R. §63.654(c)(6), identification of the monitoring location (e.g., unique monitoring location or heat exchange system ID number), the measured total strippable hydrocarbon concentration, the date the leak was first identified, and, if applicable, the date the source of the leak was identified;

(iv) For leaks that were repaired during the reporting period (including delayed repairs), identification of the monitoring location associated with the repaired leak, the total strippable hydrocarbon concentration measured during re-monitoring to verify repair, and the re-monitoring date (i.e., the effective date of repair); and

(v) For each delayed repair, identification of the monitoring location associated with the leak for which repair is delayed, the date when the delay of repair began, the date the repair is expected to be completed (if the leak is not repaired during the reporting period), the total strippable hydrocarbon concentration and date of each monitoring event conducted on the delayed repair during the reporting period, and an estimate of the potential strippable hydrocarbon emissions over the reporting period associated with the delayed repair.

(b) Other reports shall be submitted as specified in 40 C.F.R. 63 Subpart A and as follows:

(1) The permittee must notify DEP at least 30 calendar days prior to changing from one of the monitoring options specified in 40 C.F.R. §63.654(c)(4) to the other.

VI. WORK PRACTICE REQUIREMENTS.**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.654]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Heat exchange systems.**

[Additional authority of this condition is also derived from 25 Pa. Code §129.114.]

(a) When a leak is detected, the permittee must repair the leak to reduce the measured concentration to below the applicable action level as soon as practicable, but no later than 45 days after identifying the leak, except as specified in 40 C.F.R. §63.654(e) and (f). Repair includes re-monitoring at the monitoring location where the leak was identified according to the method specified in 40 C.F.R. §63.654(c)(3) to verify that the measured concentration is below the applicable action level. Actions that can be taken to achieve repair include but are not limited to:

(1) Physical modifications to the leaking heat exchanger, such as welding the leak or replacing a tube;

(2) Blocking the leaking tube within the heat exchanger;

**SECTION D. Source Level Requirements**

(3) Changing the pressure so that water flows into the process fluid;

(4) Replacing the heat exchanger or heat exchanger bundle; or

(5) Isolating, bypassing, or otherwise removing the leaking heat exchanger from service until it is otherwise repaired.

(b) When a leak is detected at a cooling tower return line, the permittee may conduct additional monitoring of each heat exchanger or group of heat exchangers associated with the heat exchange system for which the leak was detected as provided under 40 C.F.R. §63.654(c)(1)(ii). If no leaks are detected when monitoring according to the requirements of 40 C.F.R. §63.654(c)(1)(ii), the heat exchange system is considered to meet the repair requirements through re-monitoring of the heat exchange system.

(c) The permittee may delay the repair of a leaking heat exchanger when one of the conditions in paragraph (c)(1) or (c)(2) below is met and the leak is less than the delay of repair action level specified in paragraph (c)(3) below. The permittee must determine if a delay of repair is necessary as soon as practicable, but no later than 45 days after first identifying the leak.

(1) If the repair is technically infeasible without a shutdown and the total strippable hydrocarbon concentration is initially and remains less than the delay of repair action level for all monthly monitoring periods during the delay of repair, the permittee may delay repair until the next scheduled shutdown of the heat exchange system. If, during subsequent monthly monitoring, the delay of repair action level is exceeded, the permittee must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(2) If the necessary equipment, parts, or personnel are not available and the total strippable hydrocarbon concentration is initially and remains less than the delay of repair action level for all monthly monitoring periods during the delay of repair, the permittee may delay the repair for a maximum of 120 calendar days. The permittee must demonstrate that the necessary equipment, parts, or personnel were not available. If, during subsequent monthly monitoring, the delay of repair action level is exceeded, the permittee must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(3) The delay of repair action level is a total strippable hydrocarbon concentration (as methane) in the stripping gas of 62 ppmv. The delay of repair action level is assessed as described in paragraph (c)(3)(i) or (c)(3)(ii) below, as applicable.

(i) For once-through heat exchange systems for which the inlet water feed is monitored as described in 40 C.F.R. §63.654(c)(2)(ii), the delay of repair action level is exceeded if the difference in the measurement value of the sample taken from a location specified in 40 C.F.R. §63.654(c)(2)(i) and the measurement value of the corresponding sample taken from the location specified in 40 C.F.R. §63.654(c)(2)(ii) equals or exceeds the delay of repair action level.

(ii) For all other heat exchange systems, the delay of repair action level is exceeded if a measurement value of the sample taken from a location specified in either 40 C.F.R. §63.654(c)(1)(i), (c)(1)(ii), or (c)(2)(i) equals or exceeds the delay of repair action level.

VII. ADDITIONAL REQUIREMENTS.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.640]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

Applicability and designation of affected source.

(a) As per 40 C.F.R. §63.640(h)(6), heat exchange systems shall be in compliance with the existing source standards in 40 C.F.R. §63.654 no later than October 29, 2012.

(b) The heat exchange systems subject to 40 C.F.R. 63 Subpart CC at the Trainer Refinery (Facility ID 293037) are:

Marcus Hook Guard Basin
Alky Unit Cooling Tower
Benzene Unit Cooling Tower
South Side Cooling Tower

**SECTION D. Source Level Requirements**

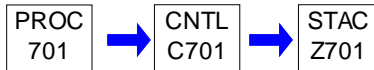
*** Permit Shield in Effect. ***

**SECTION D. Source Level Requirements**

Source ID: 701

Source Name: COOLING TOWERS (CLOSED LOOP RECIRCULATING HEAT EXCHANGERS)

Source Capacity/Throughput:

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

The concentration of particulate matter (PM) in the effluent of each cooling tower shall not exceed 0.02 gr/dscf.

002 [25 Pa. Code §127.203a.]**Applicability determination.**

a) As per 25 Pa. Code §127.203a(a)(5)(iii)(A), VOC emissions from the following new cooling towers shall not exceed the limits, specified below, calculated monthly and 12-month rolling sum:

CT 03 - Area 3 Cooling Tower 32.08 TPY

(b) The annual average VOC concentration in the recirculating cooling water shall not exceed 31 ppmw calculated monthly and averaged on a 12-month rolling period.

[The annual average VOC concentration of 31 ppmw in the recirculating cooling water is a LAER determination, and can't be changed without a new LAER determination.]

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor and record the operating minutes for each cooling tower on a monthly basis.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.654]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Heat exchange systems.**

As per 40 C.F.R. §63.654(a) and (c), the permittee must perform monitoring to identify leaks of total strippable volatile organic compounds (VOC) from each heat exchange system according to the procedures below.

(1) Monitoring location: For each closed loop recirculating heat exchange system, collect and analyze a sample from each cooling tower return line prior to exposure to air for each heat exchange system.

(2) As per 40 C.F.R. §63.654(c)(3) - Monitoring method, the permittee must determine the total strippable hydrocarbon concentration (in parts per million by volume (ppmv) as methane) at each monitoring location using the "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see §63.14) using a flame ionization detector (FID) analyzer for on-site determination as described in Section 6.1 of the Modified El Paso Method.

(3) As per 40 C.F.R. §63.654(c)(4)(i) - Monitoring frequency and leak action level, the permittee must monitor monthly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv.

**SECTION D. Source Level Requirements**

[The monthly monitoring frequency is a LAER determination, and can't be changed without a new LAER determination.]

(4) As per 40 C.F.R. §63.654(c)(6) - Leak definition, a leak is detected if a measurement value of the sample taken from the return line equals or exceeds the leak action level of 6.2 ppmv.

IV. RECORDKEEPING REQUIREMENTS.**# 005 [25 Pa. Code §127.203a.]****Applicability determination.**

The permittee shall keep records of VOC emissions from each cooling tower on a monthly basis, and 12-month rolling sum.

006 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall keep the following records for each cooling tower:

- (a) The maintenance and replacement conducted on the drift eliminators;
- (b) The monthly operating minutes;
- (c) The TDS content of the circulated water measured monthly;
- (d) The monthly PM emissions calculated using the monthly operating minutes, the TDS contents measured monthly, and the water recirculation rates as specified below:

CT 03 - Area 3 Cooling Tower – 36,850 gpm

- (e) PM emissions on a 12 month rolling sum.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Reporting and recordkeeping requirements.**

(a) As per 40 C.F.R. §63.655(i)(4), the permittee shall comply with the recordkeeping requirements in paragraph (a)(i) through (v) below and retain these records for 5 years.

(i) Identification of all petroleum refinery process unit heat exchangers at the facility and the average annual HAP concentration of process fluid or intervening cooling fluid estimated when developing the Notification of Compliance Status report.

(ii) Identification of all heat exchange systems subject to the monitoring requirements in 40 C.F.R. §63.654 and identification of all heat exchange systems that are exempt from the monitoring requirements according to the provisions in 40 C.F.R. §63.654(b). For each heat exchange system that is subject to the monitoring requirements in 40 C.F.R. §63.654, this must include identification of all heat exchangers within each heat exchange system, and, for closed-loop recirculation systems, the cooling tower included in each heat exchange system.

(iii) Results of the following monitoring data for each required monitoring event:

- (A) Date/time of event.
- (B) Barometric pressure.
- (C) El Paso air stripping apparatus water flow milliliter/minute (ml/min) and air flow, ml/min, and air temperature, °Celsius.
- (D) FID reading (ppmv).
- (E) Length of sampling period.
- (F) Sample volume.
- (G) Calibration information identified in Section 5.4.2 of the "Air Stripping Method (Modified El Paso Method) for

**SECTION D. Source Level Requirements**

Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see 40 C.F.R. §63.14).

(iv) The date when a leak was identified, the date the source of the leak was identified, and the date when the heat exchanger was repaired or taken out of service.

(v) If a repair is delayed, the reason for the delay, the schedule for completing the repair, the heat exchange exit line flow or cooling tower return line average flow rate at the monitoring location (in gallons/minute), and the estimate of potential strippable hydrocarbon emissions for each required monitoring interval during the delay of repair.

(b) As per 40 C.F.R. §63.655(i)(5), all other information required to be reported under 40 C.F.R. §63.655 shall be retained for 5 years.

V. REPORTING REQUIREMENTS.**# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.640]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Applicability and designation of affected source.**

As per 40 C.F.R. §63.640(l)(3), the permittee shall comply with the reporting and recordkeeping requirements applicable to the cooling towers. The applicable reports include, but are not limited to:

(i) The Notification of Compliance Status report as required by 40 C.F.R. §63.655(f)(6);

(ii) Periodic Reports and other reports as required by 40 C.F.R. §63.655(g) and (h);

(iii) Reports and notifications required by sections of subpart A of 40 C.F.R. part 63 that are applicable, as identified in table 6 of 40 C.F.R. 63 subpart CC.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Reporting and recordkeeping requirements.**

(a) As per 40 C.F.R. §§63.640(l)(3)(i), 63.642(f), 63.655(e)(1) and (f)(6), Notification of Compliance Status report shall be submitted no later than 60 days after the end of the 6-month period during which the cooling tower(s) was brought into compliance. Six-month periods shall be the same 6-month periods specified in 40 C.F.R. §63.655(g).

(b) As per 40 C.F.R. §§63.640(l)(3)(ii), 63.642(f), 63.655(e)(2) and (g), Periodic Reports must include the following information:

(i) The number of heat exchange systems at the plant site subject to the monitoring requirements in 40 C.F.R. §63.654;

(ii) The number of heat exchange systems at the plant site found to be leaking;

(iii) For each monitoring location where the total strippable hydrocarbon concentration was determined to be equal to or greater than the applicable leak definitions specified in §63.654(c)(6), identification of the monitoring location (e.g., unique monitoring location or heat exchange system ID number), the measured total strippable hydrocarbon concentration, the date the leak was first identified, and, if applicable, the date the source of the leak was identified;

(iv) For leaks that were repaired during the reporting period (including delayed repairs), identification of the monitoring location associated with the repaired leak, the total strippable hydrocarbon concentration measured during re-monitoring to verify repair, and the re-monitoring date (i.e., the effective date of repair); and

(v) For each delayed repair, identification of the monitoring location associated with the leak for which repair is delayed, the date when the delay of repair began, the date the repair is expected to be completed (if the leak is not repaired during the reporting period), the total strippable hydrocarbon concentration and date of each monitoring event conducted on the delayed repair during the reporting period, and an estimate of the potential strippable hydrocarbon emissions over the

**SECTION D. Source Level Requirements**

reporting period associated with the delayed repair.

(c) As per 40 C.F.R. §§63.640(l)(3)(ii), 63.642(f), 63.655(e)(3) and (h), Other Reports shall be submitted as specified in 40 C.F.R. 63 Subpart A and reports of startup, shutdown, and malfunction required by 40 C.F.R. §63.10(d)(5). For purposes of this paragraph, startup and shutdown shall have the meaning defined in 40 C.F.R. §63.641, and malfunction shall have the meaning defined in 40 C.F.R. §63.2.

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

The drift eliminators shall be installed, operated, and maintained in accordance with manufacturer's specifications.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.654]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Heat exchange systems.**

(a) As per 40 C.F.R. §63.654(d), if a leak is detected, the permittee must repair the leak to reduce the measured concentration to below the applicable action level as soon as practicable, but no later than 45 days after identifying the leak. Repair includes re-monitoring at the monitoring location where the leak was identified according to the method specified in 40 C.F.R. §63.654(c)(3) to verify that the measured concentration is below the leak action level of 6.2ppmv. Actions that can be taken to achieve repair include but are not limited to:

- (1) Physical modifications to the leaking heat exchanger, such as welding the leak or replacing a tube;
- (2) Blocking the leaking tube within the heat exchanger;
- (3) Changing the pressure so that water flows into the process fluid;
- (4) Replacing the heat exchanger or heat exchanger bundle; or
- (5) Isolating, bypassing, or otherwise removing the leaking heat exchanger from service until it is otherwise repaired.

(b) As per 40 C.F.R. §63.654(f), the permittee may delay the repair of a leaking heat exchanger when one of the conditions specified below is met and the leak is less than the delay of repair action level specified in paragraph (b)(3) below. The permittee must determine if a delay of repair is necessary as soon as practicable, but no later than 45 days after first identifying the leak.

(1) If the repair is technically infeasible without a shutdown and the total strippable hydrocarbon concentration is initially and remains less than the delay of repair action level for all monthly monitoring periods during the delay of repair, the permittee may delay repair until the next scheduled shutdown of the heat exchange system. If, during subsequent monthly monitoring, the delay of repair action level is exceeded, the permittee must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(2) If the necessary equipment, parts, or personnel are not available and the total strippable hydrocarbon concentration is initially and remains less than the delay of repair action level for all monthly monitoring periods during the delay of repair, the permittee may delay the repair for a maximum of 120 calendar days. The permittee must demonstrate that the necessary equipment, parts, or personnel were not available. If, during subsequent monthly monitoring, the delay of repair action level is exceeded, the permittee must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(3) The delay of repair action level is a total strippable hydrocarbon concentration (as methane) in the stripping gas of 62 ppmv. The delay of repair action level is exceeded if a measurement value of the sample taken from each return line equals or exceeds the delay of repair action level.

(c) As per 40 C.F.R. §63.654(g), to delay the repair under 40 C.F.R. §63.654(f), the permittee must record the following

**SECTION D. Source Level Requirements**

information.

(1) The reason(s) for delaying repair.

(2) A schedule for completing the repair as soon as practical.

(3) The date and concentration of the leak as first identified and the results of all subsequent monthly monitoring events during the delay of repair.

(4) An estimate of the potential strippable hydrocarbon emissions from the leaking heat exchange system or heat exchanger for each required delay of repair monitoring interval following the procedures in paragraphs (c)(4)(i) through (iv) below.

(i) Determine the leak concentration as specified in 40 C.F.R. §63.654(c) and convert the stripping gas leak concentration (in ppmv as methane) to an equivalent liquid concentration, in parts per million by weight (ppmw), using equation 7-1 from "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see 40 C.F.R. §63.14) and the molecular weight of 16 grams per mole (g/mol) for methane.

(ii) Determine the mass flow rate of the cooling water at the monitoring location where the leak was detected. If the monitoring location is an individual cooling tower riser, determine the total cooling water mass flow rate to the cooling tower. Cooling water mass flow rates may be determined using direct measurement, pump curves, heat balance calculations, or other engineering methods. Volumetric flow measurements may be used and converted to mass flow rates using the density of water at the specific monitoring location temperature or using the default density of water at 25 degrees Celsius, which is 997 kilograms per cubic meter or 8.32 pounds per gallon.

(iii) For delay of repair monitoring intervals prior to repair of the leak, calculate the potential strippable hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the monitoring interval by multiplying the leak concentration in the cooling water, ppmw, determined in paragraph (c)(4)(i) above, by the mass flow rate of the cooling water determined in paragraph (c)(4)(ii) above and by the duration of the delay of repair monitoring interval. The duration of the delay of repair monitoring interval is the time period starting at midnight on the day of the previous monitoring event or at midnight on the day the repair would have had to be completed if the repair had not been delayed, whichever is later, and ending at midnight of the day the of the current monitoring event.

(iv) For delay of repair monitoring intervals ending with a repaired leak, calculate the potential strippable hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the final delay of repair monitoring interval by multiplying the duration of the final delay of repair monitoring interval by the leak concentration and cooling water flow rates determined for the last monitoring event prior to the re-monitoring event used to verify the leak was repaired. The duration of the final delay of repair monitoring interval is the time period starting at midnight of the day of the last monitoring event prior to re-monitoring to verify the leak was repaired and ending at the time of the re-monitoring event that verified that the leak was repaired.

VII. ADDITIONAL REQUIREMENTS.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.640]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

Applicability and designation of affected source.

(a) As per 40 C.F.R. §63.640(l)(2)(i), the heat exchange systems shall be in compliance with the applicable requirements of 40 C.F.R. 63 subpart CC upon initial startup.

(b) The heat exchange systems subject to the requirements of 40 C.F.R. 63 Subpart CC at the Trainer Refinery (Facility ID 293037) are:

CT 03 - Crude Cooling Tower

**SECTION D. Source Level Requirements**

*** Permit Shield in Effect. ***

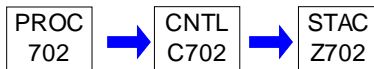
**SECTION D. Source Level Requirements**

Source ID: 702

Source Name: ULSG COOLING TOWER

Source Capacity/Throughput: 612,000.000 Gal/HR

COOLING WATER

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

No person may permit the emission into the outdoor atmosphere of particulate matter from this source in excess of 0.02 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(iii).

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

The permittee shall limit VOC emissions from this cooling tower to 6.02 tons per year, based on a 12-month rolling sum.

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

The permittee shall measure the total dissolved solids (TDS) content of the cooling water in the cooling tower once per month. The TDS shall be determined by measuring conductivity of the cooling water using Hatch Company Direct Test Method 8160 or Standard Method 2510-B and a conversion factor of 0.5 mg-cm/uS-L.

III. MONITORING REQUIREMENTS.**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.654]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Heat exchange systems.**

[Authority for this permit condition is derived from 40 CFR § 63.654(c).]

The permittee shall perform monitoring to identify leaks of total strippable volatile organic compounds (VOC) from each heat exchange system subject to the requirements 40 C.F.R. Part 63, Subpart CC according to the procedures in paragraphs (1) through (4) of this condition.

(1) Monitoring locations for closed-loop recirculation heat exchange systems. For each closed loop recirculating heat exchange system, collect and analyze a sample from the location(s) described in either paragraph (1)(i) or (1)(ii) of this condition.

(i) Each cooling tower return line or any representative riser within the cooling tower prior to exposure to air for each heat exchange system.

(ii) Selected heat exchanger exit line(s) so that each heat exchanger or group of heat exchangers within a heat exchange system is covered by the selected monitoring location(s).

(2) Monitoring method. Determine the total strippable hydrocarbon concentration (in parts per million by volume (ppmv) as methane) at each monitoring location using the "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see §63.14) using a flame ionization detector (FID) analyzer for on-site determination as described in Section 6.1 of the Modified El Paso Method.

**SECTION D. Source Level Requirements**

(3) Monitoring frequency and leak action level for existing sources. For a heat exchange system at an existing source, the owner or operator must comply with the monitoring frequency and leak action level as defined in paragraph (3)(i) of this condition or comply with the monitoring frequency and leak action level as defined in paragraph (3)(ii) of this condition. The owner or operator of an affected heat exchange system may choose to comply with paragraph (3)(i) of this condition for some heat exchange systems at the petroleum refinery and comply with paragraph (3)(ii) of this condition for other heat exchange systems. However, for each affected heat exchange system, the owner or operator of an affected heat exchange system must elect one monitoring alternative that will apply at all times. If the owner or operator intends to change the monitoring alternative that applies to a heat exchange system, the owner or operator must notify the Administrator 30 days in advance of such a change. All "leaks" identified prior to changing monitoring alternatives must be repaired.

(i) Monitor monthly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 6.2 ppmv.

(ii) Monitor quarterly using a leak action level defined as a total strippable hydrocarbon concentration (as methane) in the stripping gas of 3.1 ppmv unless repair is delayed as provided in 40 CFR § 63.654(f). If a repair is delayed as provided in 40 CFR § 63.654(f), monitor monthly.

(4) Leak definition. A leak for this source is defined as follows.

(i) A leak is detected if a measurement value of the sample taken from a location specified in either paragraph (1)(i) or (1)(ii) of this section equals or exceeds the leak action level.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.114]

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

(a) The permittee shall maintain records of the total dissolved solids (TDS) concentrations in the cooling tower water on a monthly basis.

(b) The permittee shall maintain records of the monthly operating minutes.

(c) The permittee shall perform and maintain records of VOC emission calculations on a monthly and 12-month rolling basis.

(d) The permittee shall maintain records of the monthly PM emissions calculated using monthly operating minutes, the TDS content measured monthly, and the water recirculation rate of 10,200 gallons per minute (GPM).

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Reporting and recordkeeping requirements.**

[Authority for this permit condition is derived from 40 C.F.R. § 63.655(i)(5).]

The owner or operator of a heat exchange system to this subpart shall comply with the recordkeeping requirements in paragraphs (i) through (v) of this condition and retain these records for 5 years.

(i) Identification of all petroleum refinery process unit heat exchangers at the facility and the average annual HAP concentration of process fluid or intervening cooling fluid estimated when developing the Notification of Compliance Status report.

(ii) Identification of all heat exchange systems subject to the monitoring requirements in 40 C.F.R. § 63.654 and identification of all heat exchange systems that are exempt from the monitoring requirements according to the provisions in 40 C.F.R. § 63.654(b). For each heat exchange system that is subject to the monitoring requirements in 40 C.F.R. § 63.654, this must include identification of all heat exchangers within each heat exchange system, and, for closed-loop recirculation systems, the cooling tower included in each heat exchange system.

**SECTION D. Source Level Requirements**

(iii) Results of the following monitoring data for each required monitoring event:

(A) Date/time of event.

(B) Barometric pressure.

(C) El Paso air stripping apparatus water flow milliliter/minute (ml/min) and air flow, ml/min, and air temperature, °Celsius.

(D) FID reading (ppmv).

(E) Length of sampling period.

(F) Sample volume.

(G) Calibration information identified in Section 5.4.2 of the "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see §63.14).

(iv) The date when a leak was identified, the date the source of the leak was identified, and the date when the heat exchanger was repaired or taken out of service.

(v) If a repair is delayed, the reason for the delay, the schedule for completing the repair, the heat exchange exit line flow or cooling tower return line average flow rate at the monitoring location (in gallons/minute), and the estimate of potential strippable hydrocarbon emissions for each required monitoring interval during the delay of repair.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.115]

V. REPORTING REQUIREMENTS.**# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Reporting and recordkeeping requirements.**

[Authority for this permit condition is derived from 40 C.F.R. § 63.655(e).]

Each owner or operator of a source subject to 40 CFR Part 63, Subpart CC shall submit the reports listed in paragraphs (1) through (2) of this condition except as provided in 40 C.F.R. § 63.655(h)(5).

(1) Periodic Reports as described in 40 C.F.R. § 63.655(g); and

(2) Other reports as described in 40 C.F.R. § 63.655(h).

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries Reporting and recordkeeping requirements.**

[Authority for this permit condition is derived from 40 CFR § 63.655(g)(9).]

The permittee shall submit Periodic Reports as specified in 40 C.F.R. § 63.655(g).

For heat exchange systems, Periodic Reports must include the following information:

(i) The number of heat exchange systems at the plant site subject to the monitoring requirements in 40 C.F.R. § 63.654.

**SECTION D. Source Level Requirements**

(ii) The number of heat exchange systems at the plant site found to be leaking.

(iii) For each monitoring location where the total strippable hydrocarbon concentration was determined to be equal to or greater than the applicable leak definitions specified in 40 C.F.R. § 63.654(c)(6), identification of the monitoring location (e.g., unique monitoring location or heat exchange system ID number), the measured total strippable hydrocarbon concentration, the date the leak was first identified, and, if applicable, the date the source of the leak was identified;

(iv) For leaks that were repaired during the reporting period (including delayed repairs), identification of the monitoring location associated with the repaired leak, the total strippable hydrocarbon concentration measured during re-monitoring to verify repair, and the re-monitoring date (i.e., the effective date of repair); and

(v) For each delayed repair, identification of the monitoring location associated with the leak for which repair is delayed, the date when the delay of repair began, the date the repair is expected to be completed (if the leak is not repaired during the reporting period), the total strippable hydrocarbon concentration and date of each monitoring event conducted on the delayed repair during the reporting period, and an estimate of the potential strippable hydrocarbon emissions over the reporting period associated with the delayed repair.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Reporting and recordkeeping requirements.

The owner or operator of a heat exchange system at an existing source must notify the Administrator at least 30 calendar days prior to changing from one of the monitoring options specified in 40 C.F.R. § 63.654(c)(4) to the other.

VI. WORK PRACTICE REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source and control device shall be operated and maintained in accordance with manufacturer's specifications.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The drift eliminators associated with this cooling tower shall be designed to achieve a drift rate of 0.0005%.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall not use chromium based water treatment chemicals in this source.

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.654]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Heat exchange systems.

[Authority for this permit condition is derived from 40 C.F.R. § 63.654(d)-(g).]

(a) If a leak is detected, the owner or operator must repair the leak to reduce the measured concentration to below the applicable action level as soon as practicable, but no later than 45 days after identifying the leak, except as specified in paragraphs (b) and (c) of this condition. Repair includes re-monitoring at the monitoring location where the leak was identified according to the method specified in 40 C.F.R. § 63.654(c)(3) of this section to verify that the measured concentration is below the applicable action level. Actions that can be taken to achieve repair include but are not limited to:

- (1) Physical modifications to the leaking heat exchanger, such as welding the leak or replacing a tube;
- (2) Blocking the leaking tube within the heat exchanger;
- (3) Changing the pressure so that water flows into the process fluid;

**SECTION D. Source Level Requirements**

(4) Replacing the heat exchanger or heat exchanger bundle; or

(5) Isolating, bypassing, or otherwise removing the leaking heat exchanger from service until it is otherwise repaired.

(b) If the owner or operator detects a leak when monitoring a cooling tower return line under 40 CFR § 63.654(c)(1)(i), the owner or operator may conduct additional monitoring of each heat exchanger or group of heat exchangers associated with the heat exchange system for which the leak was detected as provided under 40 CFR § 63.654(c)(1)(ii). If no leaks are detected when monitoring according to the requirements of paragraph 40 CFR § 63.654(c)(1)(ii), the heat exchange system is considered to meet the repair requirements through re-monitoring of the heat exchange system as provided in paragraph (a) of this condition.

(c) The owner or operator may delay the repair of a leaking heat exchanger when one of the conditions in paragraph (c)(1) or (c)(2) of this condition is met and the leak is less than the delay of repair action level specified in paragraph (c)(3) of this condition. The owner or operator must determine if a delay of repair is necessary as soon as practicable, but no later than 45 days after first identifying the leak.

(1) If the repair is technically infeasible without a shutdown and the total strippable hydrocarbon concentration is initially and remains less than the delay of repair action level for all monthly monitoring periods during the delay of repair, the owner or operator may delay repair until the next scheduled shutdown of the heat exchange system. If, during subsequent monthly monitoring, the delay of repair action level is exceeded, the owner or operator must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(2) If the necessary equipment, parts, or personnel are not available and the total strippable hydrocarbon concentration is initially and remains less than the delay of repair action level for all monthly monitoring periods during the delay of repair, the owner or operator may delay the repair for a maximum of 120 calendar days. The owner or operator must demonstrate that the necessary equipment, parts, or personnel were not available. If, during subsequent monthly monitoring, the delay of repair action level is exceeded, the owner or operator must repair the leak within 30 days of the monitoring event in which the leak was equal to or exceeded the delay of repair action level.

(3) The delay of repair action level is a total strippable hydrocarbon concentration (as methane) in the stripping gas of 62 ppmv. The delay of repair action level is assessed as described in paragraph (c)(3)(i) of this condition.

(i) The delay of repair action level is exceeded if a measurement value of the sample taken from a location specified in either paragraphs 40 C.F.R. § 63.654(c)(1)(i) or (c)(1)(ii) equals or exceeds the delay of repair action level.

(d) To delay the repair under paragraph (c) of this condition, the owner or operator must record the information in paragraphs (d)(1) through (4).

(1) The reason(s) for delaying repair.

(2) A schedule for completing the repair as soon as practical.

(3) The date and concentration of the leak as first identified and the results of all subsequent monthly monitoring events during the delay of repair.

(4) An estimate of the potential strippable hydrocarbon emissions from the leaking heat exchange system or heat exchanger for each required delay of repair monitoring interval following the procedures in paragraphs (d)(4)(i) through (iv) of this condition.

(i) Determine the leak concentration as specified in 40 C.F.R. § 63.654(c) and convert the stripping gas leak concentration (in ppmv as methane) to an equivalent liquid concentration, in parts per million by weight (ppmw), using equation 7-1 from "Air Stripping Method (Modified El Paso Method) for Determination of Volatile Organic Compound Emissions from Water Sources" Revision Number One, dated January 2003, Sampling Procedures Manual, Appendix P: Cooling Tower Monitoring, prepared by Texas Commission on Environmental Quality, January 31, 2003 (incorporated by reference—see 40 C.F.R. § 63.14) and the molecular weight of 16 grams per mole (g/mol) for methane.

**SECTION D. Source Level Requirements**

(ii) Determine the mass flow rate of the cooling water at the monitoring location where the leak was detected. If the monitoring location is an individual cooling tower riser, determine the total cooling water mass flow rate to the cooling tower. Cooling water mass flow rates may be determined using direct measurement, pump curves, heat balance calculations, or other engineering methods. Volumetric flow measurements may be used and converted to mass flow rates using the density of water at the specific monitoring location temperature or using the default density of water at 25 degrees Celsius, which is 997 kilograms per cubic meter or 8.32 pounds per gallon.

(iii) For delay of repair monitoring intervals prior to repair of the leak, calculate the potential strippable hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the monitoring interval by multiplying the leak concentration in the cooling water, ppmw, determined in (d)(4)(i) of this condition, by the mass flow rate of the cooling water determined in (d)(4)(ii) of this condition and by the duration of the delay of repair monitoring interval. The duration of the delay of repair monitoring interval is the time period starting at midnight on the day of the previous monitoring event or at midnight on the day the repair would have had to be completed if the repair had not been delayed, whichever is later, and ending at midnight of the day the of the current monitoring event.

(iv) For delay of repair monitoring intervals ending with a repaired leak, calculate the potential strippable hydrocarbon emissions for the leaking heat exchange system or heat exchanger for the final delay of repair monitoring interval by multiplying the duration of the final delay of repair monitoring interval by the leak concentration and cooling water flow rates determined for the last monitoring event prior to the re-monitoring event used to verify the leak was repaired. The duration of the final delay of repair monitoring interval is the time period starting at midnight of the day of the last monitoring event prior to re-monitoring to verify the leak was repaired and ending at the time of the re-monitoring event that verified that the leak was repaired.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.114]

VII. ADDITIONAL REQUIREMENTS.

014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source consists of a Cooling Tower for the Ultra Low Sulfur Gasoline (ULSG) process, manufactured by Cooling Tower Depot with a rated capacity of 10,200 gallons per minute. This cooling tower is equipped with drift eliminators.

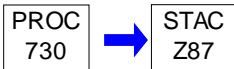
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 730

Source Name: REFORMER UNIT FUGITIVES

Source Capacity/Throughput: 250.000 Tons/HR REFORMATE

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

The permittee shall not exceed the following Volatile Organic Compound (VOC) emission rate from this process' valves, flanges, pumps, and other process equipment associated with the Reformate Splitter and depentanizer column, calculated from methods approved by the Department:

Volatile Organic Compounds (VOCs), 0.4002 lbs/hr = 1.75 ton/yr.

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor VOC emissions from this source according to the applicable LDAR schedule, as indicated in Source IDs 114 and 128.

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

The permittee shall record the monitored VOC emissions from this source according to the applicable LDAR schedule, as indicated in Source IDs 114 and 128.

V. REPORTING REQUIREMENTS.

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

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

Only centrifugal pumps with double mechanical seals incorporating a barrier fluid or seal-less pumps shall be used for this source and its light reformate delivery system.

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

Additional requirements for this source are found in Source IDs 114 and 128.

**SECTION D. Source Level Requirements**

*** Permit Shield in Effect. ***

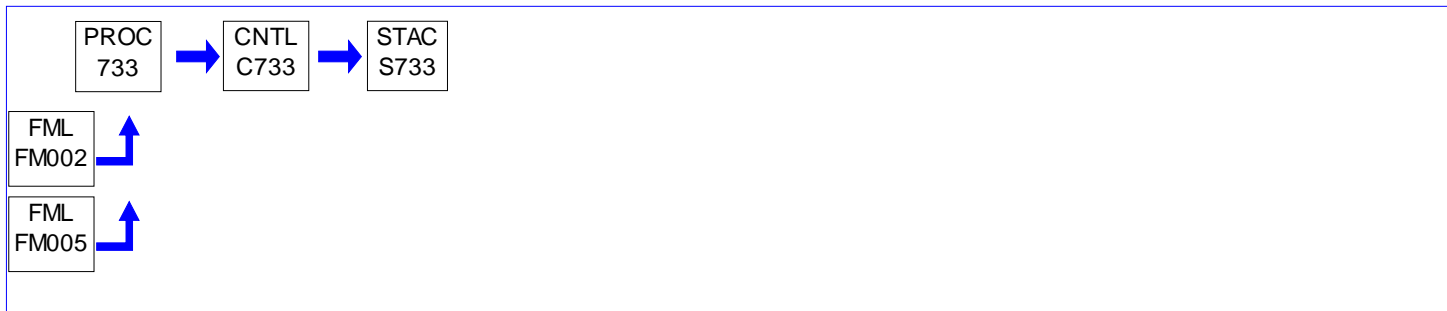
**SECTION D. Source Level Requirements**

Source ID: 733

Source Name: FCCU FEED HEATER

Source Capacity/Throughput: 63.000 MMBTU/HR
87.000 MCF/HR fuel gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 35

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

(a) Nitrogen Oxides (NO_x) emissions shall not exceed 0.045 lb/MMBtu heat input and 12.48 tons per year calculated as a 12-month rolling sum. [RACT-strengthening condition]

(b) Carbon Monoxide (CO) emissions shall not exceed 400 ppm by volume on a dry basis corrected to 3 percent oxygen (3-run average) and 33.1 tons per year calculated as a 12-month rolling sum.

(c) Volatile Organic Compounds (VOCs) emissions shall not exceed 2.20 tons per year calculated as a 12-month rolling sum.

d. Particulate Matter (PM) emissions shall not exceed 3.0 tons per year calculated as a 12-month rolling sum.

002 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NO_x emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input (daily average).

Fuel Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Only the refinery fuel gas and/or natural gas shall be combusted in the FCCU feed heater.

Throughput Restriction(s).**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The FCCU feed heater heat input shall be limited to 63 MMBtu/hr, or less, calculated as a 365-day rolling average.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall conduct a stack test for nitrogen oxides (NO_x) and carbon monoxide (CO) emissions from this source, while firing at normal or average rates, once per permit term, but no less frequent than once every five (5) years.

(b) The permittee shall ensure that all testing is done in accordance with the provisions of 25 Pa. Code Chapter 139 and with the conditions in Section C: Testing Requirements.

[Compliance with this condition assures compliance with the RACT testing requirement in accordance with 25 Pa. Code § 129.115(b)(6).]

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep records of the emissions of the pollutant(s) under Emissions Restriction for this unit in tons per month and 12-month rolling sum.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 007 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 735

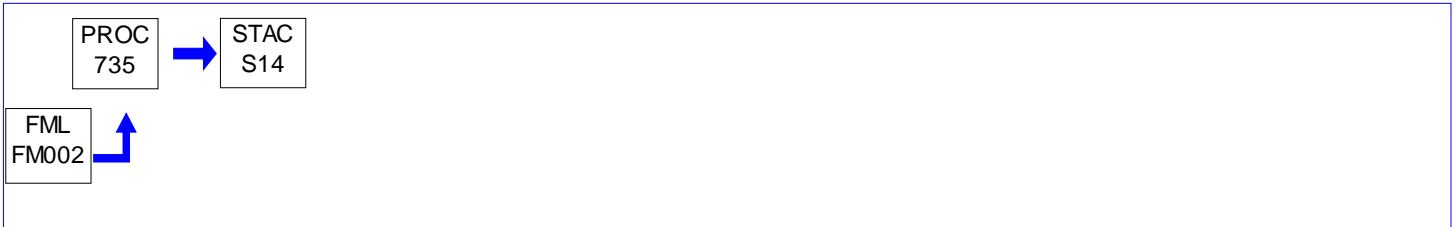
Source Name: KEROSENE/HCN HTU HEATER

Source Capacity/Throughput: 23.000 MMBTU/HR

28.000 MCF/HR

Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 25
GROUP 30
GROUP 35

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**(a) Nitrogen Oxides (NO_x) emissions shall not exceed 14.32 tons per year calculated as a 12-month rolling sum.

(b) Carbon Monoxide (CO) emissions shall not exceed 12.09 tons per year as a 12-month rolling sum.

Throughput Restriction(s).**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall limit the heat input of FCC heavy naphtha hydrodesulfurization unit heater to 23 MMBtu/hr, calculated as a 365-day rolling average.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

The permittee shall keep records of the emissions of the pollutant(s) under Emissions Restriction for this unit in tons per month and 12-month rolling sum.

004 [25 Pa. Code §129.114]**Alternative RACT proposal and petition for alternative compliance schedule**Recordkeeping related to the tune ups performed including, dates, service provider, operating rate or loads, CO and NO_x emission rates, and final excess oxygen rate.

**SECTION D. Source Level Requirements****V. REPORTING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The FCC heavy naphtha hydrodesulfurization unit and related emission points and affected sources as specified in 40 C.F.R. §63.640 is subject to Subpart CC of the National Emission Standards for Hazardous Air Pollutants and shall comply with all applicable requirements of this Subpart. 40 C.F.R. §63.13 requires submission of copies of all requests, reports, applications, submittals, and other communications to both the EPA and the Department. The EPA copies shall be forwarded to the address specified in Condition #020 of Section B of this permit.

VI. WORK PRACTICE REQUIREMENTS.**# 006 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

007 [25 Pa. Code §129.114]**Alternative RACT proposal and petition for alternative compliance schedule**

Annual tune-up or once in five (5) years if equipped with oxygen trim system.

VII. ADDITIONAL REQUIREMENTS.

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

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

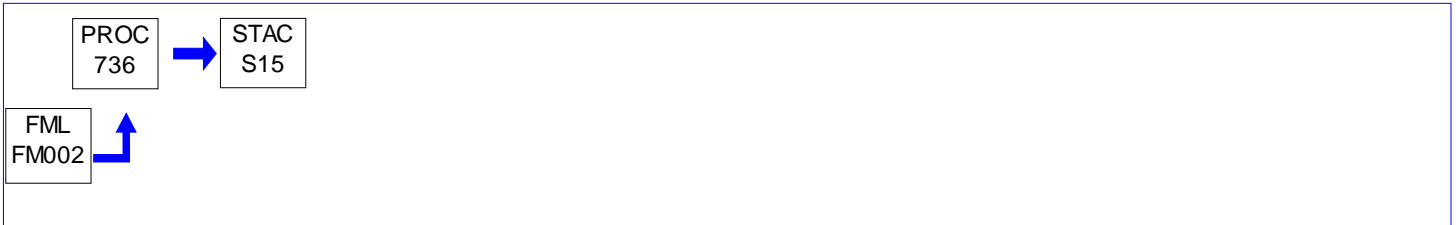
**SECTION D. Source Level Requirements**

Source ID: 736

Source Name: DIESEL HTU HEATER

Source Capacity/Throughput: 39.000 MMBTU/HR
39.000 MCF/HR Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 25
GROUP 30
GROUP 35

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

- (a) Nitrogen Oxides (NO_x) emissions shall not exceed 24.36 tons per year calculated as a 12-month rolling sum.
- (b) Carbon Monoxide (CO) emissions shall not exceed 14.2 tons per year calculated as a 12-month rolling sum.
- (c) Volatile Organic Compounds (VOCs) emissions shall not exceed 3.4 tons per year calculated as a 12-month rolling sum.
- (d) Particulate Matter (PM) emissions shall not exceed 1.5 tons per year calculated as a 12-month rolling sum.
- (e) The permittee shall calculate emissions using emission factors developed from the most recent emissions test approved by the Department.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

The permittee shall keep records of the emissions of the pollutant(s) under Emissions Restriction for this unit in tons per month and 12-month rolling sum.

003 [25 Pa. Code §129.114]**Alternative RACT proposal and petition for alternative compliance schedule**

Recordkeeping related to the tune ups performed including, dates, service provider, operating rate or loads, CO and NO_x emission rates, and final excess oxygen rate.

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

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

VI. WORK PRACTICE REQUIREMENTS.**# 004 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

005 [25 Pa. Code §129.114]**Alternative RACT proposal and petition for alternative compliance schedule**

Annual tune-up or once in five (5) years if equipped with oxygen trim system.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 737

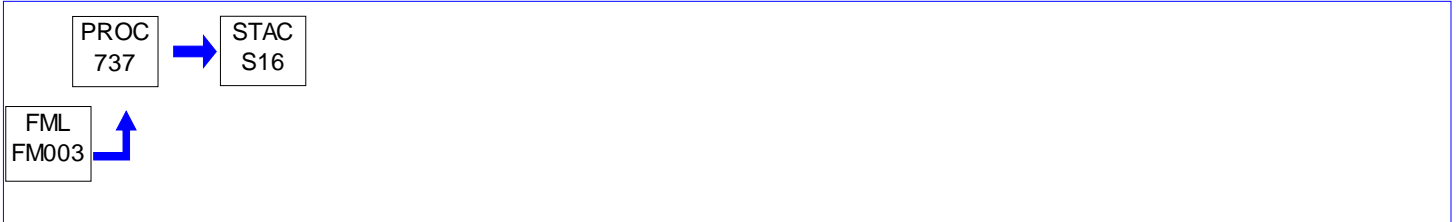
Source Name: NAPHTHA HDS HEATER

Source Capacity/Throughput: 76.000 MMBTU/HR

93.000 MCF/HR

Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 40

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

(a) VOC emissions from this source shall not exceed 1.74 tons per year, based on a 12-month rolling sum.

(b) PM-2.5 emissions from this source shall not exceed 2.41 tons per year, based on a 12-month rolling sum.

002 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NOx emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NOx/million Btu heat input (daily average).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

The permittee shall calculate and maintain records of VOC and PM-2.5 emissions for this source on a monthly and 12-month rolling sum basis.

V. REPORTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 004 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 738

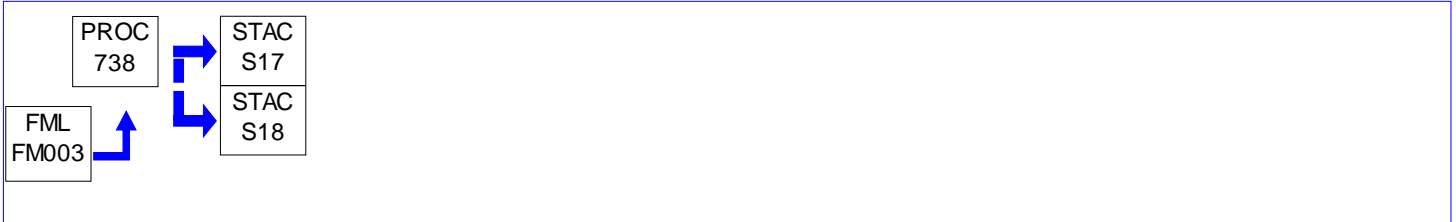
Source Name: PLATFORMER FEED HEATER

Source Capacity/Throughput: 913.000 MMBTU/HR

1,310.000 MCF/HR

Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 40

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

The emissions from this source shall not exceed either of the following:

(a) NO_x emissions:

- (1) 0.12 lbs/MMBtu heat input; and
 - (2) 317.0 tons in any 12 consecutive month period.
- [RACT-strengthening condition]

(b) The permittee shall not exceed SO₂ emissions limit of 0.011 lbs/MMBtu on a 12-month rolling average, calculated monthly.

(c) PM-2.5 emissions from this source shall not exceed 17.19 tons per year, based on a 12-month rolling sum.

002 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NO_x emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input (daily average).

Fuel Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Only RFG and/or natural gas shall be fired in this source.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.104]**Subpart J - Standards of Performance for Petroleum Refineries
Standards for sulfur oxides.**

The permittee shall not burn in this source any fuel gas that contains H₂S in excess of 48 ppmv on a 12-month rolling average, calculated monthly.

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

This source shall be limited to a 12 consecutive month average firing rate of 750 MMBtu/hr, when firing on RFG.

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

The source shall be equipped with twenty-four (24) Ultra Low-NO_x Burners (ULNB) (installed in 2006) and the eighty-four (84) previously installed Low NO_x Burners (LNB) to achieve NO_x emission limits specified in Condition #001 above.

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

(a) The permittee shall perform a stack test using Department approved procedures for the source once per permit term, but no less frequently than once every 5 years. The stack test results shall be submitted for review no later than six (6) months before the permit expiration.

(b) The stack test shall, at a minimum, test for the NO_x and CO. Tests shall be conducted in accordance with EPA test methods, 25 Pa. Code Chapter 139, and the testing requirements found in Section C of this operating permit, and is to occur while the unit is firing at normal or average rates.

(c) The permittee shall ensure that all testing is done in accordance with the provisions of 25 Pa. Code Chapter 139, 40 C.F.R. 60 Subparts A and J, and 40 C.F.R. 63, Subparts A and UUU, and the Testing Requirements specified in Condition II, Section C of this permit.

III. MONITORING REQUIREMENTS.

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

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

The permittee shall calculate and maintain records of PM-2.5 emissions for this source on a monthly and 12-month rolling sum basis.

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

The permittee shall keep records of the emissions of the pollutant(s) under Emissions Restriction for this unit in tons per month and 12-month rolling sum.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 010 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

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

**SECTION D. Source Level Requirements**

Source ID: 739

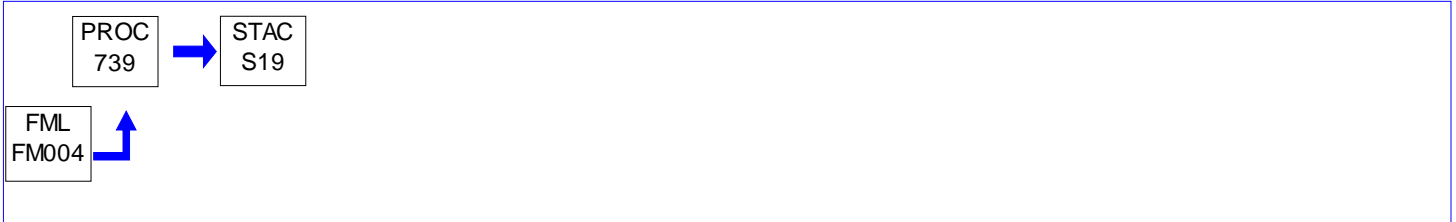
Source Name: ISOCRACKER 1ST STAGE HEATER.

Source Capacity/Throughput: 50.000 MMBTU/HR

80.000 MCF/HR

Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 35

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

When firing on refinery fuel gas (RFG), emissions shall not exceed the following:

(a) NO_x - 0.2 lbs/MMBtu heat input and 30.66 tons in any 12 consecutive month period [RACT-Strengthening condition]; and

(b) SO₂ - 0.011 lbs/MMBtu, on a 12-month rolling average, calculated monthly.

002 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NO_x emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input (daily average).

Fuel Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

H₂S concentration in the fuel gas shall not exceed 48 ppmv on a 12-month rolling average, calculated monthly.

Throughput Restriction(s).**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The source shall be limited to an annual average firing rate of 50 MMBtu/hr, when firing on RFG.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Demonstration of compliance with the H₂S limit for this source shall be documented through the use of the Department approved CMS data.

006 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

The permittee shall keep records of the emissions of the pollutant(s) under Emissions Restriction for this unit in tons per month and 12-month rolling sum.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 007 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION D. Source Level Requirements**

Source ID: 740

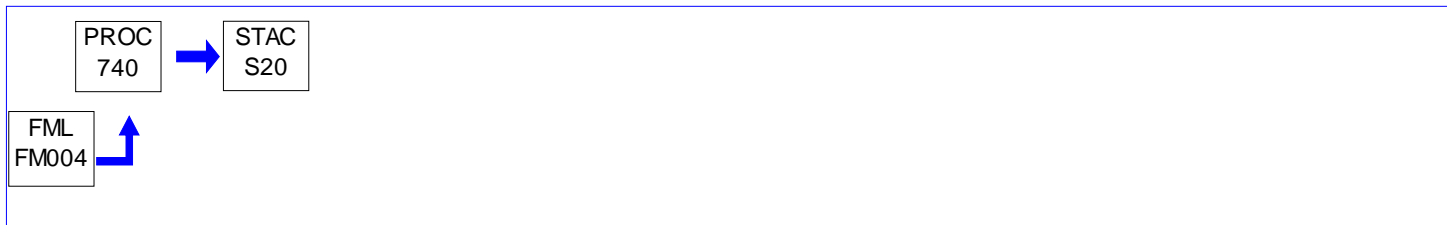
Source Name: ISOCRACKER SPLITTER RBLR

Source Capacity/Throughput: 76.000 MMBTU/HR

109.000 MCF/HR

Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 35

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**Presumptive NO_x emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input (daily average).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

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

Demonstration of compliance with the H₂S limit for this source shall be documented through the use of the Department approved CMS data.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 003 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

Source ID: 741

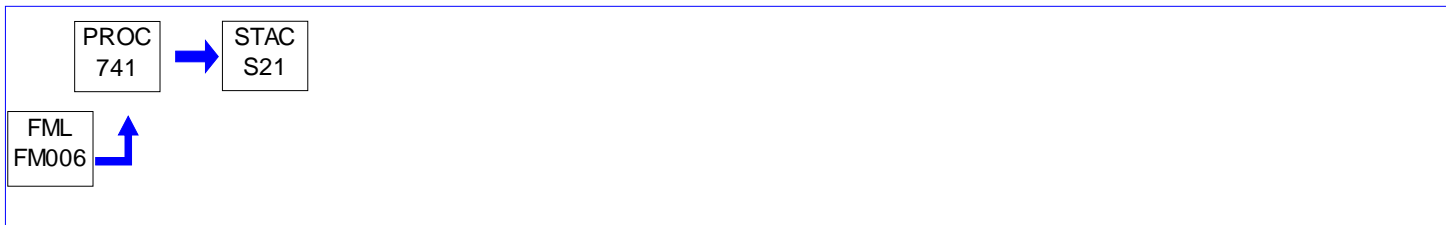
Source Name: D2/VGO HYDROTREATER FEED HEATER

Source Capacity/Throughput: 56.000 MMBTU/HR

80.000 MCF/HR

Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 35

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NOx emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NOx/million Btu heat input (daily average).

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 002 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

Source ID: 742

Source Name: VCD 541 VAC HEATER

Source Capacity/Throughput:	56.000	MMBTU/HR	
	80.000	MCF/HR	Refinery Gas
	100.000	MCF/HR	Natural Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 35

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

001 [25 Pa. Code §129.112]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule

Presumptive NOx emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NOx/million Btu heat input (daily average).

Fuel Restriction(s).

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

This source shall only operate on refinery fuel gas or natural gas.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The CMS for H₂S, as previously approved by the Department, must be operated and maintained in accordance with the quality assurance, recordkeeping and reporting requirements of Chapter 139 of the Department of Environmental Protection's Rules and Regulations and the Department's Continuous Source Monitoring Manual. The required data reports shall be submitted to the Department's Central Office, in hardcopy and computer readable-media formats as specified by the Department, within thirty (30) days following the close of each calendar quarter.

004 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.

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

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

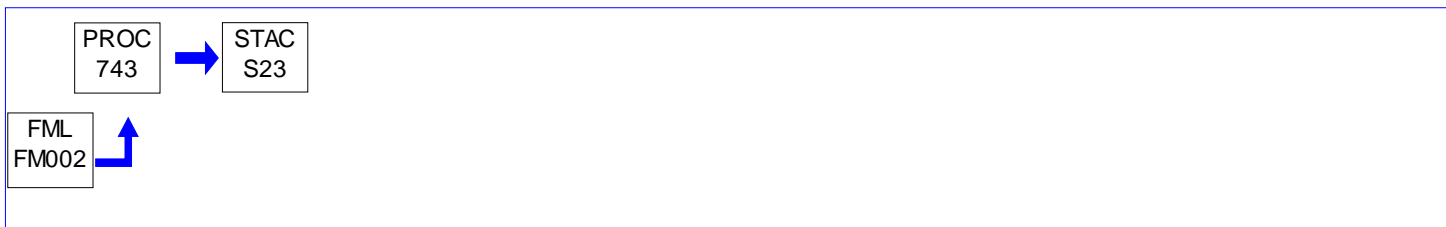
**SECTION D. Source Level Requirements**

Source ID: 743

Source Name: VCD 542 VAC HEATER

Source Capacity/Throughput:	72.000	MMBTU/HR	
	103.000	MCF/HR	Refinery Gas
	100.000	MCF/HR	Natural Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 35

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

The following emission limits shall not be exceeded:

- (a) VOCs - 0.18 lbs/hr, and 0.79 tons in any 12 consecutive month period.
- (b) NOx - 0.25 lbs/MMBtu heat input, 10.8 lbs/hr, and 31.3 tons in any 12 consecutive month period.
- (c) SO₂ - 1.78 lbs/hr, and 7.8 tons in any 12 consecutive month period.
- (d) CO - 4.0 lbs/hr, and 13.8 tons in any 12 consecutive month period.
- (e) PM - 1.0 lbs/hr, and 3.1 tons in any 12 consecutive month period. [Compliance with these limits assures compliance with 25 Pa. Code §123.11(a)(2).]

002 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NOx emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NOx/million Btu heat input (daily average).

Fuel Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) This source shall only fire refinery fuel gas or natural gas.
- (b) The amount of refinery gas combusted in this source shall not exceed 72 MMBtu/hr on a daily basis and 500,550 MMBtus calculated on a 365 day rolling period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep records of the emissions of the pollutant(s) under Emissions Restriction for this unit in tons per month and 12-month rolling sum.

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

The CMS for H₂S, as approved by the Department, must be operated and maintained in accordance with the quality assurance, recordkeeping and reporting requirements of Chapter 139 of the Department of Environmental Protection's Rules and Regulations and the Department's Continuous Source Monitoring Manual. The required data reports shall be submitted to the Department's Central Office, in hardcopy and computer readable-media formats as specified by the Department, within thirty (30) days following the close of each calendar quarter.

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

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

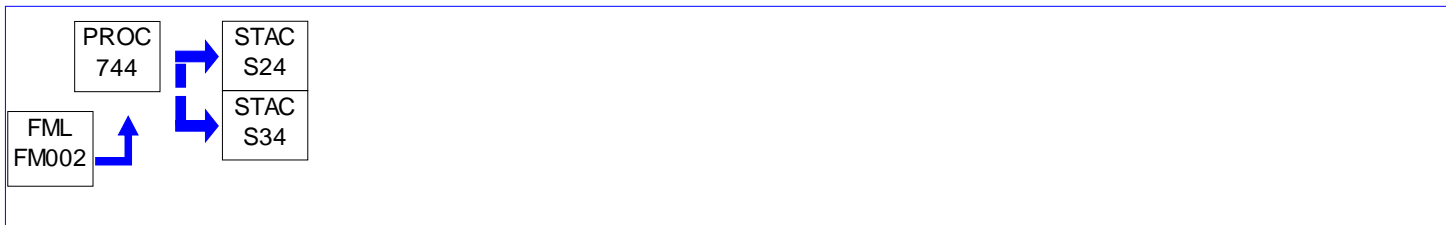
**SECTION D. Source Level Requirements**

Source ID: 744

Source Name: ACD 543 CRUDE HEATER

Source Capacity/Throughput: 514.000 MCF/HR Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 35

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

The emissions from this source shall not exceed either of the following:

(a) NO_x emissions :

(1) 0.2 lbs/MMBtu heat input on a daily average basis when firing on refinery gas. [Compliance with this condition assures compliance with 25 Pa. Code § 129.112(g)(1)(iv).]

(b) VOC emissions from this source shall not exceed 7.07 tons per year, based on a 12-month rolling sum.

(c) PM-2.5 emissions from this source shall not exceed 9.76 tons per year, based on a 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

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

The permittee shall use a CMS to monitor the H₂S content of the refinery fuel gas, being burned in this source. This data shall be used to demonstrate compliance with the SO₂ limit for this source.

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

The permittee shall calculate and maintain records of VOC and PM-2.5 emissions for this source on a monthly and 12-month rolling sum basis.

V. REPORTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 004 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.

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

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

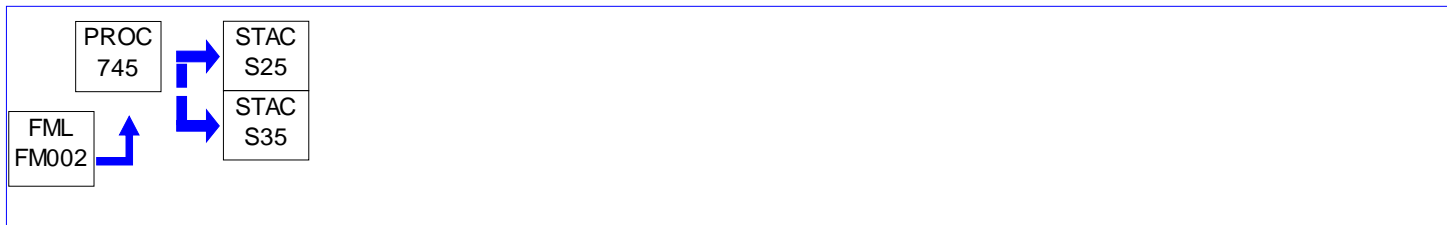
**SECTION D. Source Level Requirements**

Source ID: 745

Source Name: ACD 544 CRUDE HEATER

Source Capacity/Throughput: 514.000 MCF/HR Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 40

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

NOx emissions shall not exceed 0.2 lb/MMBtu heat input when firing refinery fuel gas.

[Compliance with this condition assures compliance with 25 Pa. Code § 129.112(g)(1)(iv).]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The Permittee shall use a CMS to monitor the H2S content of the refinery fuel gas being burned in this source. This data shall be used to demonstrate compliance with the SO2 emission limit for this source.

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

003 [25 Pa. Code §129.112]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

Source ID: 746

Source Name: VCD 544 VAC HEATER

Source Capacity/Throughput:

229.000 MCF/HR

Refinery Gas

Conditions for this source occur in the following groups: GROUP 15
GROUP 30
GROUP 35

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

(a) Nitrogen Oxides (NO_x) emissions shall not exceed 0.06 lb/MMBtu heat input and 42.05 tons per year calculated as a 12-month rolling sum. [RACT-strengthening condition]

(b) Carbon Monoxide (CO) emissions shall not exceed 84.1 tons per year calculated as a 12-month rolling sum.

(c) Volatile Organic Compounds (VOCs) emissions shall not exceed 5.5 tons per year calculated as a 12-month rolling sum.

(d) Particulate Matter (PM) emissions shall not exceed 9.1 tons per year calculated as a 12-month rolling sum.

002 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NO_x emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input (daily average).

Fuel Restriction(s).**# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Only the refinery fuel gas and/or natural gas shall be combusted in the 544 Vacuum Heater.

Throughput Restriction(s).**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The heat input of 544 Vacuum Heater shall be limited to 160 MMBtu/hr, or less, calculated as a 365-day rolling average.

**SECTION D. Source Level Requirements****Control Device Efficiency Restriction(s).****# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall install, operate, and maintain next generation ultra-low NO_x burners to control the emissions of NO_x from the 544 Vacuum Heater. The next generation ultra-low NO_x burners shall be installed, operated, and maintained in accordance with manufacturer's specifications as well as good air pollution control practices.

II. TESTING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall conduct a stack test to determine the nitrogen oxides (NO_x), and carbon monoxide (CO) emissions from the source, while the unit is firing at average rates, once per permit term, but no less frequent than once every five (5) years.

III. MONITORING REQUIREMENTS.**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall use a CMS to monitor the H₂S content of the refinery fuel gas being burned in this source. This data will be used to demonstrate compliance with the SO₂ emission limit for this source.

IV. RECORDKEEPING REQUIREMENTS.**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep records of the emissions of the pollutant(s) under Emissions Restriction for this unit in tons per month and 12-month rolling sum.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.**# 009 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 747A

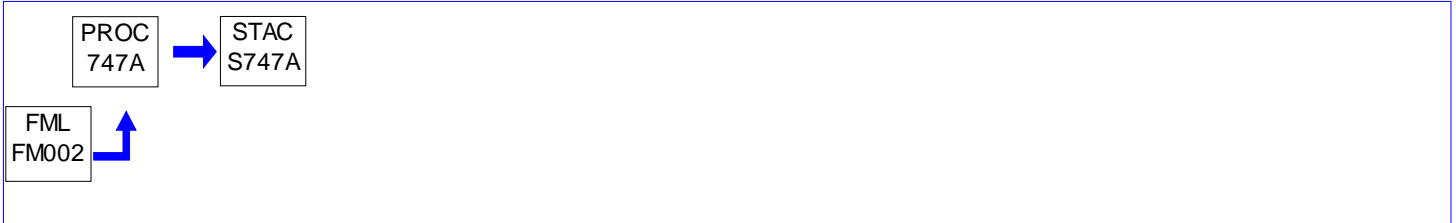
Source Name: REACTOR EFFLUENT HEATER H-124-01 (H01)

Source Capacity/Throughput: 71.760 MMBTU/HR

60,710.000 CF/HR

Refinery Gas

Conditions for this source occur in the following groups: GROUP 45

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.11]****Combustion units**

Particulate matter emissions into the outdoor atmosphere from this combustion unit shall not exceed the rate determined by the following formula:

$$A = 3.6E^{(-0.56)}$$

where

A = Allowable emissions in pounds per million BTUs of heat input, and

E = Heat input to the combustion unit in millions of BTUs per hour,

when E is equal to or greater than 50 but less than 600.

002 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

Emissions from this process heater shall not exceed the following:

- (a) Nitrogen Oxides (NO_x) = 11.00 tons per year, calculated as a 12-month rolling sum.
- (b) Volatile Organic Compounds (VOC) = 1.57 tons per year, calculated as a 12-month rolling sum.
- (c) Carbon Monoxide (CO) = 8.52 tons per year, calculated as a 12-month rolling sum.
- (d) Sulfur Dioxide (SO₂) = 2.21 tons per year, calculated as a 12-month rolling sum.
- (e) Particulate Matter (PM/PM-10/PM-2.5) = 1.57 tons per year, calculated as a 12-month rolling sum.

003 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NO_x emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.**# 004 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

This source consists of a Reactor Effluent Heater manufactured by Optimized Process Furnaces, Inc. with a rated capacity of 71.76 MMBtu/hr. The burners are manufactured by Zeeco with model number GLSF-13. There are a total of 6 burners, each rated at 11.96 MMBtu/hr. This heater is equipped with a low-NOx burners.

*** **Permit Shield in Effect.** ***

**SECTION D. Source Level Requirements**

Source ID: 748A

Source Name: STRIPPER REBOILER HEATER H-124-02 (H02)

Source Capacity/Throughput: 44.200 MMBTU/HR

37,394.000 CF/HR

Refinery Gas

Conditions for this source occur in the following groups: GROUP 45

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §123.11]****Combustion units**

A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of 0.4 pounds per million Btu of heat input, pursuant to 25 Pa. Code § 123.11(a)(1).

002 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

Emissions from this process heater shall not exceed the following:

- (a) Nitrogen Oxides (NO_x) = 6.77 tons per year, calculated as a 12-month rolling sum.
- (b) Volatile Organic Compounds (VOC) = 0.97 tons per year, calculated as a 12-month rolling sum.
- (c) Carbon Monoxide (CO) = 5.25 tons per year, calculated as a 12-month rolling sum.
- (d) Sulfur Dioxide (SO₂) = 1.36 tons per year, calculated as a 12-month rolling sum.
- (e) Particulate Matter (PM/PM-10/PM-2.5) = 0.97 tons per year, calculated as a 12-month rolling sum.

003 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NO_x emission limitation:

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.**

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.**# 004 [25 Pa. Code §129.112]****Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

This source consists of a Stripper Reboiler Heater manufactured by Tulsa Heaters, Inc. with a rated capacity of 44.2 MMBtu/hr. The burners are manufactured by Callidus with model number CUBL. There are a total of 4 burners, each rated at 11.05 MMBtu/hr. This heater is equipped with a low-NOx burners.

***** Permit Shield in Effect. *****

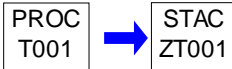
**SECTION D. Source Level Requirements**

Source ID: T001

Source Name: MACT GROUP 1, INT FLOAT ROOF TANKS

Source Capacity/Throughput:

1.000 BBL/HR

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

(a) Per 40 CFR §63.660(b), a floating roof storage vessel complying with the requirements of Subpart WW of this part may comply with the control option specified in 40 CFR §63.660(b)(1) and, if equipped with a ladder having at least one slotted leg, shall comply with one of the control options as described in 40 CFR §63.660(b)(2) of this section. If the floating roof storage vessel does not meet the requirements of 40 CFR §§63.1063(a)(2)(i) through (a)(2)(viii) as of June 30, 2014, these requirements do not apply until the next time the vessel is completely emptied and degassed, or January 30, 2026, whichever occurs first.

(1) In addition to the options presented in 40 CFR §§63.1063(a)(2)(viii)(A) and (B) and 40 CFR §63.1064, a floating roof storage vessel may comply with 40 CFR §63.1063(a)(2)(vi) using a flexible enclosure device and either a gasketed or welded cap on the top of the guidepole.

(2) Each opening through a floating roof for a ladder having at least one slotted leg shall be equipped with one of the configurations specified in 40 CFR §§63.660(b)(2)(i) through (iii) of this section.

(i) A pole float in the slotted leg and pole wipers for both legs. The wiper or seal of the pole float must be at or above the height of the pole wiper.

(ii) A ladder sleeve and pole wipers for both legs of the ladder.

(iii) A flexible enclosure device and either a gasketed or welded cap on the top of the slotted leg.

(b) If the permittee elects to change any tank(s) in this source to MACT Group 2 status (Source T003), such tank(s) shall comply with the provisions outlined for MACT Group 2 tanks (Source T003), rather than the provisions of MACT Group 1 tanks presented in this source.

II. TESTING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

Under 40 CFR §63.660(a)(2) the permittee is allowed to use appropriate methods as published by the U.S. EPA or a consensus-based standards organization (e.g., American Society for Testing and Materials [ASTM], ANSI standards, American Galvanizer's Association [AGA]), as stated below:

(a) When a permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing source or above or below 2 percent for a storage vessel at a new source, an appropriate method (based on the type of liquid stored) as published by EPA or a consensus-based standards organization shall be used. Consensus-based standards organizations include, but are not limited to, the following: ASTM, ANSI, AGA etc.

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

(1) Internal floating roofs shall be inspected as specified in 40 CFR §63.1063(d)(1) of this section before the initial filling of the storage vessel. Subsequent inspections shall be performed as specified in 40 CFR §63.1063(c)(1)(i) or (c)(1)(ii).

(i) Internal floating roofs shall be inspected as specified in 40 CFR §63.1063(c)(1)(i)(A) and (c)(1)(i)(B).

(A) At least once per year the IFR shall be inspected as specified in paragraph 40 CFR §63.1063(d)(2).

(B) Each time the storage vessel is completely emptied and degassed, or every 10 years, whichever occurs first, the IFR shall be inspected as specified in 40 CFR §63.1063(d)(1).

(ii) Instead of the inspection frequency specified in 40 CFR §63.1063(c)(1)(i), internal floating roofs with two rim seals may be inspected as specified in 40 CFR §63.1063(d)(1) each time the storage vessel is completely emptied and degassed, or every 5 years, whichever occurs first.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

In accordance with 40 C.F.R. §63.1063(d)(1) and (2), floating roof inspection procedures shall be conducted as specified in paragraphs (1) through (d)(2) below, as applicable. If a floating roof fails an inspection, the owner or operator shall comply with the repair requirements of 40 C.F.R. §63.1063(e) covered under the Work Practice requirements.

(1) Inspections shall be conducted by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is visual access to all deck components specified in 40 C.F.R. §63.1063(a). Any of the conditions described in paragraphs (i) through (v) below constitutes inspection failure.

(i) Stored liquid on the floating roof.

(ii) Holes or tears in the primary or secondary seal (if one is present).

(iii) Floating roof deck, deck fittings, or rim seals that are not functioning as designed (as specified in paragraph (a) of this section).

(iv) Failure to comply with the operational requirements of 40 C.F.R. §63.1063(b).

(v) Gaps of more than 0.32 centimeters (1/8 inch) between any deck fitting gasket, seal, or wiper (required by 40 C.F.R. §63.1063(a)) and any surface that it is intended to seal.

(2) Tank-top inspections shall be conducted by visually inspecting the floating roof deck, deck fittings, and rim seal through openings in the fixed roof. Any of the conditions described in paragraphs (1)(i) through (1)(iv) above constitutes inspection failure. Identification of holes or tears in the rim seal is required only for the seal that is visible from the top of the storage vessel.

IV. RECORDKEEPING REQUIREMENTS.**# 005 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

The permittee shall record when the status of any of these individual tanks is changed from MACT, Group 1 status.

006 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

Throughput type, and amount, for each individual tank, shall be recorded on a monthly basis.

**SECTION D. Source Level Requirements****# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

(a) As specified at 40 CFR §63.655(i)(1)(v) the permittee a Group 1 storage vessel subject to the provisions in 40 CFR §63.660 shall keep records as specified in 40 CFR §63.1065. The permittee shall keep the records required in 40 CFR §63.1065(a) for as long as liquid is stored. Records required in 40 CFR §63.1065(b), (c) and (d) of this section shall be kept for at least 5 years. Records shall be kept in such a manner that they can be readily accessed within 24 hours. Records may be kept in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.

(1) Vessel dimensions and capacity. A record shall be kept of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored.

(2) Inspection results. Records of floating roof inspection results shall be kept as specified in 40 CFR §63.1065(b)(1).

(3) Floating roof landings. The permittee shall keep a record of the date when a floating roof is set on its legs or other support devices. The owner or operator shall also keep a record of the date when the roof was refloated, and the record shall indicate whether the process of refloating was continuous.

(4) A permittee who cannot safely empty and repair a vessel within 45 days may use up to two 30-day extensions and document as required by 40 CFR §63.1063(e)(2) or 40 CFR §63.1063(c)(2)(iv)(B).

(b) For storage vessels subject to 40 CFR Part 63, Subpart CC, Periodic Reports must include the information specified in 40 CFR §63.655(g)(2)-(5).

(c) For the storage vessel subject to the provisions in 40 CFR §63.660, the permittee shall keep records as specified in 40 CFR §63.655(i)(1)(v).

(d) For storage vessels subject to the compliance schedule specified in 40 CFR §63.640(h)(2), the permittee shall submit the Notice of Compliance Status report that includes the information specified in 40 CFR §63.655(f)(1)(i)(A)-(D) as applicable.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 129.56(h).]

V. REPORTING REQUIREMENTS.**# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

(a) Per 40 CFR §63.655(h)(2)(i)(A), the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAPs to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

(b) Per 40 CFR §63.655(h)(2)(i)(B), if the internal inspection required is not planned, and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel, followed by written documentation demonstrating why the inspection was unplanned, which shall also be provided at least 7 calendar days in advance of the refilling.

(c) Periodic Reporting elements specified in 40 CFR §63.655(g)(2) must be submitted within 60 days of the close of the semiannual period.

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

(a) Per 40 CFR §63.660(a)(1), permittee may use good engineering judgment or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

Repair requirements. Conditions causing inspection failures under 40 C.F.R. §1063(d) shall be repaired as specified below:

(1) If the inspection is performed while the storage vessel is not storing liquid, repairs shall be completed before the refilling of the storage vessel with liquid; or

(2) If the inspection is performed while the storage vessel is storing liquid, repairs shall be completed or the vessel removed from service within 45 days. If a repair cannot be completed and the vessel cannot be emptied within 45 days, the permittee may use up to 2 extensions of up to 30 additional days each. Documentation of a decision to use an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be completely emptied as soon as practical.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

Operational requirements, in accordance with 40 C.F.R. §63.1065(b), are as follow:

(a) The floating roof shall float on the stored liquid surface at all times, except when the floating roof is supported by its leg supports or other support devices (e.g., hangers from the fixed roof).

(b) When the storage vessel is storing liquid, but the liquid depth is insufficient to float the floating roof, the process of filling to the point of refloating the floating roof shall be continuous and shall be performed as soon as practical.

(c) Each cover over an opening in the floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access.

(d) Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design.

(e) Each unslotted guidepole cap shall be closed at all times except when gauging the liquid level or taking liquid samples.

VII. ADDITIONAL REQUIREMENTS.**# 012 [25 Pa. Code §127.503]****Application information.**

As of the issuance date of this permit, this source consists of the following individual tanks, subject to MACT, Group 1, Internal Floating Roof Requirements:

- DEP Source ID 134, capacity - 15 Mbarrels
- DEP Source ID 153, capacity - 83 Mbarrels

*** Permit Shield in Effect. ***

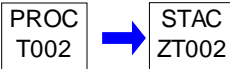
**SECTION D. Source Level Requirements**

Source ID: T002

Source Name: MACT GROUP 1, EXT FLOATING TANKS

Source Capacity/Throughput:

1.000 BBL/HR

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

(a) Per 40 CFR §63.660(b), a floating roof storage vessel complying with the requirements of 40 CFR Part 63 Subpart WW may comply with the control option specified in 40 CFR §63.660 (b)(1) and, if equipped with a ladder having at least one slotted leg, shall comply with one of the control options as described in 40 CFR §63.660(b)(2). Per 40 CFR §63.660(d), an uncontrolled fixed roof storage vessel that commenced construction on or before June 30, 2014 that meets the "Group 1 storage vessel" definition in 40 CFR §63.641(2) does not need to comply with 40 CFR Part 63, Subpart WW until the next time the vessel is completely emptied and degassed, or January 30, 2026, whichever occurs first.

(1) In addition to the options presented in 40 CFR §63.1063(a)(2)(viii)(A) and (B) and 40 CFR §63.1064, a floating roof storage vessel may comply with 40 CFR §63.1063(a)(2)(vii) using a flexible enclosure device and either a gasketed or welded cap on the top of the guidepole.

(2) Each opening through a floating roof for a ladder having at least one slotted leg shall be equipped with one of the configurations specified in 40 CFR §63.660(b)(2)(i) through (iii).

(i) A pole float in the slotted leg and pole wipers for both legs. The wiper or seal of the pole float must be at or above the height of the pole wiper.

(ii) A ladder sleeve and pole wipers for both legs of the ladder.

(iii) A flexible enclosure device and either a gasketed or welded cap on the top of the slotted leg.

(b) If the permittee elects to change any tank(s) in this source to MACT Group 2 status (Source T003), such tank(s) shall comply with the provisions outlined for MACT Group 2 tanks (Source T003), rather than the provisions of MACT Group 1 tanks presented in this source.

II. TESTING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

[Additional authority for this permit condition is derived from 25. Pa. Code §127.441.]

Under 40 CFR §63.660(a)(2) the permittee is allowed to use appropriate methods as published by the U.S. EPA or a consensus-based standards organization (e.g., ASTM, ANSI standards), as stated below:

(a) When a permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing source or above or below 2 percent for a storage vessel at a new source, an appropriate method (based on the type of liquid stored) as published by EPA or a consensus-based standards organization shall be used. Consensus-based standards organizations include, but are not limited to, the following: ASTM, ANSI, AGA, etc.

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

[Additional authority for this permit condition is derived from 25. Pa. Code §127.441.]

(a) Per 40 C.F.R. §63.1063(c)(2)(i), within 90 days of initial fill or refill, primary and secondary rim seal gap measurements must be conducted as specified in 40 C.F.R. §63.1063(d)(3).

(b) Per 40 C.F.R. §63.1063(c)(2)(ii), the secondary seal shall be inspected at least once every year, and the primary seal shall be inspected at least every 5 years, as specified in 40 C.F.R. §1063(d)(3).

(c) Per 40 C.F.R. §63.1063(c)(1)(iii), each time the storage vessel is completely emptied and degassed, or every 10 years, whichever occurs first, the EFR shall be inspected as specified in 40 C.F.R. §1063(d)(1).

(d) If the permittee determines that it is unsafe to perform the floating roof inspections specified in paragraphs 40 C.F.R. §§1063(c)(2)(i) and (c)(2)(ii), the permittee shall comply with the requirements of paragraph 40 C.F.R. §§1063(c)(2)(iv)(A) or (c)(2)(iv)(B).

(1) The inspections shall be performed no later than 30 days after the determination that the floating roof is unsafe.

(2) The storage vessel shall be removed from liquid service no later than 45 days after determining the floating roof is unsafe. If the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional days each. If the vessel cannot be emptied within 45 days, the permittee may utilize up to two extensions of up to 30 additional days each. Documentation of a decision to use an extension shall include an explanation of why it was unsafe to perform the inspection, documentation that alternative storage capacity is unavailable, and a schedule of actions that will ensure that the vessel will be emptied as soon as practical.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

In accordance with 40 C.F.R. §63.1063(d)(1), floating roof inspection procedures shall be conducted as specified in paragraph (1) below, as applicable. If a floating roof fails an inspection, the owner or operator shall comply with the repair requirements of 40 C.F.R. §63.1063(e) covered under the Work Practice requirements.

(1) Inspections shall be conducted by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. The inspection may be performed entirely from the top side of the floating roof, as long as there is visual access to all deck components specified in 40 C.F.R. §63.1063 (a) of this section. Any of the conditions described in paragraphs (i) through (v) below constitutes inspection failure.

(i) Stored liquid on the floating roof.

(ii) Holes or tears in the primary or secondary seal (if one is present).

(iii) Floating roof deck, deck fittings, or rim seals that are not functioning as designed (as specified in 40 C.F.R. §63.1063(a)).

(iv) Failure to comply with the operational requirements of 40 C.F.R. §63.1063(b).

(v) Gaps of more than 0.32 centimeters (1/8 inch) between any deck fitting gasket, seal, or wiper (required by 40 C.F.R. §63.1063(a)) and any surface that it is intended to seal.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 129.56(h).]

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

In accordance with 40 C.F.R. §1063(d)(3), seal gap inspections for EFR's shall determine the presence and size of gaps between the rim seals and the wall of the storage vessel by the procedures specified below. Any exceedance of the gap requirements specified in (b) and (c) constitutes inspection failure.

**SECTION D. Source Level Requirements**

(a) Rim seals shall be measured for gaps at one or more levels while the EFR is floating, as specified in paragraphs (1) through (6).

(1) The inspector shall hold a 0.32 centimeter (1/8 inch) diameter probe vertically against the inside of the storage vessel wall, just above the rim seal, and attempt to slide the probe down between the seal and the vessel wall. Each location where the probe passes freely (without forcing or binding against the seal) between the seal and the vessel wall constitutes a gap.

(2) The length of each gap shall be determined by inserting the probe into the gap (vertically) and sliding the probe along the vessel wall in each direction as far as it will travel freely without binding between the seal and the vessel wall. The circumferential length along which the probe can move freely is the gap length.

(3) The maximum width of each gap shall be determined by inserting probes of various diameters between the seal and the vessel wall. The smallest probe diameter should be 0.32 centimeter, and larger probes should have diameters in increments of 0.32 centimeter. The diameter of the largest probe that can be inserted freely anywhere along the length of the gap is the maximum gap width.

(4) The average width of each gap shall be determined by averaging the minimum gap width (0.32 centimeter) and the maximum gap width.

(5) The area of a gap is the product of the gap length and average gap width.

(6) The ratio of accumulated area of rim seal gaps to storage vessel diameter shall be determined by adding the area of each gap, and dividing the sum by the nominal diameter of the storage vessel. This ratio shall be determined separately for primary and secondary rim seals.

(b) The ratio of seal gap area to vessel diameter for the primary seal shall not exceed 212 square centimeters per meter of vessel diameter (10 square inches per foot of vessel diameter), and the maximum gap width shall not exceed 3.81 centimeters (1.5 inches).

(c) The ratio of seal gap area to vessel diameter for the secondary seal shall not exceed 21.2 square centimeters per meter (1 square inch per foot), and the maximum gap width shall not exceed 1.27 centimeters (0.5 inches), except when the secondary seal must be pulled back or removed to inspect the primary seal.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 129.56(h).]

IV. RECORDKEEPING REQUIREMENTS.

006 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

The permittee shall record when the status of any of these individual tanks is changed from MACT, Group 1 status.

007 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

Throughput type, and amount, for each individual tank, shall be recorded on a monthly basis.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]

**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Storage vessel provisions.**

[Additional authority for this permit condition is derived from 25. Pa. Code §127.441.]

(a) As specified at 40 CFR §63.655(i)(1)(v) the permittee of a Group 1 storage vessel subject to the provisions of 40 CFR §63.660 shall keep records as specified per 40 CFR §63.1065 as applicable. The permittee shall keep the records required in 40 CFR §63.1065(a) for as long as liquid is stored. Records required in 40 CFR §63.1065(b), (c) and (d) shall be kept for at least 5 years. Records shall be kept in such a manner that they can be readily accessed within 24 hours. Records may be kept in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk,

**SECTION D. Source Level Requirements**

magnetic tape, or microfiche.

(1) Vessel dimensions and capacity. A record shall be kept of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored.

(2) Inspection results. Records of floating roof inspection results shall be kept as specified in 40 CFR §63.1065(b)(1) and (b)(2).

(3) Floating roof landings. The permittee shall keep a record of the date when a floating roof is set on its legs or other support devices. The permittee shall also keep a record of the date when the roof was refloated, and the record shall indicate whether the process of refloating was continuous.

(4) A permittee who cannot safely empty and repair a vessel within 45 days may use up to two 30-day extensions and document as required by 40 CFR §63.1063(e)(2) or §63.1063(c)(2)(iv)(B).

(b) For storage vessels subject to 40 CFR Part 63, Subpart CC, Periodic Reports must include the information specified in 40 CFR §63.655(g)(2)-(5).

(c) For the storage vessel subject to the provisions in 40 CFR §63.660, the permittee shall keep records as specified in 40 CFR §63.655(i)(1)(v).

(d) For storage vessels subject to the compliance schedule specified in 40 CFR §63.640(h)(2), the permittee shall submit the Notice of Compliance Status report that includes the information specified in 40 CFR §63.655(f)(1)(i)(A)-(D) as applicable.

V. REPORTING REQUIREMENTS.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

Storage vessel provisions.

[Additional authority for this permit condition is derived from 25. Pa. Code §127.441.]

(a) Per 40 CFR §63.655(h)(2)(i)(A), the permittee shall notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel with organic HAPs to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

(b) Per 40 CFR §63.655(h)(2)(i)(B), if the internal inspection required is not planned, and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel, the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel, followed by written documentation demonstrating why the inspection was unplanned, which shall also be provided at least 7 calendar days in advance of the refilling.

(c) Per 40 CFR §63.655(h)(2)(ii), the permittee of a storage vessel equipped with an external floating roof shall notify the Administrator of any seal gap measurements 30 calendar days prior to the measurements. The State or local permitting authority can waive this notification requirement for all or some storage vessels subject to the rule or can allow less than 30 calendar days' notice.

(d) Periodic Reporting elements specified in 40 CFR §63.655(g)(3) must be submitted within 60 days of the close of the semiannual period.

VI. WORK PRACTICE REQUIREMENTS.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

Storage vessel provisions.

**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is derived from 25. Pa. Code §127.441.]

(a) Per 40 §63.660(a)(1)(1), a permittee may use good engineering judgment or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

Repair requirements. Conditions causing inspection failures under 40 C.F.R. §1063(d) shall be repaired as specified below:

(1) If the inspection is performed while the storage vessel is not storing liquid, repairs shall be completed before the refilling of the storage vessel with liquid; or

(2) If the inspection is performed while the storage vessel is storing liquid, repairs shall be completed or the vessel removed from service within 45 days. If a repair cannot be completed and the vessel cannot be emptied within 45 days, the permittee may use up to 2 extensions of up to 30 additional days each. Documentation of a decision to use an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be completely emptied as soon as practical.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

Operational requirements, in accordance with 40 C.F.R. §63.1065(b), are as follow:

(a) The floating roof shall float on the stored liquid surface at all times, except when the floating roof is supported by its leg supports or other support devices (e.g., hangers from the fixed roof).

(b) When the storage vessel is storing liquid, but the liquid depth is insufficient to float the floating roof, the process of filling to the point of refloating the floating roof shall be continuous and shall be performed as soon as practical.

(c) Each cover over an opening in the floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access.

(d) Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design.

(e) Each unslotted guidepole cap shall be closed at all times except when gauging the liquid level or taking liquid samples.

[Compliance with this streamlined permit condition assures compliance with 25 Pa. Code § 129.56(h).]

VII. ADDITIONAL REQUIREMENTS.**# 013 [25 Pa. Code §127.503]****Application information.**

As of the issuance date of this permit, the following individual tanks comprise this source subject to MACT Group 1, External Floating Roof requirements:

- DEP Source ID 123, capacity - 43 M barrels
- DEP Source ID 124, capacity - 43 M barrels
- DEP Source ID 126, capacity - 59 M barrels
- DEP Source ID 127, capacity - 59 M barrels
- DEP Source ID 136, capacity - 53 M barrels
- DEP Source ID 141, capacity - 53 M barrels

**SECTION D. Source Level Requirements**

- DEP Source ID 143, capacity - 79 Mbarrels
- DEP Source ID 144, capacity - 86 Mbarrels
- DEP Source ID 145, capacity - 82 Mbarrels
- DEP Source ID 146, capacity - 82 Mbarrels
- DEP Source ID 147, capacity - 83 Mbarrels
- DEP Source ID 148, capacity - 82 Mbarrels
- DEP Source ID 149, capacity - 83 Mbarrels
- DEP Source ID 155, capacity - 154 Mbarrels
- DEP Source ID 156, capacity - 151 Mbarrels
- DEP Source ID 157, capacity - 80 Mbarrels
- DEP Source ID 160, capacity - 129 Mbarrels
- DEP Source ID 161, capacity - 129 Mbarrels
- DEP Source ID 163, capacity - 150 Mbarrels
- DEP Source ID 164, capacity - 151 Mbarrels
- DEP Source ID 165, capacity - 244 Mbarrels
- DEP Source ID 166, capacity - 243 Mbarrels

*** **Permit Shield in Effect.** ***

**SECTION D. Source Level Requirements**

Source ID: T003

Source Name: MACT CC GROUP 2 TANKS

Source Capacity/Throughput:

1.000 BBL/HR

PROC
T003STAC
ZT003**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.640]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries**
Applicability and designation of affected source.

As applicable, 40 CFR §§63.640(n)(1), (3), (4), (6), and (7) apply for Group 2 storage vessels.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries**
Storage vessel provisions.

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

On and after February 1, 2016, a Group 2 storage vessel is defined as:

(i) A storage vessel at an existing source that has a design capacity greater than or equal to 151 cubic meters (40,000 gallons) and stored-liquid maximum true vapor pressure greater than or equal to 5.2 kilopascals (0.75 pounds per square inch) and annual average HAP liquid concentration greater than 4 percent by weight total organic HAP;

(ii) A storage vessel at an existing source that has a design storage capacity greater than or equal to 76 cubic meters (20,000 gallons) and less than 151 cubic meters (40,000 gallons) and stored-liquid maximum true vapor pressure greater than or equal to 13.1 kilopascals (1.9 pounds per square inch) and annual average HAP liquid concentration greater than 4 percent by weight total organic HAP;

(iii) A storage vessel at a new source that has a design storage capacity greater than or equal to 151 cubic meters (40,000 gallons) and stored-liquid maximum true vapor pressure greater than or equal to 3.4 kilopascals (0.5 pounds per square inch) and annual average HAP liquid concentration greater than 2 percent by weight total organic HAP; or

(iv) A storage vessel at a new source that has a design storage capacity greater than or equal to 76 cubic meters (20,000 gallons) and less than 151 cubic meters (40,000 gallons) and stored-liquid maximum true vapor pressure greater than or equal to 13.1 kilopascals (1.9 pounds per square inch) and annual average HAP liquid concentration greater than 2 percent by weight total organic HAP.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.****# 003 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

The permittee shall keep records of

- (a) The status change from MACT Group 2 of any tanks under Source ID T003;
- (b) The throughput, type of liquid, and amount, for each individual tank on a monthly basis.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.655]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Reporting and recordkeeping requirements.**

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

- (a) The permittee shall maintain records of the dimensions of the storage vessels and an analysis showing the capacity of the storage vessels for all tanks contained in this source.
- (b) If a storage vessel is determined to be a MACT Group 2 tank because the weight percent total organic HAP of the stored liquid is less than or equal to 4 percent for existing sources or 2 percent for new sources, a record of any data, assumptions, and procedures used to make this determination shall be retained.
- (c) The permittee shall maintain a list of tanks designated as MACT Group 1 or MACT Group 2 onsite, and update this list as necessary.

V. REPORTING REQUIREMENTS.**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Storage vessel provisions.**

- (a) For storage vessels subject to 40 CFR Part 63, Subpart CC, Periodic Reports must include the information specified in 40 CFR §63.655(g).
- (b) For the storage vessel subject to the provisions in 40 CFR §63.660, the permittee shall keep records as specified in 40 CFR §63.655(i)(1)(vi).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.**# 006 [25 Pa. Code §127.503]****Application information.**

As of the issuance date of this permit, this source consists of the following individual storage tanks that are subject to MACT Group 2 requirements:

- DEP Source ID 137, capacity - 61 Mbarrels, internal floating roof
- DEP Source ID 138, capacity - 53 Mbarrels, external floating roof
- DEP Source ID 140, capacity - 63 Mbarrels, internal floating roof
- DEP Source ID 142, capacity - 77 Mbarrels, external floating roof
- DEP Source ID 150, capacity - 79 Mbarrels, internal floating roof
- DEP Source ID 151, capacity - 78 Mbarrels, external floating roof
- DEP Source ID 154, capacity - 81 Mbarrels, external floating roof
- DEP Source ID 167, capacity - 9 Mbarrels, fixed roof
- DEP Source ID 168, capacity - 7 Mbarrels, fixed roof

**SECTION D. Source Level Requirements**

- DEP Source ID 194, capacity - 85 M barrels, internal floating roof
- DEP Source ID 180, capacity - 54 M barrels
- DEP Source ID 181, capacity - 54 M barrels
- DEP Source ID 182, capacity - 54 M barrels
- DEP Source ID 195, capacity - 93 M barrels
- DEP Source ID 376A, capacity - 140 M barrels
- DEP Source ID T62, capacity - 10 M barrels
- DEP Source ID 184, capacity - 8 M barrels
- DEP Source ID T84, capacity - 1 M barrels
- DEP Source ID T143, capacity - 9 M barrels
- DEP Source ID T144, capacity - 9 M barrels
- DEP Source ID T145, capacity - 10 M barrels
- DEP Source ID T146, capacity - 10 M barrels
- DEP Source ID T147, capacity - 10 M barrels
- DEP Source ID T148, capacity - 10 M barrels
- DEP Source ID 193, capacity - 56 M barrels
- Tank number 82TK2
- Tank number 312
- Tank number 313

If the permittee elects to change any tank(s) in this group to MACT Group 1 status, such tank(s) shall comply with the provisions outlined for MACT Group 1 tanks (Source T001 for internal floating roof tanks or Source T002 for external floating roof tanks) rather than the provisions of this source.

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: T003-A

Source Name: MACT CC GROUP 2 - PA CODE 129.56

Source Capacity/Throughput:

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.**# 001 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

In accordance with 25 Pa. Code § 129.56(f)(3), the permittee shall maintain records of the types of volatile petroleum liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed in subsection 25 Pa. Code § 129.56(f)(1) and (2). Copies of the records shall be retained by the permittee for a period of 2 years after the date on which the record was made and shall be made available to the Department upon written or verbal request at a reasonable time.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 002 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

(a) No person may permit the placing, storing or holding in a stationary tank, reservoir or other container with a capacity greater than 40,000 gallons of volatile organic compounds with a vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions unless the tank, reservoir or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed and equipped with the following vapor loss control devices:

(1) An external or an internal floating roof. This control equipment may not be permitted if the volatile organic compounds have a vapor pressure of 11 psia (76 kilopascals) or greater under actual storage conditions.

(b) An external floating roof shall be fitted with a primary seal and a continuous secondary seal extending from the floating roof to the tank wall (rim-mounted secondary seal). The external floating roof shall meet the following equipment requirements:

(1) Seal closure devices shall meet the following requirements:

(i) There are no visible holes, tears or other openings in the seals or seal fabric.

(ii) The seals are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.

(iii) For tanks with vapor-mounted primary seals, the accumulated area of gaps exceeding 1/8 inch in width between the secondary seal and the tank wall shall not exceed 1 square inch per foot of tank diameter. Compliance with this subsection shall be determined by physically measuring the length and width of gaps around the entire circumference of the secondary seal in each place where a 1/8 inch uniform diameter probe passes freely (without forcing or binding against the seal) between the seal and tank wall and by summing the area of the individual gaps.

**SECTION D. Source Level Requirements**

(2) Openings in the external floating roof, except for automatic bleeder vents, rim space vents and leg sleeves, are as follows:

- (i) Equipped with covers, seals or lids in the closed position except when the openings are in actual use.
- (ii) Equipped with projections into the tank which remain below the liquid surface at all times.
- (3) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports.
- (4) Rim vents are set to open when the roof is being floated off the leg supports or at the recommended setting of the manufacturer.

(5) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90% of the area of the opening.

(c) An internal floating roof shall be fitted with a primary seal and shall comply with the following equipment requirements:

- (1) A closure seal or seals, to close the space between the roof edge and tank wall is used.
- (2) There are no holes, tears or other openings in the seal or a seal fabric or materials.
- (3) Openings except stub drains are equipped with covers, lids or seals such that:
 - (i) The cover, lid or seal is in the closed position at all times except when in actual use.
 - (ii) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports.
 - (iii) Rim vents, if provided are set to open when the roof is being floated off the roof leg supports or at the recommended setting of the manufacturer.

(d) This section does not apply to petroleum liquid storage vessels which:

- (1) Are used to store waxy, heavy pour crude oil.
- (2) Have capacities less than 420,000 gallons and are used to store produced crude oil and condensate prior to lease custody transfer.

(e) For the purposes of this section, the petroleum liquid storage vessels listed in this subsection comply with the equipment requirements of this section. These tanks shall comply with the maintenance, inspection and reporting requirements of this section. These petroleum liquid storage vessels are those:

- (1) Which contain a petroleum liquid with a true vapor pressure less than 4 psia (27.6 kilopascals) and which are of welded construction and which presently possess a metallic-type shoe seal, a liquid-mounted foam seal, a liquid-mounted liquid filled type seal or other closure device of demonstrated equivalence approved by the Department.
- (2) Which are of welded construction, equipped with a metallic-type shoe primary seal and has a secondary seal from the top of the shoe seal to the tank wall (shoe-mounted secondary seal).

(f) The owner or operator of a petroleum liquid storage vessel with a floating roof subject to this regulation shall:

- (1) Perform routine inspections annually in order to insure compliance with subsection (b) or (c). The inspection shall include a visual inspection of the secondary seal gap when inspecting external floating roof tanks.
- (2) For external floating roof tanks, measure the secondary seal gap annually in accordance with subsection (b)(1)(iii) when the floating roof is equipped with a vapor-mounted primary seal.

(g) For volatile organic compounds whose storage temperature is governed by ambient weather conditions, the vapor pressure under actual storage conditions shall be determined using a temperature which is representative of the average storage temperature for the hottest month of the year in which the storage takes place.

(h) If a failure is detected during inspections required in this section, the owner or operator, or both, shall repair the items or empty and remove the storage vessel from service within 45 days. If this failure 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 Department. A request for an extension shall document that alternate storage capacity is unavailable and specify a schedule of actions the owner or operator will take that will assure that the equipment will be repaired or the vessel will be emptied as soon as possible but within the additional 30-day time requested.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 003 [25 Pa. Code §127.503]****Application information.**

As of the issuance date of this permit, this source consists of the following individual storage tanks that are subject to MACT Group 2 requirements and 25 Pa. Code § 129.56.

- DEP Source ID 137, capacity - 61 M barrels, internal floating roof
- DEP Source ID 138, capacity - 53 M barrels, external floating roof
- DEP Source ID 140, capacity - 63 M barrels, internal floating roof
- DEP Source ID 142, capacity - 77 M barrels, external floating roof
- DEP Source ID 150, capacity - 79 M barrels, internal floating roof
- DEP Source ID 151, capacity - 78 M barrels, external floating roof
- DEP Source ID 154, capacity - 81 M barrels, external floating roof
- DEP Source ID 194, capacity - 85 M barrels, internal floating roof
- DEP Source ID 180, capacity - 54 M barrels
- DEP Source ID 181, capacity - 54 M barrels
- DEP Source ID 182, capacity - 54 M barrels
- DEP Source ID 195, capacity - 93 M barrels
- DEP Source ID 376A, capacity - 140 M barrels
- DEP Source ID T62, capacity - 10 M barrels
- DEP Source ID 184, capacity - 8 M barrels
- DEP Source ID T84, capacity - 1 M barrels
- DEP Source ID T143, capacity - 9 M barrels
- DEP Source ID T144, capacity - 9 M barrels
- DEP Source ID T145, capacity - 10 M barrels
- DEP Source ID T146, capacity - 10 M barrels
- DEP Source ID T147, capacity - 10 M barrels
- DEP Source ID T148, capacity - 10 M barrels
- DEP Source ID 193, capacity - 56 M barrels

***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: T003-B

Source Name: MACT CC GROUP 2 - PA CODE 129.57

Source Capacity/Throughput:

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 001 [25 Pa. Code §129.57]****Storage tanks less than or equal to 40,000 gallons capacity containing VOCs**

The provisions of this section shall apply to above ground stationary storage tanks with a capacity equal to or greater than 2,000 gallons which contain volatile organic compounds with vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions. Storage tanks covered under this section shall have pressure relief valves which are maintained in good operating condition and which are set to release at no less than 0.7 psig (4.8 kilopascals) of pressure or 0.3 psig (2.1 kilopascals) of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department. 25 Pa. Code §129.56(g) (relating to storage tanks greater than 40,000 gallons capacity containing volatile organic compounds) applies to this section. Petroleum liquid storage vessels which are used to store produced crude oil and condensate prior to lease custody transfer shall be exempt from the requirements of this section.

VII. ADDITIONAL REQUIREMENTS.**# 002 [25 Pa. Code §127.503]****Application information.**

As of the issuance date of this permit, this source consists of the following individual storage tanks that are subject to MACT Group 2 and 25 Pa. Code § 129.57 requirements:

- DEP Source ID T33T1, capacity - 500 barrels
- DEP Source ID T81, capacity - 300 barrels
- DEP Source ID T82, capacity - 516 barrels
- DEP Source ID TMET1, capacity - 150 barrels
- Tank number 82TK2
- Tank number 312
- Tank number 313

**SECTION D. Source Level Requirements**

*** **Permit Shield in Effect.** ***

**SECTION D. Source Level Requirements**

Source ID: T004

Source Name: RACT-ONLY EXT FLOAT ROOF TANKS

Source Capacity/Throughput:

1.000 BBL/HR

PROC
T004STAC
ZT004**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

The permittee may not store VOCs that have a vapor pressure of 11 psia or greater under actual storage conditions in any of these external floating roof tanks in this source.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.**# 002 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

The permittee shall perform routine inspections annually, which shall include a visual inspection of the secondary seal, in compliance with Condition #007(a), for this source.

IV. RECORDKEEPING REQUIREMENTS.**# 003 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

The permittee shall record when the status of any of these individual tanks is changed from State-Only external floating roof status to either MACT Group 1 or MACT Group 2.

004 [25 Pa. Code §127.511]**Monitoring and related recordkeeping and reporting requirements.**

Throughput type, and amount, for each individual tank, shall be recorded on a monthly basis.

005 [25 Pa. Code §129.56]**Storage tanks greater than 40,000 gallons capacity containing VOCs**

The permittee shall maintain records of the types of volatile petroleum liquids stored, the maximum true vapor pressure of the liquid as stored, and the results of the routine annual inspections.

V. REPORTING REQUIREMENTS.**# 006 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

If a failure detected during the routine annual inspections, required by Condition #002, for this source, cannot be repaired within forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the Department. A request for an extension shall document that alternate storage capacity is unavailable and specify a schedule of actions the permittee will take that will assure that the equipment will be repaired or the vessel will be emptied as soon as possible, but within the additional thirty (30) day time requested.

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.****# 007 [25 Pa. Code §129.56]****Storage tanks greater than 40,000 gallons capacity containing VOCs**

(a) An external floating roof shall be fitted with a primary seal and a continuous secondary seal extending from the floating roof to the tank wall. The external floating roof shall meet the specifications listed below:

(1) Seal closure devices shall meet the following requirements:

(i) There are no visible holes, tears or other openings in the seals or seal fabric.

(ii) The seals are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall.

(2) Openings in the external floating roof, except for automatic bleeder vents, rim space vents and leg sleeves, are as follows:

(i) Equipped with covers, seals or lids in the closed position except when the openings are in actual use.

(ii) Equipped with projections into the tank which remain below the liquid surface at all times

(3) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports

(4) Rim vents are set to open when the roof is being floated off the leg supports or at the recommended setting of the manufacturer.

(5) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least 90% of the area of the opening.

(b) For volatile organic compounds whose storage temperature is governed by ambient weather conditions, the vapor pressure under actual storage conditions shall be determined using a temperature which is representative of the average storage temperature of the hottest month of the year in which the storage takes place.

(c) If a failure is detected during the routine annual inspections, the permittee shall repair the items or empty and remove the storage vessel from service within 45 days. A 30-day extension may be requested from the Department if this cannot be accomplished.

VII. ADDITIONAL REQUIREMENTS.**# 008 [25 Pa. Code §127.503]****Application information.**

As of the issuance date of this permit, this source consists of the following individual external floating roof tanks subject to 25 Pa. Code 129.56:

- DEP Source number 126, capacity - 59 Mbarrels
- DEP Source number 127, capacity - 59 Mbarrels
- DEP Source number 145, capacity - 82 Mbarrels
- DEP Source number 146, capacity - 82 Mbarrels
- DEP Source number 147, capacity - 83 Mbarrels
- DEP Source number 148, capacity - 82 Mbarrels
- DEP Source number 149, capacity - 83 Mbarrels
- DEP Source number 155, capacity - 154 Mbarrels
- DEP Source number 156, capacity - 151 Mbarrels
- DEP Source number 157, capacity - 80 Mbarrels
- DEP Source number 160, capacity - 129 Mbarrels
- DEP Source number 161, capacity - 129 Mbarrels
- DEP Source number 163, capacity - 150 Mbarrels
- DEP Source number 164, capacity - 151 Mbarrels

*** Permit Shield in Effect. ***

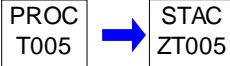
**SECTION D. Source Level Requirements**

Source ID: T005

Source Name: EXT FLOAT NSPS KB TANKS

Source Capacity/Throughput:

1.000 BBL/HR

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]**

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Standard for volatile organic compounds (VOC).

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

- (1) The permittee may not store volatile organic compounds that have a vapor pressure of 11.1 psia or greater under actual storage conditions in any of the tanks contained in this source.
- (b) The accumulated area of gaps between the vessel wall and the primary seal, as determined by Condition #002(c), below, shall not exceed 212 square centimeters per meter of tank diameter and the width of any portion of any gap shall not exceed 3.81 centimeters.
- (c) The accumulated area of gaps between the vessel wall and the secondary seal, as determined by Condition #002(c), below, shall not exceed 21.2 square centimeters per meter of vessel diameter and the width of any portion of any gap shall not exceed 1.27 centimeters. These seal gap requirements may be exceeded during the measurement of primary seal gaps as required in this section.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]**

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Monitoring of operations.

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

- (a) The permittee shall determine the gap areas and maximum gap widths between the primary seal and the wall of the storage vessel, and the secondary seal and the wall of the storage vessel according to the following frequency:

- (1) Measurements of gaps between the vessel wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within 60 days of the initial fill with volatile organic liquid (VOL) and at least once every 5 years.
- (2) Measurements of gaps between the vessel wall and the secondary seal shall be performed within 60 days of the initial fill with VOL and at least once per year thereafter.
- (3) If any storage vessel ceases to store VOL for a period of 1 year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for the purposes of subconditions (a)(1) and (a)(2), above.

**SECTION D. Source Level Requirements**

(b) The permittee shall determine gap widths and gap areas in the primary and secondary seals (seal gaps) individually by the following procedures:

(1) Seal gaps, if any, shall be measured at one or more floating roof levels when the roof is not resting on the roof leg supports.

(2) Seal gaps, if any, shall be measured around the entire circumference of the vessel in each place where an 1/8 inch diameter uniform probe passes freely (without forcing or binding against the seal) between the seal and the wall of the storage vessel. The circumferential distance of each such location shall also be measured.

(3) The total surface area of each gap described in subcondition (b)(2), above, shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.

(c) The permittee shall add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum of each seal by the nominal diameter of the vessel.

(d) The permittee shall visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed.

(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure for Condition #004(b)(5), for this source, as determined below.

(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:

(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 0.51 psia.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.511]

Monitoring and related recordkeeping and reporting requirements.

Throughput type, and amount, for each individual tank, shall be recorded on a monthly basis.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441.]

(a) The permittee shall keep a record of each gap measurement performed as required by Condition #002(a), above. Each record shall identify the storage vessel in which the measurement was performed and shall contain:

- (1) The date of measurement.
- (2) The raw data obtained in the measurement.

**SECTION D. Source Level Requirements**

(3) The calculations described in Conditions #002(b) and (c), above.

(b) The permittee shall keep records of the following for each storage vessel in accordance with 40 C.F.R. §60.116b(c):

- (1) Dimension of the storage vessel .
- (2) Analysis showing the capacity of the storage vessel.
- (3) The VOL stored.
- (4) The period of storage.
- (5) The maximum true vapor pressure of that VOL during the respective storage period.

V. REPORTING REQUIREMENTS.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Reporting and recordkeeping requirements.

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441 and 40 C.F.R. §63.640(n)(8).]

(a) Except as provided in 40 C.F.R. §60.113(b), for all the inspections required by Condition #002(d), above, the permittee shall notify the Administrator in writing at least thirty (30) calendar days prior to the refilling of each storage vessel with organic HAP to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

(b) If the inspection required by Condition #002(d), above, is not planned and the permittee could not have known about the inspection thirty (30) calendar days in advance of refilling the vessel with VOL, the permittee shall notify the Administrator at least seven (7) calendar days prior to refilling of a storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternately, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least 7 calendar days prior to refilling.

(c) After each seal gap measurement that detects gaps exceeding the limitations specified in Conditions #001(b) or (c), above, the permittee shall include the results of that inspection within the next periodic report required by 40 CFR 63.655(g). The following information will need to be identified in the report:

- (1) The date of measurement.
- (2) The raw data obtained in the measurement.
- (3) The calculations described in Conditions #002(b) and (c), above.
- (4) The date the vessel was emptied or the repairs made and date of repair.

(d) The permittee shall notify the Administrator in writing thirty (30) calendar days in advance of any gap measurements required in the monitoring requirements to afford the Administrator the opportunity to have an observer present.

(e) To utilize the extension specified in Condition #006(i), below, the permittee shall, in the next periodic report required by 40 CFR 63.655(g), identify the vessel, provide a demonstration of unavailability of alternate storage capacity, specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible, and the date the repair was made or the date that the storage vessel was emptied.

VI. WORK PRACTICE REQUIREMENTS.

006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

[Additional authority for this permit condition is derived from 25 Pa. Code § 127.441 and 40 C.F.R. §63.640(n)(8)]

(a) The roof shall be floating on the liquid at all times (i.e., off the roof leg supports) except during the initial fill until the roof is lifted off leg supports and when the tank is completely emptied and subsequently refilled.

**SECTION D. Source Level Requirements**

(b) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as soon as practical.

(c) Each external floating roof shall be equipped with a closure device between the wall of the storage vessel and the roof edge. The closure device meets the following criteria:

- (1) Consist of two seals, one above the other.
- (2) The primary seal shall be either a metallic shoe seal or a liquid-mounted seal.

(d) Except during inspections required by Condition #002, for this source, both the primary and secondary seal shall completely cover the annular space between the external floating roof and the wall of the storage vessel in a continuous fashion.

(e) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface. Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof is to be equipped with a gasketed cover, seal, or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Automatic bleeder vents are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents are to be gasketed. Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening. Slotted guidepoles must be equipped with covers and/or controls (e.g., pole float system, pole sleeve system, internal sleeve system or flexible enclosure system) as appropriate to comply with the "no visible gap" requirement.

(f) The primary seal shall also meet the following requirements:

- (1) Where a metallic shoe seal is in use, one end of the metallic shoe shall extend into the stored liquid and the other end shall extend a minimum vertical distance of 61 centimeters above the stored liquid surface.
- (2) There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

(g) The secondary seal shall also meet the following requirements:

- (1) The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided by Condition #002(a).
- (2) There shall be no holes, tears, or other openings in the seal or seal fabric

(h) If during the inspections required in Condition #002(d), above, the primary seal has holes, tears or other openings in the seal or the seal fabric; or the secondary seal has holes, tears or other openings, the permittee shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL.

(i) The permittee shall repair conditions that do not meet the requirements in Conditions #001(b) and (c), above, or subconditions (f) and (g) of this condition no later than forty-five (45) calendar days after identification, or shall empty and remove the storage vessel from service no later than forty-five (45) calendar days after identification. If a failure is detected that cannot be repaired within forty-five (45) calendar days and if the vessel cannot be emptied within forty-five (45) calendar days, a thirty (30) day extension may be utilized.

VII. ADDITIONAL REQUIREMENTS.**# 007 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Compliance with the requirements under 40 C.F.R. Part 60, Subpart Kb for Source ID T005 assures compliance with 25 Pa. Code § 129.56.

008 [25 Pa. Code §127.503]**Application information.**

As of the issuance date of this permit, the following external floating roof tanks, subject to NSPS, Subpart Kb regulations,

**SECTION D. Source Level Requirements**

comprise this source:

- DEP Source ID 125, capacity - 43 Mbarrels
- DEP Source ID 152, capacity - 71 Mbarrels
- DEP Source ID 162, capacity - 26 Mbarrels
- DEP Source ID 165, capacity - 244 Mbarrels
- DEP Source ID 166, capacity - 243 Mbarrels

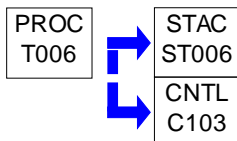
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: T006

Source Name: MACT GR 1, TANKS ROUTED TO CLOSED VENT SYS

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.119]**

Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
Storage vessel provisions--reference control technology.

The closed vent system shall be operated to reduce inlet emissions of total organic HAPs by 95% or greater.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries
Storage vessel provisions.

[Additional authority for this permit condition is derived from 25. Pa. Code §127.441.]

(a) Per 40 CFR §63.660(i), a vessel complying with the requirements of 40 CFR Part 63, Subpart SS must comply with the control option specified in 40 CFR §63.660(i)(1)-(3). Therefore, on and after January 30, 2019, vent emissions to a flare must meet the requirements of 40 CFR §63.670. Prior to January 30, 2019, vent emissions to a flare must meet the requirements for control devices in 40 CFR §63.11(b) and visible emissions from a flare must not exceed a total of 5 minutes during any 2-hour operating period. Alternatively, the permittee can meet the requirements of 40 CFR §63.670 prior to January 30, 2019.

(1) For tanks controlled by a flare, the flare must meet the requirements of 40 CFR §63.670.

(2) If a closed vent system contains a bypass line, the permittee shall comply with the provisions of either 40 CFR §63.983(a)(3)(i) or (ii) for each closed vent system that contains bypass lines that could divert a vent stream either directly to the atmosphere or to a control device that does not comply with the requirements in 40 CFR Part 63, Subpart SS.

(i) If planned routine maintenance of the control device cannot be performed during periods that storage vessel emissions are vented to the control device or when the storage vessel is taken out of service for inspections or other planned maintenance reasons, the permittee may bypass the control device.

(ii) Periods for which storage vessel control device may be bypassed for planned routine maintenance of the control device shall not exceed 240 hours per calendar year.

(b) Per 40 CFR §63.660(c)(6), all references to the "required control efficiency" in 40 CFR Part 63, Subpart SS mean reduction of organic HAP emissions by 95 percent or to an outlet concentration of 20 ppmv.

(c) Under 40 CFR §63.660(a)(2) the permittee is allowed to use good engineering judgement or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination. Data, assumptions, and procedures used in the determination shall be documented.

(d) When the permittee and the Administrator do not agree on whether the annual average weight percent organic HAP in the stored liquid is above or below 4 percent for a storage vessel at an existing source or above or below 2 percent for a storage vessel at a new source, an appropriate method (based on the type of liquid stored) as published by EPA or a consensus-based standards organization shall be used. Consensus-based standards organizations include, but are not limited to, the following: ASTM, ANSI, AGA, etc.

**SECTION D. Source Level Requirements****II. TESTING REQUIREMENTS.**

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.148]****Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater****Leak inspection provisions.**

The permittee shall perform annual inspections for visible, audible, or olfactory indication of leaks. The inspections shall be performed in accordance with Method 21, of 40 C.F.R. part 60, appendix A.

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

Per 40 CFR §63.983(b)(1)(i), any tank utilizing a closed vent system to route emissions to a control device or fuel gas system requires an initial closed vent system inspection, and recurring annual inspections detailed in 40 CFR §63.983(c), unless the closed vent system meets the exemptions per 40 CFR §63.983(2)-(3).

IV. RECORDKEEPING REQUIREMENTS.**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Throughput type, and amount, for each individual tank shall be recorded on a monthly basis.

(b) The permittee shall maintain a list of tanks designated as MACT Group 1 or MACT Group 2 onsite, and update this list as necessary.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.123]**Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater****Storage vessel provisions--recordkeeping.**

(a) The permittee shall maintain records of the dimensions of the storage vessels and an analysis showing the capacity of the storage vessels for all tanks contained in this source.

(b) The permittee shall keep readily accessible records of the following:

(1) the measured values of the parameters monitored in accordance with 40 C.F.R. §63.120(d)(5); and

(2) the planned routine maintenance performed on the control device, including durations of each time the control device does not meet the percent reduction requirements due to the planned routine maintenance. Such a record shall include the information specified in 40 C.F.R. §63.123(f)(2) and (3).

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.148]**Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater****Leak inspection provisions.**

The permittee shall record the following information:

(a) For each vapor collection system or closed vent system that contains bypass lines that could divert a vent stream away from the control device and to the atmosphere, the owner or operator shall keep a record of the information specified in either 40 C.F.R. §§63.148(i)(3)(i) or (i)(3)(ii) of this section:

(1) Hourly records of whether the flow indicator specified under paragraph (f)(1) of this section was operating and whether a diversion was detected at any time during the hour, as well as records of the times of all periods when the vent stream is

**SECTION D. Source Level Requirements**

diverted from the control device or the flow indicator is not operating;

(2) Where a seal mechanism is used to comply with paragraph (f)(2) of this section, hourly records of flow are not required. In such cases, the owner or operator shall record whether the monthly visual inspection of the seals or closure mechanisms has been done, and shall record the occurrence of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type configuration has been checked out, and records of any car-seal that has broken.

(b) Bypass lines:

(1) hourly records of the flow indicator, whether it was operating, if a diversion was detected anytime during the hour, as well as all periods of time when the indicator is not operating, or the vent stream bypasses the closed vent; or

(2) monthly inspection records of the seals or closure mechanisms, the occurrence when the seal or closure mechanism is broken, the bypass valve position has changed, of the key for the lock-and-key type configuration has been checked out.

(c) Detected leaks:

(1) the instrument identification, operator name or initials, and identification of the equipment;

(2) the date that the leak was detected, and the date of the first attempted repair;

(3) maximum instrument reading measured after the leak is successfully repaired or determined to be nonreparable;

(4) "repair delayed" and the reason for the delay if the leak is not repaired within fifteen (15) calendar days after discovery;

(5) name, initials, or other identification of the person whose decision it was that a repair could not be effected without a shutdown;

(6) the expected date of successful repair of the leak if the leak is not repaired within fifteen (15) calendar days;

(7) Dates of shutdowns that occur while the equipment is unrepaired.

(d) No detection of leaks during inspections a record that the inspection was performed, the date of inspection, and a statement that no leaks were detected.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]

Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries

Storage vessel provisions.

As specified at 40 CFR §63.655(i)(1)(v) the permittee of a Group 1 storage vessel subject to the provisions of 40 CFR §63.660 shall keep records as specified in Subpart SS per 40 CFR §63.998.

V. REPORTING REQUIREMENTS.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.148]

Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater

Leak inspection provisions.

Reports are required to be submitted to the EPA, and the Department, if:

(a) the vent stream is diverted from the control device through the bypass line; and

(b) the seal mechanism is broken, the bypass line valve position has changed, or the key to unlock the bypass line valve was checked out.

**SECTION D. Source Level Requirements****# 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]****Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

- (a) Per 40 CFR §63.655(g)(5), the permittee shall submit, as part of the next Periodic Report, the information specified in 40 CFR §63.655(g)(i) through (v) as applicable.
- (b) notify the Administrator in writing at least 30 calendar days prior to filling or refilling of each storage vessel to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.
- (c) Per 40 CFR §63.655(h)(2)(i)(B), if the internal inspection required is not planned, and the permittee could not have known about the inspection 30 calendar days in advance of refilling the vessel the permittee shall notify the Administrator at least 7 calendar days prior to refilling of the storage vessel, followed by written documentation demonstrating why the inspection was unplanned.
- (d) For the storage vessel subject to the provisions in 40 CFR §63.660, the permittee shall keep records as specified in 40 CFR §63.655(i)(1)(v).
- .

VI. WORK PRACTICE REQUIREMENTS.**# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.148]****Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater****Leak inspection provisions.**

- (a) For bypass lines that could divert a vent stream away from the closed-vent system, the permittee shall:
- (1) secure the bypass line valve in the closed position with a car-seal or a lock and key type of configuration. A visual inspection shall be performed at least once per month to ensure that the valve is maintained in the closed supposition and the vent stream is not diverted through the bypass; or
 - (2) calibrate, maintain, and operate a flow indicator that determines whether vent stream flow is present at least once every fifteen (15) minutes. The flow indicator shall be installed at the entrance to any bypass line and records shall be generated as specified in 40 C.F.R. §63.118(a)(3).

NOTE: Equipment such as low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and pressure relief valves needed for safety purposes are not subject to condition (a).

- (b) The following are exempt from the inspection requirements for this source:

- (1) any part of the closed vent system that is designated in 40 C.F.R. §63.148(i)(1) as unsafe to inspect because inspecting personnel would be exposed to imminent or potential danger as a consequence and that the permittee has a written plan requiring inspection of the equipment as frequently as practicable during safe-to-inspect times;
- (2) any part of the closed vent system that is designated in 40 C.F.R. §63.148(i)(1) as difficult to inspect because the permittee determined that the equipment cannot be inspected without elevating the inspecting personnel more than two (2) meters above a support surface and that the permittee has a written plan that requires inspection of the equipment at least once every five (5) years.

- (c) Instrument leaks are defined as readings of 500 ppm above background. A first attempt at repair shall be made no later than five (5) calendar days after the leak is detected.

- (d) Leaks as indicated by an instrument reading greater than 500 ppm above background, or by visual inspections, shall be repaired as soon as practicable, except when the repair is technically infeasible without a shutdown of the source or if the

**SECTION D. Source Level Requirements**

permittee determines that the emissions resulting from the immediate repair would be greater than the fugitive emissions likely to result from the delay of the repair. Repair of such equipment shall be complete by the end of the next shutdown.

(1) A first attempt at repair shall be made no later than five (5) calendar days after the leak is detected.

(2) Repair shall be completed no later than fifteen (15) calendar days.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.660]**Subpart CC -- National Emission Standards for Hazardous Air Pollutants From Petroleum Refineries****Storage vessel provisions.**

(a) Per 40 CFR §63.660(a)(1), a permittee may use good engineering judgment or test results to determine the stored liquid weight percent total organic HAP for purposes of group determination.

(ii) The permittee who elects to comply with 40 CFR §63.660 by using a closed vent system collecting regulated material from a regulated source shall record the results of each inspection conducted in accordance with 40 CFR §63.998(d)(1)(iii) and (iv) of Subpart SS.

VII. ADDITIONAL REQUIREMENTS.**# 013 [25 Pa. Code §127.503]****Application information.**

As of the issuance date of this permit, this source consists of the following individual sources:

- DEP Source number 501, capacity - 1.26MM gallons, controlled by Main Flare, Source ID 103
- DEP Source number 502, capacity - 1.26MM gallons, controlled by Main Flare, Source ID 103
- DEP Source number 513, capacity - 1.26MM gallons, vented to a Lowline Unit that collects gases for the fuel gas system.

*** **Permit Shield in Effect.** ***

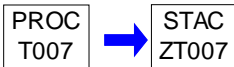
**SECTION D. Source Level Requirements**

Source ID: T007

Source Name: INTERNAL FLOAT NSPS KB TANKS

Source Capacity/Throughput:

1.000 BBL/HR

**I. RESTRICTIONS.****Emission Restriction(s).**

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Standard for volatile organic compounds (VOC).**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

The permittee may not store volatile organic compounds that have a vapor pressure of 11.1 psia or greater under actual storage conditions in this source.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Testing and procedures.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

- (a) The permittee shall visually inspect the internal floating roof and the primary seal prior to filling the storage tank with VOL.
- (b) The permittee shall visually inspect the internal floating roof and the primary seal through the manholes and roof hatches on the fixed roof at least once every twelve (12) months after the initial fill.
- (c) The permittee shall visually inspect the internal floating roof, the primary seal, gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed, and at least every ten (10) years.

IV. RECORDKEEPING REQUIREMENTS.

**# 003 [25 Pa. Code §127.511]
Monitoring and related recordkeeping and reporting requirements.**

Throughput type, and amount, for each individual tank, shall be recorded on a monthly basis.

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.115b]
Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Reporting and recordkeeping requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

The permittee shall keep a record of each inspection performed as required by Condition #002, for this source, which shall include:

- (a) Identification of the storage tank.

**SECTION D. Source Level Requirements**

- (b) The date of the inspection.
(c) The observed condition of each component inspected.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]**Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984****Monitoring of operations.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

- (a) The permittee shall keep records of the following for each storage vessel:
- (1) The dimensions of the storage vessel,
 - (2) The capacity of the storage vessel,
 - (3) The VOL stored,
 - (4) The period of storage for which the VOL was stored in the vessel,
 - (5) The maximum true vapor pressure of that VOL during the respective storage period.
- (b) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below:
- (1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service,
 - (2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
 - (i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be samples, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
 - (ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 2.0 psia or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded of the estimated maximum true vapor pressure is greater than 0.51 psia.

V. REPORTING REQUIREMENTS.**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]****Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984****Testing and procedures.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441 and 40 C.F.R. §63.640(n)(8).]

- (a) After each visual inspection that detects defects, the permittee shall include the results of that inspection within the next periodic report required by 40 C.F.R §63.655(g). The following information will need to be identified in the report:
- (1) The identity of the storage vessel inspected.
 - (2) The nature of the defects.
 - (3) The date the tank was emptied or the nature of and date the repair was made.
- (b) If defects found during the inspection cannot be repaired within forty-five (45) days and if the tank cannot be emptied within forty-five (45) days, a thirty (30) day extension may be utilized. When such an extension is used, the permittee shall, in the next periodic report required by 40 C.F.R §63.655(g), identify the vessel, provide a demonstration of unavailability of alternate storage capacity, specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be emptied as soon as possible, and the date the repair was made or the date that the storage vessel was emptied.

**SECTION D. Source Level Requirements****# 007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]**

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Testing and procedures.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

(a) Except as provided in subcondition (b), below, for inspections required by Condition #002(a) and (c), for this source, the permittee shall notify the Administrator in writing at least thirty (30) calendar days prior to the filling or refilling of the tank with VOL to afford the Administrator the opportunity to inspect the storage vessel prior to refilling.

(b) If the inspection is not planned and the permittee could not have known about the inspection thirty (30) days in advance of refilling the vessel with VOL, the permittee shall notify the Administrator at least seven (7) calendar days prior to refilling of a storage vessel. Notification may be made by telephone and immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the Administrator at least seven (7) calendar days prior to refilling.

VI. WORK PRACTICE REQUIREMENTS.**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]**

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441 and 40 C.F.R. §63.640(n)(8).]

(a) Except for automatic bleeder vents and rim space vents, each opening in a noncontact internal floating roof shall provide a projection below the liquid surface.

(b) Except for automatic bleeder vents, rim space vents, leg sleeves, column wells, ladder wells, sampling wells, and stub drains, each opening in the roof is to be equipped with a gasketed cover or lid that is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

(c) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

(d) Rim vents shall be equipped with a gasket and are to be set to open only when the roof is being floated off the roof leg supports, or at the manufacturer's recommended setting.

(e) Each penetration of the internal floating roof that allows for the column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

(f) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least ninety (90) percent of the opening.

(g) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(h) slotted guidepoles must be equipped with covers and/or controls (e.g., pole float system, pole sleeve system, internal sleeve system or flexible enclosure system) as appropriate to comply with the "no visible gap" requirement of Condition #008(b).

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

The internal floating roof shall be equipped with a closure device between the wall of the storage vessel and the floating roof edge. The closure device shall consist of a single mechanical shoe seal.

010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.112b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984

Standard for volatile organic compounds (VOC).

**SECTION D. Source Level Requirements**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

(a) The internal floating roof shall rest or float on the liquid surface, (but not necessarily in complete contact with it) inside the tank at all times, except during those intervals when the tank is completely emptied or subsequently emptied and refilled.

(b) When the floating roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.113b]

Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Testing and procedures.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

(a) If during the inspection required by Condition #002(a), for this source, the primary seal has holes, tears or other openings in the seal fabric, or there are defects in the internal floating roof, the permittee shall repair the items as necessary so that none of the conditions specified in this condition exist before filling the storage vessel with VOL.

(b) If during the inspection required by Condition #002(b), for this source, the internal floating roof is not resting on the surface of the VOL inside the tank, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the permittee shall repair the items or empty and remove the tank from service within forty-five (45) days. If a failure cannot be repaired within forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested in accordance with the requirements specified in Condition #007(b) for this source.

(c) If during the inspection required by Condition #002(c), of this source, the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than ten (10) percent open area, the permittee shall repair the items as necessary so that none of the conditions specified in this subcondition exist before refilling the tank with VOL.

VII. ADDITIONAL REQUIREMENTS.

012 [25 Pa. Code §127.503]

Application information.

As of the issuance date of this permit, the following individual internal floating roof storage tanks, subject to 40 C.F.R. 60, Subpart Kb, are included in this source:

- DEP Source number 139, capacity - 105 M barrels
- DEP Source number 190, capacity - 15 M barrels

*** Permit Shield in Effect. ***

**SECTION E. Source Group Restrictions.**

Group Name: D2 RENEWABLES TANKAGE GROUP

Group Description: Storage Tanks greater than 40,000 gallons capacity containing VOCs

Sources included in this group

ID	Name
167	#65 FIXED ROOF TANK 9 MBBL
168	#445 FIXED ROOF TANK 7 MBBL

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee may not store volatile organic compounds with a vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions in any of the tanks in this group.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 10

Group Description: Boiler Nos. 9 and 10 State and 40 CFR Part 60, Subpart Db Requirements

Sources included in this group

ID	Name
034	BOILER 9
035	BOILER 10

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) Stack emissions from this boiler shall not exceed any of the following:

(1) SO_x - 3.43 lbs/hr and 15.0 tons/12 consecutive month period [Compliance with these limits assure compliance with 25 Pa. Code § 123.22(e)(1) and 40 C.F.R. §60.104(a)(1)].

(2) NO_x

(i) 0.10 lbs/MMBtu heat input (low heat release rate) averaged 30-day rolling average, per 40 CFR §60.44b(a)(1)(i).

(ii) 11.8 tons per 12 consecutive month period.

(3) VOC - 0.46 lbs/hr and 2.0 tons/12 consecutive month period;

(4) CO - 6.85 lbs/hr and 30.0 tons/12 consecutive month period;

(5) Total PM - 3.13 lbs/hr and 13.7 tons/12 consecutive month period. [Compliance with these limits assures compliance with 25 Pa. Code §123.11(a)(2)];

(6) Total PM₁₀ - 3.13 lbs/hr and 13.7 tons/12 consecutive month period.

(7) Total PM_{2.5} - 3.13 lbs/hr and 13.7 tons/12 consecutive month period.

(b) The emissions from a start-up or shutdown shall be included in the 12-month rolling sum. For this boiler, a start-up and shut-down period shall be defined as:

(1) Start-up refers to the initial three (3) hours, 180 consecutive minutes for reporting up to four (4) consecutive clock hours, after a successful light off during start up; and

(2) Shutdown begins when the position of the fuel gas control valve is less than or equal to 20% open with the intent to shut down the boiler, and shutdown ends when the position of the fuel gas control valve is 0% open.

(c) VOC fugitive emissions shall not exceed 1.65 tons/12 consecutive month period.

(d) Ammonia emissions from the SCR system shall not exceed 10 ppmvd, corrected to 3% oxygen, as measured by stack test.

002 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

Presumptive NO_x emission limitations:

(a) A natural gas-fired, propane-fired or liquid petroleum gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.10 lb NO_x/million Btu heat input (daily average).

(b) A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour

**SECTION E. Source Group Restrictions.**

shall comply with 0.25 lb NO_x/million Btu heat input (daily average).

Fuel Restriction(s).

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) This boiler shall fire Refinery Fuel Gas (RFG) and/or Natural gas only.

(b) The H₂S concentration in the RFG supply line shall not exceed:

(1) 50 ppmv on a 12-month rolling average, calculated monthly; and

(2) 162 ppmv (0.10 gr/dscf) on 3-hour average, rolling by 1-hour.

[Compliance with the H₂S limits assures compliance with 40 C.F.R. §§60.104(a)(1) and 60.40b(c).]

Control Device Efficiency Restriction(s).

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Emissions from this boiler shall be controlled as follows:

(1) NO_x - Low NO_x Burners (LNB), Flue Gas Recirculation (FGR), and Selective Catalytic Reduction (SCR);

(2) CO - through the use of a CO catalyst; and

(3) VOC - through the use of the CO catalyst.

(b) The catalyst bed inlet temperature shall be maintained at a minimum of 450°F at all times when this source is operating, except during startup, shutdown, and malfunctions. This minimum temperature has been determined during initial stack testing.

II. TESTING REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall perform a stack test using Department approved procedures for the source once per permit term, but no less frequently than once every 5 years for the following pollutants:

(1) PM;

(2) PM-10 and PM_{2.5} (filterable and condensable);

(3) VOC;

(4) Ammonia.

(b) The stack tests shall be performed while the source is operating at the maximum rated capacity as stated in the application.

(c) The permittee shall perform the above stack tests in accordance with the provisions of 40 CFR §§ 60.8 and 63.7, and applicable Testing Requirements in Condition II of Section C of this permit.

**SECTION E. Source Group Restrictions.****III. MONITORING REQUIREMENTS.****# 006 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The following DEP certified continuous monitors shall be calibrated, operated, and maintained to meet the minimum data availability requirements found in 25 Pa. Code Chapter 139, and in accordance with 40 CFR § 60.48b. [Compliance with this condition assures compliance with 25 Pa. Code §123.51.]:

- (1) NO_x;
- (2) CO; and
- (3) H₂S in the North Yard RFG line.

(b) The permittee shall continuously monitor and record the following:

- (1) The catalyst bed inlet temperature
- (2) The fuel consumption by this boiler.

007 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

In accordance with 25 Pa. Code § 129.115(b)(4), the permittee shall demonstrate compliance with the emission limit established under 25 Pa. Code § 129.112(g)(1)(i) and (iv) using a CEMS, in accordance with the requirements in Chapter 139, Subchapter C, using a daily average.

(a) The daily average shall be calculated by summing the total pounds of pollutant emitted for the calendar day and dividing that value by the total heat input to the source for the same calendar day.

(b) The daily average for the source shall include all emissions that occur during the entire day.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
Emission monitoring for particulate matter and nitrogen oxides.**

(a) The continuous NO_x monitoring systems shall be operated and data recorded during all periods of operation of the source except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(b) The 1-hour average nitrogen oxides emission rates measured by the continuous nitrogen oxides monitor shall be used to calculate the average emission rates under 40 CFR §60.44b. The 1-hour averages shall be calculated using the data points required under 40 CFR §60.13(h)(2).

IV. RECORDKEEPING REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep the following records:

- (a) Emissions from this boiler calculated on a monthly, and a 12-consecutive month basis for each pollutant listed in Condition #001 for this source.
- (b) The catalyst bed inlet temperature.
- (c) The fuel consumption by this boiler on a monthly basis.

010 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

(a) Each adjustment conducted under the tune-up procedures for this source, shall be recorded in a permanently bound log

**SECTION E. Source Group Restrictions.**

book, or other Department approved method, and contain the following:

- (1) The date of the tuning procedure.
 - (2) The name of the service company and technician.
 - (3) The final operating rate or load.
 - (4) The final CO and NO_x emission rates.
 - (5) The final excess oxygen rate.
- (b) The permittee shall keep records to demonstrate compliance with 25 Pa. Code § 129.112 in the following manner:
- (1) The records must include sufficient data and calculations to demonstrate that the requirements of 25 Pa. Code § 129.112(g)(1)(i) and (iv) are met.
 - (2) Data or information required to determine compliance shall be recorded and maintained in a time frame consistent with the averaging period of the requirement.

011 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

The permittee shall maintain records of the following:

- (a) daily average NO_x emissions (lb/MMBtu) for natural gas and refinery fuel gas
- (b) total pounds of NO_x emitted, per fuel, daily
- (c) total heat input, per fuel, daily
- (d) maintenance activities performed on the source

012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.49b]**Subpart Db - Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units Reporting and recordkeeping requirements.**

The permittee shall maintain records of the following information for each steam generating unit operating day:

- (a) Calendar date.
- (b) The average hourly nitrogen oxides emission rates (expressed as NO₂) measured.
- (c) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- (d) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- (e) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- (f) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
- (g) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
- (h) Results of daily CEMS drift tests and quarterly accuracy assessments as required under 40 CFR Part 60, Appendix F, Procedure 1.

**SECTION E. Source Group Restrictions.****V. REPORTING REQUIREMENTS.****# 013 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

DEP certified continuous emission monitor (CEM) results shall be reported to DEP on a quarterly basis.

VI. WORK PRACTICE REQUIREMENTS.**# 014 [25 Pa. Code §127.441]
Operating permit terms and conditions.**

The ammonia feed system and the injection system shall be operated with feedback from the continuous monitors, such that the flue gas NOx concentration is maintained at or below the NOx concentrations specified for this boiler in this permit.

**# 015 [25 Pa. Code §129.112]
Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

(a) A tune-up shall be performed on the unit once in five (5) years. The tune-up shall consist of, at a minimum, the following:

- (1) Inspection and cleaning or replacement of fuel-burning equipment, including the burners and components, as necessary, for proper operation as specified by the manufacturer.
- (2) Inspection of the flame pattern and adjustment of the burner, as necessary, to optimize the flame pattern to minimize total emissions of NOx and, to the extent possible, emissions of CO.
- (3) Inspection and adjustment, as necessary, of the air-to-fuel ratio control system to ensure proper calibration and operation as specified by the manufacturer.

**# 016 [25 Pa. Code §129.112]
Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

The permittee shall install, maintain and operate the source in accordance with the manufacturer's specifications and with good operating practices.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 15

Group Description: Process Heaters subject to 40 CFR Part 60, Subpart J

Sources included in this group

ID	Name
733	FCCU FEED HEATER
735	KEROSENE/HCN HTU HEATER
736	DIESEL HTU HEATER
737	NAPHTHA HDS HEATER
738	PLATFORMER FEED HEATER
739	ISOCRACKER 1ST STAGE HEATER.
740	ISOCRACKER SPLITTER RBLR
741	D2/VGO HYDROTREATER FEED HEATER
742	VCD 541 VAC HEATER
743	VCD 542 VAC HEATER
744	ACD 543 CRUDE HEATER
745	ACD 544 CRUDE HEATER
746	VCD 544 VAC HEATER

I. RESTRICTIONS.**Fuel Restriction(s).**

001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.104]

Subpart J - Standards of Performance for Petroleum Refineries

Standards for sulfur oxides.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

The permittee shall not burn any fuel gas in this source that contains hydrogen sulfide (H₂S) in excess of 162 ppmv (0.10 gr/dscf), 3-hour average, rolling by 1-hour.

[Compliance with this limit assures compliance with 25 Pa. Code §123.22(e)(3)]

II. TESTING REQUIREMENTS.

002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.106]

Subpart J - Standards of Performance for Petroleum Refineries

Test methods and procedures.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

(a) Once every five (5) years, and in accordance with 40 C.F.R. 60.106(e), EPA Method 11 shall be used to determine the H₂S concentration in the fuel gas burned in this source while the unit is firing at normal or average rates.

(b) The permittee shall ensure that all testing is done in accordance with the provisions of 25 Pa. Code Chapter 139, 40 C.F.R. 60 Subparts A and J, and 40 C.F.R. 63, Subparts A and UUU, and the Testing Requirements specified in Condition II, Section C of this permit.

III. MONITORING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following operating parameters:

- (a) The fuel rate each day.
- (b) H₂S content of the fuel consumed.
- (c) The BTU content of the fuel consumed.

**SECTION E. Source Group Restrictions.****# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.105]****Subpart J - Standards of Performance for Petroleum Refineries****Monitoring of emissions and operations.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

The permittee shall ensure that a Department approved CMS is continuously monitoring and recording the concentration (dry basis) of Hydrogen Sulfide (H₂S) in refinery fuel gas before being burned in this source. This condition does not apply when the source is burning natural gas.

- a. The span value for this CMS is 425 mg/dscm H₂S.
- b. Fuel gas combustion devices having a common source of fuel gas may be monitored at only one location, if monitoring at this location accurately represents the concentration of H₂S in the fuel gas being burned.
- c. The performance evaluations for the H₂S monitor under 40 C.F.R. § 60.13(c) shall use Performance Specification 7. EPA Method 11 shall be used for conducting the relative accuracy evaluations.

IV. RECORDKEEPING REQUIREMENTS.**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall keep the following records for the unit:

- (a) The amount of fuel consumed each day the unit is operating.
- (b) The H₂S content of the fuel consumed on a monthly, and 12-month rolling average, basis.
- (c) The BTU content of the fuel consumed each day the unit is operating.
- (d) Average firing rate (in MMBtu/hr) each month and each 12 consecutive month period.

V. REPORTING REQUIREMENTS.**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.105]****Subpart J - Standards of Performance for Petroleum Refineries****Monitoring of emissions and operations.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

For the purpose of reports under 40 C.F.R. § 60.7(c), periods of excess emissions that shall be determined and reported are defined as follows:

All 3-hour average, rolling by 1-hour, during which the average concentration of H₂S as measured by the H₂S continuous monitoring system under 40 C.F.R. § 60.105(a)(4) exceeds 162 ppmv (0.10 gr/dscf).

Note: All averages shall be determined as the arithmetic average of the applicable 1-hour averages, e.g., the rolling 3-hour average shall be determined as the arithmetic average of three contiguous 1-hour averages.

007 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.107]**Subpart J - Standards of Performance for Petroleum Refineries****Reporting and recordkeeping requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

The permittee shall submit a signed statement certifying the accuracy and completeness of the information contained in the report.

VI. WORK PRACTICE REQUIREMENTS.**# 008 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

- (a) A tune-up shall be performed on the unit annually or once in five (5) years if equipped with oxygen trim system. The tune-up shall consist of, at a minimum, the following:

**SECTION E. Source Group Restrictions.**

- (1) Inspection, adjustment, cleaning or replacement of fuel burning equipment, including the burners and moving parts necessary for proper operation as specified by the manufacturer.
 - (2) Inspection of the flame pattern or characteristics and adjustments necessary to minimize total emissions of NO_x, and to the extent practicable, minimize the emissions of CO.
 - (3) Inspection of the air-to-fuel ratio control system and adjustments necessary to ensure proper calibration and operation as specified by the manufacturer.
- (b) The tune-up shall be made in accordance with EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 (EPA-340/1-83-023) or equivalent procedures approved by the Department in writing.

VII. ADDITIONAL REQUIREMENTS.

009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.441.]

40 C.F.R. § 60.4 requires the submittal of all reports, requests, applications, submittals, and other communications to both the EPA and the Department. The EPA copies shall be forwarded to the address specified in Section B of this permit.

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 20

Group Description: Process Units Subject to 40 CFR Part 63 Subpart UUU

Sources included in this group

ID	Name
101	FCC UNIT
102	CLAUS SULFUR RECOV. PLT.

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1570]**

Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

What are my general requirements for complying with this subpart?

(a) The permittee shall be in compliance with all of the non-opacity standards set forth in 40 CFR Part 63 Subpart UUU at all times.

(b) The permittee shall be in compliance with all of the opacity and visible emission limits set forth in 40 CFR Part 63 Subpart UUU at all times.

II. TESTING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1571]**

Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

How and when do I conduct a performance test or other initial compliance demonstration?

(a) The permittee shall conduct performance tests in compliance with 40 CFR §63.1571(b).

(b) The permittee shall use the procedures specified in 40 CFR §63.1571(c) for any engineering assessment.

(c) The permittee shall comply with the applicable requirements specified in 40 CFR §63.1571(d) to adjust the process or control device measured values when establishing an operating limit.

(d) The permittee shall comply with the applicable requirements specified in 40 CFR §63.1571(e)(1) through (3) to change the established operating limit.

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1570]**

Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units

What are my general requirements for complying with this subpart?

The permittee shall report each instance in which each emission limitation and each operating limit was not met. This includes periods of startup, shutdown, and malfunction. The permittee shall report each instance in which the applicable work practice standards were not met. These instances are deviations from the emission limitations and work practice standards in this subpart. These deviations must be reported according to the requirements in 40 CFR §63.1575.

**SECTION E. Source Group Restrictions.****# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1575]****Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What reports must I submit and when?**

(a) The permittee shall submit each report required in Table 43 of 40 CFR Part 63 Subpart UUU.

(b) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.

(c) The compliance report must contain the information required below:

- (1) Company name and address.
- (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
- (3) Date of report and beginning and ending dates of the reporting period.
- (4) If there are no deviations from any emission limitation that applies to the permittee and there are no deviations from the requirements for work practice standards, a statement that there were no deviations from the emission limitations or work practice standards during the reporting period and that no continuous emission monitoring system or continuous opacity monitoring system was inoperative, inactive, malfunctioning, out-of-control, repaired, or adjusted.

(d) For each deviation from an emission limitation and for each deviation from the requirements for work practice standards that occurs at an affected source where the permittee is not using a continuous opacity monitoring system or a continuous emission monitoring system to comply with the emission limitation or work practice standard in 40 CFR Part 63 Subpart UUU, the semiannual compliance report must contain the information in paragraphs (c)(1) through (3) above and the information in paragraphs (d)(1) through (4) below.

- (1) The total operating time of each affected source during the reporting period and identification of the sources for which there was a deviation..
- (2) Information on the number, date, time, duration, and cause of deviations (including unknown cause, if applicable)..
- (3) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks).
- (4) The applicable operating limit or work practice standard from which the permittee deviated and either the parameter monitor reading during the deviation or a description of how the permittee deviated from the work practice standard.

(e) For each deviation from an emission limitation occurring at an affected source using a continuous emission monitoring system to comply with the emission limitation, the permittee must include the information in 40 CFR Sections 63.1575(c)(1) through (3) and in 40 CFR Sections 63.1575 (d)(1) through (3), and the information in 40 CFR Sections 63.1575(e)(2) through (13), as follows:

- (1) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was inoperative, except for zero (low-level) and high-level checks.
- (2) The date and time that each continuous opacity monitoring system or continuous emission monitoring system was out-of-control, including the information in 40 CFR §63.8(c)(8).
- (3) An estimate of the quantity of each regulated pollutant emitted over the emission limit during the deviation, and a description of the method used to estimate the emissions.
- (4) A summary of the total duration of the deviation during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging period specified in the regulation for other types of emission limitations), and the total duration as a percent of the total source operating time during that reporting period.
- (5) A breakdown of the total duration of the deviations during the reporting period and into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
- (6) A summary of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period (recorded in minutes for opacity and hours for gases and in the averaging time specified in the regulation for other types of standards), and the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system as a percent of the total source operating time during that reporting period.

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(7) A breakdown of the total duration of downtime for the continuous opacity monitoring system or continuous emission monitoring system during the reporting period into periods that are due to monitoring equipment malfunctions, non-monitoring equipment malfunctions, quality assurance/quality control calibrations, other known causes, and other unknown causes.

(8) An identification of each HAP that was monitored at the affected source.

(9) A brief description of the process units.

(10) The monitoring equipment manufacturer(s) and model number(s).

(11) The date of the latest certification or audit for the continuous opacity monitoring system or continuous emission monitoring system.

(12) A description of any change in the continuous emission monitoring system or continuous opacity monitoring system, processes, or controls since the last reporting period.

(f) The permittee also must include the following information required in 40 CFR Sections 63.1575(f)(1) through (2) in each compliance report, if applicable.

(1) A copy of any performance test or performance evaluation of a CMS done during the reporting period on any affected unit. The report must be included in the next semiannual report. The copy must include a complete report for each test method used for a particular kind of emission point tested. For additional tests performed for a similar emission point using the same method, the permittee must submit the results and any other information required, but a complete test report is not required. A complete test report contains a brief process description; a simplified flow diagram showing affected processes, control equipment, and sampling point locations; sampling site data; description of sampling and analysis procedures and any modifications to standard procedures; quality assurance procedures; record of operating conditions during the test; record of preparation of standards; record of calibrations; raw data sheets for field sampling; raw data sheets for field and laboratory analyses; documentation of calculations; and any other information required by the test method.

For data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test, the permittee must submit the results in accordance with paragraph (k)(1)(i) of 40 CFR Section 63.1575 by the date that the compliance report is submitted, and instead of including a copy of the test report in the compliance report, the permittee must include the process unit(s) tested, the pollutant(s) tested, and the date that such performance test was conducted in the compliance report. For performance evaluations of CMS measuring relative accuracy test audit (RATA) pollutants that are supported by the EPA's ERT as listed on the EPA's ERT website at the time of the evaluation, the permittee must submit the results in accordance with paragraph (k)(2)(i) of 40 CFR Section 63.1575 by the date that the permittee submits the compliance report, and the permittee must include the process unit where the CMS is installed, the parameter measured by the CMS, and the date that the performance evaluation was conducted in the compliance report. All other performance tests and performance evaluation results (i.e., those not supported by EPA's ERT) must be reported in the compliance report.

(2) Any requested change in the applicability of an emission standard (e.g., the permittee wants to change from the PM standard to the Ni standard for catalytic cracking units or from the HCl concentration standard to percent reduction for catalytic reforming units) in the compliance report. The permittee must include all information and data necessary to demonstrate compliance with the new emission standard selected and any other associated requirements.

(g) The permittee may submit reports required by other regulations in place of or as part of the compliance report if they contain the required information.

(h) (1) Unless otherwise specified by 40 CFR Part 63 Subpart UUU, within 60 days of completing a performance test as required by Subpart UUU, the permittee must submit the results of the performance tests following the procedure in either 40 CFR Part 63 Section 63.1575 (k)(1)(i) or (ii).

(2) Unless otherwise specified by 40 CFR Part 63 Subpart UUU, within 60 days after the date of completion of each CEMS performance evaluation required by 40 CFR Part 63 Sections 63.1571(a) and (b), the permittee must submit the results of the performance evaluation following the procedure specified in either 40 CFR Part 63 Section 63.1575(k)(2)(i) or (ii).

(i) (1) The permittee who is required to electronically submit a report through the Compliance and Emissions Data Reporting Interface (CEDRI) in EPA's Central Data Exchange (CDX) and due to an actual or planned outage of either the

**SECTION E. Source Group Restrictions.**

EPA's CEDRI or CDX, may apply for a filing extension by following the procedures in 40 CFR Part 63 Section 63.1575(l)(1).

(2) The permittee who is required to electronically submit a report through CEDRI and a force majeure event is about to occur or occurs, may apply for a filing extension by following the procedures in 40 CFR Part 63 Section 63.1575(l)(2).

VI. WORK PRACTICE REQUIREMENTS.**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1570]****Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What are my general requirements for complying with this subpart?**

In accordance with 40CFR Section 63.1570(c),

At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.1574]**Subpart UUU-National Emission Standards for Hazardous Air Pollutants for Petroleum Refineries: Catalytic Cracking Units, Catalytic Reforming Units, and Sulfur Recovery Units****What notifications must I submit and when?**

The permittee shall implement the operation, maintenance, and monitoring plan for each control system and continuous monitoring system for the source. The plan shall contain details of the operation, maintenance, and monitoring procedures.

(1) The permittee shall submit any changes to the Department for review and approval and comply with the plan until the change is approved.

(2) Each plan must include, at a minimum, the following information:

(i) Process and control device parameters to be monitored for each affected source, along with established operating limits.

(ii) Procedures for monitoring emissions and process and control device operating parameters for each affected source.

(iii) Procedures used to determine the coke burn-rate, the volumetric flow rate, and the rate of combustion of liquid fuels in CO Boiler (Source ID C01).

(iv) Procedures and analytical methods used to determine the equilibrium catalyst Ni concentration, the equilibrium catalyst Ni concentration monthly rolling average, and the hourly or hourly average Ni operating value.

(v) Procedures used to determine the pH of the water exiting the wet gas scrubber (Source ID C101-4).

(vi) Procedures used to determine the gas flow rate for the source.

(vii) Monitoring schedule, including when to and not to monitor the source.

(viii) Quality control plan for each continuous monitoring system used to meet an emission limit. The plan must include procedures used for calibrations, accuracy audits, and adjustments to the system needed to meet applicable requirements for the system.

(ix) Maintain schedule for each monitoring system and control device for each affected source that is generally consistent with the manufacturer's instructions for routine and long-term maintenance.

**SECTION E. Source Group Restrictions.****VII. ADDITIONAL REQUIREMENTS.**

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 25

Group Description: 735/736 - State Requirements

Sources included in this group

ID	Name
735	KEROSENE/HCN HTU HEATER
736	DIESEL HTU HEATER

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.**# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The refinery gas burned in this source shall be monitored for sulfur content using the Department certified CMS.

IV. RECORDKEEPING REQUIREMENTS.**# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Using EPA or the Department approved methods, the permittee shall perform calculations demonstrating compliance with the emission limits for this source.

003 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

The permittee shall record the following information for each adjustment conducted:

- (1) The date of the tuning procedure.
- (2) The name of the service company and the technician performing the procedure.
- (3) The final operating rate or load.
- (4) The final NO_x and CO emission rates.
- (5) The final excess oxygen rate.
- (6) Other information required by the applicable operating permit.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 004 [25 Pa. Code §129.114]****Alternative RACT proposal and petition for alternative compliance schedule**

The permittee shall conduct annual tune-up in accordance with the provisions specified in 40 CFR §63.7540(a)(10)(i) through (vi).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**SECTION E. Source Group Restrictions.**

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 30

Group Description: MACT BOILERS AND PROCESS HEATERS

Sources included in this group

ID	Name
034	BOILER 9
035	BOILER 10
053	BOILER 14
733	FCCU FEED HEATER
735	KEROSENE/HCN HTU HEATER
736	DIESEL HTU HEATER
737	NAPHTHA HDS HEATER
738	PLATFORMER FEED HEATER
739	ISOCRACKER 1ST STAGE HEATER.
740	ISOCRACKER SPLITTER RBLR
741	D2/VGO HYDROTREATER FEED HEATER
742	VCD 541 VAC HEATER
743	VCD 542 VAC HEATER
744	ACD 543 CRUDE HEATER
745	ACD 544 CRUDE HEATER
746	VCD 544 VAC HEATER

I. RESTRICTIONS.**Fuel Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7499]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What are the subcategories of boilers and process heaters?**

As per 40 C.F.R. §63.7499(I), the boilers and process heaters under Source ID 030 are in the subcategory of Units designed to burn gas 1 fuels.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7555]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What records must I keep?**

The permittee must keep a copy of each notification and report submitted to DEP to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status submitted, according to the requirements in 40 C.F.R. §63.10(b)(2)(xiv).

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7560]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****In what form and how long must I keep my records?**

**SECTION E. Source Group Restrictions.**

- (a) The records must be in a form suitable and readily available for expeditious review, according to 40 C.F.R. §63.10(b)(1).
- (b) As specified in 40 C.F.R. §63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) The permittee must keep each record on site, or the records must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. §63.10(b)(1).

V. REPORTING REQUIREMENTS.**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7495]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****When do I have to comply with this subpart?**

The permittee must meet the notification requirements in 40 C.F.R. §63.7545 according to the schedule in 40 C.F.R. §63.7545 and in subpart A of 40 C.F.R. Part 63.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7530]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****How do I demonstrate initial compliance with the emission limitations, fuel specifications and work practice standards?**

- (a) The permittee must submit a signed statement in the Notification of Compliance Status report that indicates that a tuneup of the unit was conducted.
- (b) The permittee must include with the Notification of Compliance Status a signed certification that the energy assessment was completed according to Table 3 to 40 C.F.R. 63 Subpart DDDDD and is an accurate depiction of the unit at the time of the assessment.
- (c) The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 C.F.R. §63.7545(e).

006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7545]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What notifications must I submit and when?**

The permittee must submit a Notification of Compliance Status according to 40 C.F.R. §63.9(h)(2)(ii). The Notification of Compliance Status must contain the information specified below, as per 40 C.F.R. §63.7545(e):

- (1) A description of the unit including identification of which subcategories the unit is in, the design heat input capacity of the unit, description of the fuel(s) burned.
- (2) In addition to the information required in 40 C.F.R. §63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, and signed by a responsible official:
- (i) "This facility complies with the required initial tune-up according to the procedures in 40 C.F.R. §63.7540(a)(10)(i) through (vi)."
- (ii) "This facility has had an energy assessment performed according to 40 C.F.R. §63.7530(e)."

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7550]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What reports must I submit and when?**

- (a) The permittee must submit each report in Table 9 to 40 C.F.R. 63 Subpart DDDDD that applies.
- (b) A compliance report must contain the following information.

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- (1) Company and Facility name and address.
- (2) Unit information.
- (3) Date of report and beginning and ending dates of the reporting period.
- (4) The total operating time during the reporting period.
- (5) The date of the most recent tune-up for the unit. The date of the most recent burner inspection if it was not done and was delayed until the next scheduled or unscheduled unit shutdown.
- (6) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.

VI. WORK PRACTICE REQUIREMENTS.**# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7500]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What emission limits, work practice standards, and operating limits must I meet?**

- (a) The permittee must meet each work practice standard in Table 3 to 40 C.F.R. 63 Subpart DDDDD that applies to the unit.
- (b) At all times, the permittee must operate and maintain the unit in a manner consistent with safety and good air pollution control practices for minimizing emissions.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7510]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What are my initial compliance requirements and by what date must I conduct them?**

- (a) As per 40 C.F.R. §63.7510(e), the permittee must complete an initial tune-up by following the procedures described in 40 C.F.R. §63.7540(a)(10)(i) through (vi) no later than January 31, 2016 as specified in 40 C.F.R. §63.7495.
- (b) The permittee must complete a one-time energy assessment specified in Table 3 to 40 C.F.R. 63 Subpart DDDDD no later than January 31, 2016. The one-time energy assessment must be performed by a qualified energy assessor, and must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in 40 C.F.R. §63.7575:
 - a. A visual inspection of the unit system.
 - b. An evaluation of operating characteristics of the unit systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
 - c. An inventory of major energy use systems consuming energy from the unit.
 - d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
 - e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.
 - f. A list of cost-effective energy conservation measures that are within the facility's control.
 - g. A list of the energy savings potential of the energy conservation measures identified.
 - h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

**SECTION E. Source Group Restrictions.****# 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?**

As per 40 C.F.R. §63.7540(a)(10)(i) through (vi), each tune-up must be conducted by following the procedures specified below:

- (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown);
- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the inspection may be delayed until the next scheduled unit shutdown);
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;
- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Maintain on-site and submit, if requested by DEP, an annual report containing the following information,
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the unit;
 - (B) A description of any corrective actions taken as a part of the tune-up; and
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up. Units sharing a fuel meter may estimate the fuel used by each unit.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 35

Group Description: MACT BOILERS AND PROCESS HEATERS - W/O O2 TRIM SYSTEM

Sources included in this group

ID	Name
733	FCCU FEED HEATER
735	KEROSENE/HCN HTU HEATER
736	DIESEL HTU HEATER
739	ISOCRACKER 1ST STAGE HEATER.
740	ISOCRACKER SPLITTER RBLR
741	D2/VGO HYDROTREATER FEED HEATER
742	VCD 541 VAC HEATER
743	VCD 542 VAC HEATER
744	ACD 543 CRUDE HEATER
746	VCD 544 VAC HEATER

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.**# 001 [25 Pa. Code §129.115]****Written notification, compliance demonstration and recordkeeping and reporting requirements**

[Additional authority for this condition is derived from 40 C.F.R. § 63.7540(a)(10)(vi)]

Maintain records of the following:

- (a) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the unit;
- (b) A description of any corrective actions taken as a part of the tune-up; and
- (c) The type and amount of fuel used over the 12 months prior to the tune-up. Units sharing a fuel meter may estimate the fuel used by each unit.

V. REPORTING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7550]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What reports must I submit and when?**

The permittee must submit annual compliance reports for units without O2 trim system, as specified in paragraphs (1) through (4) of this section.

- (1) The first compliance report must cover the period beginning on the compliance date and ending on January 31, the first date that occurs at least 1 year for submitting an annual compliance report after January 31, 2016.

**SECTION E. Source Group Restrictions.**

- (2) The first annual compliance report must be postmarked or submitted no later than January 31.
- (3) Annual compliance reports must cover 1-year periods from January 1 to December 31.
- (4) Annual compliance reports must be postmarked or submitted no later than January 31.

VI. WORK PRACTICE REQUIREMENTS.**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7515]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****When must I conduct subsequent performance tests or fuel analyses, or tune-ups?**

As per 40 C.F.R. §63.7515, the permittee must conduct an annual tune-up for units without O₂ trim system. Each annual tune-up specified in 40 C.F.R. §63.7540(a)(10) must be no more than 13 months after the previous tune-up.

[Compliance with this work practice was an accepted surrogate to demonstrate compliance with 25 Pa.Code § 129.115(b)(6). Compliance with this condition assures compliance with the presumptive RACT III limit in the Emission Restriction section.]

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?**

As per 40 C.F.R. §63.7540(a)(10)(i) through (vi), each tune-up must be conducted by following the procedures specified below:

- (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the burner inspection may be delayed until the next scheduled unit shutdown);
- (ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;
- (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the inspection may be delayed until the next scheduled unit shutdown);
- (iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject;
- (v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and
- (vi) Submit, if requested by DEP, an annual report containing the following information,
 - (A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the unit;
 - (B) A description of any corrective actions taken as a part of the tune-up; and
 - (C) The type and amount of fuel used over the 12 months prior to the tune-up. Units sharing a fuel meter may estimate the fuel used by each unit.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

**SECTION E. Source Group Restrictions.**

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 40

Group Description: MACT BOILERS AND PROCESS HEATERS - W/ O2 TRIM SYSTEM

Sources included in this group

ID	Name
034	BOILER 9
035	BOILER 10
053	BOILER 14
737	NAPHTHA HDS HEATER
738	PLATFORMER FEED HEATER
745	ACD 544 CRUDE HEATER

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.**# 001 [25 Pa. Code §129.115]****Written notification, compliance demonstration and recordkeeping and reporting requirements**

[Additional authority for this condition is derived from 40 C.F.R. § 63.7540(a)(10)(vi)]

Maintain records of the following:

- (a) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the unit;
- (b) A description of any corrective actions taken as a part of the tune-up; and
- (c) The type and amount of fuel used over the 12 months prior to the tune-up. Units sharing a fuel meter may estimate the fuel used by each unit.

V. REPORTING REQUIREMENTS.**# 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7550]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What reports must I submit and when?**

For units equipped with O2 trim system, the permittee must submit 5-year compliance reports, as specified in paragraphs (1) through (4) below.

- (1) The first compliance report must cover the period beginning on the compliance date that is specified for the unit in 40 C.F.R. §63.7495 and ending on January 31, the first date that occurs at least 5 years after January 31, 2016.
- (2) The first 5-year compliance report must be postmarked or submitted no later than January 31.
- (3) 5-year compliance reports must cover the applicable 5-year periods from January 1 to December 31.
- (4) 5-year compliance reports must be postmarked or submitted no later than January 31.

**SECTION E. Source Group Restrictions.****VI. WORK PRACTICE REQUIREMENTS.****# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7515]****Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****When must I conduct subsequent performance tests or fuel analyses, or tune-ups?**

For units equipped with O2 trim system, the permittee must conduct 5-year performance tune-up according to 40 C.F.R. § 63.7540(a)(12). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up.

[Compliance with this work practice was an accepted surrogate to demonstrate compliance with 25 Pa.Code § 129.115(b)(6). Compliance with this condition assures compliance with the presumptive RACT III limit in the Emission Restriction section.]

004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?**

If your boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio or meets the definition of limited-use boiler or process heater in 40 C.F.R. § 63.7575, you must conduct a tune-up of the boiler or process heater every 5 years as specified in 40 C.F.R. §§ 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. You may delay the burner inspection specified in 40 C.F.R. § 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but you must inspect each burner at least once every 72 months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 45

Group Description: 747A/748A - H-124 Process Heaters - State and Federal Requirements

Sources included in this group

ID	Name
747A	REACTOR EFFLUENT HEATER H-124-01 (H01)
748A	STRIPPER REBOILER HEATER H-124-02 (H02)

I. RESTRICTIONS.**Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

NO_x emissions from this source shall not exceed 0.035 lb/MMBtu, based on a 30-operating day rolling average.

[Compliance with the NO_x emission limit in this streamlined permit condition assures compliance with the NO_x emission limit specified in 40 C.F.R. § 60.102a(g)(2)(i)(B). This is a RACT-strengthening condition.]

002 [25 Pa. Code §129.112]**Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule**

A refinery gas-fired combustion unit or process heater with a rated heat input equal to or greater than 50 million Btu/hour shall comply with 0.25 lb NO_x/million Btu heat input (daily average).

003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.102a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Emissions limitations.**

[Authority for this permit condition is derived from 40 C.F.R. § 60.102a(g).]

The owner or operator shall not burn in any fuel gas combustion device any fuel gas that contains H₂S in excess of 162 ppmv determined hourly on a 3-hour rolling average basis and H₂S in excess of 60 ppmv determined daily on a 365 successive calendar day rolling average basis.

[Compliance with this limit assures compliance with 25 Pa. Code §123.22(e)(3).]

Fuel Restriction(s).**# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

This source shall only be fired by refinery fuel gas from the existing North Side Fuel Gas system.

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.**# 005 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall monitor the amount of fuel consumed by this source on a monthly and 12-month rolling basis.

006 [25 Pa. Code §127.441]**Operating permit terms and conditions.**

(a) The fuel gas supplied to this process heater shall be continuously monitored for H₂S concentration and averaged in accordance with 40 C.F.R. Part 60, Subpart Ja, and in accordance with the latest revision of the Department's Continuous Source Monitoring Manual.

**SECTION E. Source Group Restrictions.**

(b) NO_x and O₂ concentrations from the exhaust stack of this process heater shall be continuously monitored and averaged in accordance with 40 C.F.R. Part 60, Subpart Ja, and in accordance with the latest revision of the Department's Continuous Source Monitoring Manual.

007 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

In accordance with 25 Pa. Code § 129.115(b)(4), the permittee shall demonstrate compliance with the emission limit established under 25 Pa. Code § 129.112(g)(1)(i) and (iv) using a CEMS, in accordance with the requirements in Chapter 139, Subchapter C, using a daily average.

(a) The daily average shall be calculated by summing the total pounds of pollutant emitted for the calendar day and dividing that value by the total heat input to the source for the same calendar day.

(b) The daily average for the source shall include all emissions that occur during the entire day.

008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.107a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Monitoring of emissions and operations for fuel gas combustion devices and flares.**

(a) The permittee shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration (dry basis, 0-percent excess air) of NO_x emissions into the atmosphere in accordance with the requirements specified in 40 C.F.R. § 60.107a(d).

(b) The permittee shall install, operate, calibrate and maintain an instrument for continuously monitoring and recording the concentration by volume (dry basis) of H₂S in the fuel gases before being burned in any fuel gas combustion device in accordance with the requirements specified in 40 C.F.R. § 60.107a(a)(2).

IV. RECORDKEEPING REQUIREMENTS.**# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall calculate and maintain records of NO_x, VOC, CO, SO₂, and PM/PM-10/PM-2.5 emissions for this source on a monthly and 12-month rolling sum basis.

(b) The permittee shall maintain records of the amount of fuel consumed by this source on a monthly and 12-month rolling basis.

010 [25 Pa. Code §129.115]**Written notification, compliance demonstration and recordkeeping and reporting requirements**

The permittee shall maintain records of the following:

- (a) daily average NO_x emissions (lb/MMBtu) for refinery fuel gas
- (b) total pounds of NO_x emitted, daily
- (c) total heat input, daily
- (d) maintenance activities performed on the source

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.108a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Recordkeeping and reporting requirements.**

[Authority for this permit condition is derived from 40 CFR § 60.108a(c)(6).]

The owner or operator shall maintain the following records:

(1) Records of discharges greater than 500 lb SO₂ in excess of the allowable limits from a fuel gas combustion device in any 24-hour period as required by 40 C.F.R. § 60.103a(c). The following information shall be recorded no later than 45 days following the end of a discharge exceeding the thresholds:

- (i) A description of the discharge.

**SECTION E. Source Group Restrictions.**

(ii) The date and time the discharge was first identified and the duration of the discharge.

(iii) The measured or calculated cumulative quantity of gas discharged over the discharge duration. If the discharge duration exceeds 24 hours, record the discharge quantity for each 24-hour period. Engineering calculations are allowed for fuel gas combustion devices.

(iv) For each discharge greater than 500 lb SO₂ in excess of the applicable short-term emissions limit in 40 C.F.R. § 60.102a(g)(1) from a fuel gas combustion device, either the measured concentration of H₂S in the fuel gas or the measured concentration of SO₂ in the stream discharged to the atmosphere. Process knowledge can be used to make these estimates for fuel gas combustion devices.

(v) For each discharge greater than 500 lb SO₂ in excess of the allowable limits from a fuel gas combustion device, the cumulative quantity of H₂S and SO₂ released into the atmosphere. For fuel gas combustion devices, assume 99-percent conversion of H₂S to SO₂.

(vi) The steps that the owner or operator took to limit the emissions during the discharge.

(vii) The root cause analysis and corrective action analysis conducted as required in 40 C.F.R. § 60.103a(d), including an identification of the affected facility, the date and duration of the discharge, a statement noting whether the discharge resulted from the same root cause(s) identified in a previous analysis and either a description of the recommended corrective action(s) or an explanation of why corrective action is not necessary under 40 C.F.R. § 60.103a(e).

(viii) For any corrective action analysis for which corrective actions are required in 40 C.F.R. § 60.103a(e), a description of the corrective action(s) completed within the first 45 days following the discharge and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7555]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

What records must I keep?

[Authority for this permit condition is derived from 40 CFR § 63.7555(a)(1)-(2).]

The permittee shall keep records of the following:

(1) A copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report submitted, according to the requirements in §63.10(b)(2)(xiv).

(2) Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in §63.10(b)(2)(viii).

013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7560]

Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.

In what form and how long must I keep my records?

[Authority for this permit condition is derived from 40 C.F.R. § 63.7560.]

(a) Records shall be maintained in a form suitable and readily available for expeditious review, according to 40 C.F.R. § 63.10(b)(1).

(b) As specified in 40 C.F.R. § 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) The permittee shall keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 C.F.R. § 63.10(b)(1). You can keep the records off site for the remaining 3 years.

**SECTION E. Source Group Restrictions.****V. REPORTING REQUIREMENTS.****# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall submit reports of H₂S and NO_x monitoring data on a quarterly basis in accordance with 40 CFR Part 60, Subpart Ja, and in accordance with the latest revision of the Department's Continuous Source Monitoring Manual.

015 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.107a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Monitoring of emissions and operations for fuel gas combustion devices and flares.**

The permittee shall comply with the requirements for excess emissions as outlined in 40 C.F.R. § 60.107a(i).

016 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.108a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Recordkeeping and reporting requirements.**

[Authority for this permit condition is derived from 40 CFR § 60.108a(a) & (b).]

(a) Each owner or operator subject to the emissions limitations in 40 C.F.R. § 60.102a shall comply with the notification, recordkeeping, and reporting requirements in 40 C.F.R. § 60.7 and other requirements as specified in this condition.

(b) Each owner or operator subject to an emissions limitation in 40 C.F.R. § 60.102a shall notify the Administrator of the specific monitoring provisions of 40 C.F.R. § 60.107a with which the owner or operator intends to comply. This notification shall be submitted with the notification of initial startup required by 40 C.F.R. § 60.7(a)(3).

017 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.108a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Recordkeeping and reporting requirements.**

[Authority for this permit condition is derived from 40 CFR § 60.108a(d).]

Each owner or operator subject to Subpart Ja shall submit an excess emissions report for all periods of excess emissions according to the requirements of 40 C.F.R. § 60.7(c) except that the report shall contain the information specified in paragraphs (1) through (7) below.

(1) The date that the exceedance occurred;

(2) An explanation of the exceedance;

(3) Whether the exceedance was concurrent with a startup, shutdown, or malfunction of an affected facility or control system; and

(4) A description of the action taken, if any.

(5) The information described in 40 C.F.R. § 60.108a(c)(6) for all discharges listed in paragraph (c)(6).

(6) For any periods for which monitoring data are not available, any changes made in operation of the emission control system during the period of data unavailability which could affect the ability of the system to meet the applicable emission limit. Operations of the control system and affected facility during periods of data unavailability are to be compared with operation of the control system and affected facility before and following the period of data unavailability.

(7) A written statement, signed by a responsible official, certifying the accuracy and completeness of the information contained in the report.

018 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]**Subpart A - General Provisions****Address.**

This source is subject to 40 CFR Part 60, Subpart Ja - Standards of Performance for New Stationary Sources, and shall

**SECTION E. Source Group Restrictions.**

comply with all applicable requirements of this Subpart.

Pursuant to 40 CFR Section 60.4, the permittee shall submit copies of all required requests, reports, applications, submittals, and other communications to both EPA and the appropriate Regional Office of the Department. The EPA copies shall be forwarded to:

Associate Director
Office of Air and Radiation Division (3ED21)
United States Environmental Protection Agency
Region 3
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

Any variations from the compliance monitoring, testing, and reporting methods specified in the New Source Performance Standards shall be approved in advance by the U.S. EPA

019 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.13]**Subpart A--General Provisions****Addresses of State air pollution control agencies and EPA Regional Offices.**

This source is subject to 40 CFR Part 63 Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants, and shall comply with all applicable requirements of this Subpart.

Pursuant to 40 C.F.R. § 63.13, the permittee shall submit copies of all required requests, reports, applications, submittals, and other communications to both EPA and the appropriate Regional Office of the Department. The EPA copies shall be forwarded to:

Associate Director
Office of Air and Radiation Division (3ED21)
United States Environmental Protection Agency
Region 3
Four Penn Center
1600 John F. Kennedy Boulevard
Philadelphia, PA 19103-2852

Any variations from the compliance monitoring, testing, and reporting methods specified in the National Emission Standards for Hazardous Air Pollutants shall be approved in advance by the U.S. EPA.

020 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7545]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What notifications must I submit and when?**

[Authority for this permit condition is derived from 40 CFR § 63.7545(a).]

The permittee shall submit to the Administrator all of the notifications in 40 C.F.R. § 63.9(b) through (h), that are applicable by the dates specified.

021 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7550]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What reports must I submit and when?**

(a) The permittee shall submit annual compliance reports in accordance with 40 C.F.R. § 63.7550(b), (c)(5), and (h)(3).

(b) The compliance report shall contain the following information:

(i) Company and Facility name and address.

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- (ii) Process unit information, emissions limitations, and operating parameter limitations.
 - (iii) Date of report and beginning and ending dates of the reporting period.
 - (iv) Include the date of the most recent tune-up.
 - (v) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- (c) The permittee shall submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee shall use the appropriate electronic report in CEDRI for this subpart. Instead of using the electronic report in CEDRI for this subpart, you may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, you must submit the report to the Administrator at the appropriate address listed in 40 C.F.R. § 63.13. You must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

VI. WORK PRACTICE REQUIREMENTS.**# 022 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

Continuous Emission Monitoring Systems and components must be operated and maintained in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), and the "Quality Assurance" requirements in the Department's Continuous Source Monitoring Manual, Revision No. 8, 274-0300-001.

Compliance with any subsequently issued revision to the Continuous Monitoring Source Manual will constitute compliance with this permit condition.

023 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.103a]**Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After May 14, 2007****Work practice standards.**

[Authority for this permit condition is derived from 40 CFR § 60.103a(c)(2), (d)(1) & (5), and (e)(1)-(3).]

(a) Each owner or operator that operates a fuel gas combustion device shall conduct a root cause analysis and a corrective action analysis for each exceedance of an applicable short-term emissions limit in 40 C.F.R. § 60.102a(g)(1) if the SO₂ discharge to the atmosphere is 227 kg (500 lb) greater than the amount that would have been emitted if the emissions limits had been met during one or more consecutive periods of excess emissions or any 24-hour period, whichever is shorter.

(b) A root cause analysis and corrective action analysis must be completed as soon as possible, but no later than 45 days after a discharge meeting the above condition.

(1) If a single continuous discharge meets any of the conditions specified in paragraphs (a) above, for 2 or more consecutive 24-hour periods, a single root cause analysis and corrective action analysis may be conducted.

(2) If discharges occur that meet the conditions specified in paragraph (a) above, for more than one affected facility in the same 24-hour period, initial root cause analyses shall be conducted for each affected facility. If the initial root cause analyses indicate that the discharges have the same root cause(s), the initial root cause analyses can be recorded as a single root cause analysis and a single corrective action analysis may be conducted.

(c) Each owner or operator of a fuel gas combustion device shall implement the corrective action(s) identified in the corrective action analysis conducted pursuant to paragraph (b) above, in accordance with the applicable requirements in paragraphs (1) through (3) below.

(1) All corrective action(s) must be implemented within 45 days of the discharge for which the root cause and corrective action analyses were required or as soon thereafter as practicable. If an owner or operator concludes that corrective action

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should not be conducted, the owner or operator shall record and explain the basis for that conclusion no later than 45 days following the discharge as specified in 40 C.F.R. § 60.108a(c)(6)(ix).

(2) For corrective actions that cannot be fully implemented within 45 days following the discharge for which the root cause and corrective action analyses were required, the owner or operator shall develop an implementation schedule to complete the corrective action(s) as soon as practicable.

(3) No later than 45 days following the discharge for which a root cause and corrective action analyses were required, the owner or operator shall record the corrective action(s) completed to date, and, for action(s) not already completed, a schedule for implementation, including proposed commencement and completion dates as specified in 40 C.F.R. § 60.108a(c)(6)(x).

024 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7500]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What emission limits, work practice standards, and operating limits must I meet?**

[Authority for this permit condition is derived from 40 CFR § 63.7500, Table 3.]

The permittee shall conduct a tune-up of the process heater annually as specified in 40 C.F.R. § 63.7540. Units in the Gas 1 subcategory shall conduct this tune-up as a work practice for all regulated emissions under 40 CFR Part 63, Subpart DDDDD

025 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7500]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****What emission limits, work practice standards, and operating limits must I meet?**

At all times, the permittee shall operate and maintain this source, including associated monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

026 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7515]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****When must I conduct subsequent performance tests or fuel analyses, or tune-ups?**

[Authority for this permit condition is derived from 40 C.F.R. § 63.7515(d).]

If you are required to meet an applicable tune-up work practice standard, you must conduct an annual performance tune-up according to 40 C.F.R. § 63.7540(a)(10). Each annual tune-up specified in 40 C.F.R. § 63.7540(a)(10) must be no more than 13 months after the previous tune-up. For a new or reconstructed affected source (as defined in 40 C.F.R. § 63.7490), the first annual tune-up must be no later than 13 months, after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.

027 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.7540]**Subpart DDDDD - National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial and Institutional Boilers and Process Heaters.****How do I demonstrate continuous compliance with the emission limitations, fuel specifications and work practice standards?**

[Authority for this permit condition is derived from 40 CFR § 63.7540(a)(10).]

The permittee shall conduct an annual tune-up of the process heater to demonstrate continuous compliance as specified in paragraphs (i) through (vi) of this condition. The tune-up shall be conducted while burning refinery fuel gas.

(i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The

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adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown);

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (vi)(A) through (C) of this condition:

(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

(B) A description of any corrective actions taken as a part of the tune-up; and

(C) The amount of fuel used over the 12 months prior to the tune-up. Units sharing a fuel meter may estimate the fuel used by each unit.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 50

Group Description: BOILERS - 25 Pa. Code 145.8

Sources included in this group

ID	Name
034	BOILER 9
035	BOILER 10
053	BOILER 14

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.**# 001 [25 Pa. Code §145.8.]****Transition to CAIR NO_x Trading Programs.**

The permittee shall comply with all applicable requirements as specified in 25 Pa. Code §145.8(d) - Non-EGU NO_x Trading Program Budget:

(1) Statewide limitation. The sum of NO_x ozone season emissions from all units subject to this subsection may not exceed the Commonwealth's non-EGU NO_x Trading Program budget of 3,619 tons during any ozone season.

(2) CAIR NO_x ozone season allowances. All units subject to this subsection shall monitor and report NO_x emissions in accordance with 40 CFR Part 96, Subpart HHHH (relating to monitoring and reporting), and establish a CAIR-authorized account representative and general account, in accordance with 40 CFR Part 96, Subparts BBBB and FFFF (relating to CAIR designated representative for CAIR NO_x ozone season sources; and CAIR NO_x ozone season allowance tracking system), incorporated into Subchapter D by reference, for the purposes of ensuring continued compliance with the non-EGU NO_x Trading Program budget limitation of paragraph (1) and of retiring CAIR NO_x ozone season allowances.

(3) CAIR NO_x allowances. All units subject to this subsection shall establish a CAIR-authorized account representative and general account in accordance with 40 CFR Part 96, Subparts BB and FF (relating to CAIR designated representative for CAIR NO_x sources; and CAIR NO_x allowance tracking system), incorporated into Subchapter D by reference, for the purpose of retiring CAIR NO_x allowances.

(4) Emissions below Statewide limitation. If the total ozone season emissions from all units subject to this subsection are less than 3,438 tons of NO_x, the Department's permanent retirement of allowances covers all applicable emissions and no additional account transactions are required by the units covered under this subsection.

(5) Allowable emissions per unit. By January 31, 2009, and by January 31 of each year thereafter, the Department will

**SECTION E. Source Group Restrictions.**

determine the allowable amount of NOx emissions for the next ozone season for each unit subject to this subsection, as follows:

Allowable emission rate X each unit's heat input

Where "Allowable emission rate" =

3,438 tons of NOx

Combined heat input of all units during the most recent ozone season

(6) Allowance surrender for excess emissions. If the combined NOx emissions from all units subject to this subsection exceed 3,438 tons in an ozone season, then a unit whose actual emissions exceed the unit's allowable emissions for that ozone season, as determined under paragraph (5), shall surrender to the Department by April 30 of the year following the ozone season one CAIR NOx ozone season allowance and one CAIR NOx allowance for each ton of excess emissions. A unit whose excess emissions are 0.5 ton or greater of the next excess ton shall surrender 1 full ton of CAIR NOx allowances (banked or current) for that excess emission. Units under common ownership may include the allowable and actual emissions from multiple units to determine whether a unit must surrender allowances.

(7) Surrender procedure. To surrender allowances under paragraph (6), an owner or operator of a unit shall surrender the required CAIR NOx ozone season allowances and CAIR NOx allowances to the Department's designated NOx allowance tracking system account and provide to the Department, in writing, the following:

(i) The serial number of each allowance surrendered.

(ii) The calculations used to determine the quantity of allowances required to be surrendered.

(8) Failure to surrender allowances. If an owner or operator fails to comply with paragraph (6), the owner or operator shall by June 30 surrender three CAIR NOx ozone season allowances and three CAIR NOx allowances of the current or later year vintage for each ton of excess emissions as calculated under paragraph (6).

(9) Liability not affected. The surrender of CAIR NOx ozone season allowances and CAIR NOx allowances under paragraph (6) does not affect the liability of the owner or operator of the unit for any fine, penalty or assessment, or an obligation to comply with any other remedy for the same violation, under the CAA or the act.

(i) For purposes of determining the number of days of violation, if a facility has excess emissions for the period May 1 through September 30, each day in that period (153 days) constitutes a day in violation unless the owner or operator of the unit demonstrates that a lesser number of days should be considered.

(ii) Each ton of excess emissions is a separate violation.

(10) Allowance retirement. The Department will permanently retire to the Department's CAIR NOx retirement account the allowances surrendered under paragraphs (6)--(9).

(11) Actual emissions below allowable emissions. If a facility's allowable emissions exceed the facility's actual emissions for an ozone season, the owner or operator may deduct the difference or any portion of the difference from the actual emissions of units under the facility's common control that are subject to §§ 129.201--129.203 (relating to boilers; stationary combustion turbines; and stationary internal combustion engines).

(12) Corrections. One hundred and eighty-one tons of allowable NOx emissions are available to the Department annually for accounting corrections.

[Note: On July 6, 2011, EPA promulgated the Cross-State Air Pollution Rule (CSAPR) to replace CAIR. The CSAPR provisions of 40 CFR Part 97, Subpart AAAAA (relating to CSAPR NOx Annual Trading Program), replaced the provisions of 40 CFR Part 96, Subpart AA (relating to CAIR NOx Annual Trading Program General Provisions), and remain in effect. On October 26, 2016, EPA promulgated the CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart EEEEE (relating to CSAPR NOx Ozone Season Group 2 Trading Program), to replace the previously-established CAIR NOx Ozone

**SECTION E. Source Group Restrictions.**

Season Trading Program and CSAPR NOx Ozone Season Group 1 Trading Program for certain states, including Pennsylvania, beginning with the 2017 ozone season. On April 30, 2021, EPA promulgated the Revised CSAPR Update to establish the provisions of 40 CFR Part 97, Subpart GGGGG (relating to CSAPR NOx Ozone Season Group 3 Trading Program), to replace the provisions of 40 CFR Part 97, Subpart EEEEE, for certain states, including Pennsylvania, beginning with the 2021 ozone season (though DEP will accept CSAPR NOx Ozone Season Group 2 allowances of current year vintage from other states, if available). Accordingly, the permittee shall surrender CSAPR NOx Annual allowances and either CSAPR NOx Ozone Season Group 2 allowances or CSAPR NOx Ozone Season Group 3 allowances, as defined in 40 CFR §§ 97.402, 97.802, and 97.1002, respectively, instead of the CAIR NOx allowances and CAIR NOx Ozone Season allowances indicated in 25 Pa. Code § 129.204(c), as the latter are no longer available.]

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

*** **Permit Shield in Effect.** ***

**SECTION F. Alternative Operation Requirements.**

No Alternative Operations exist for this Title V facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
034	BOILER 9		
Emission Limit			Pollutant
10.000	PPMV	Measured by stack test	Ammonia
6.850	Lbs/Hr	12-month rolling average (calculated monthly)	CO
30.000	Tons/Yr	12-month rolling sum	CO
0.100	Lbs/MMBTU	Daily average	NOX
2.700	Lbs/Hr	12-month rolling average (calculated monthly)	NOX
11.800	Tons/Yr	12-month rolling sum	NOX
3.130	Lbs/Hr	Measured by stack test	PM10
13.700	Tons/Yr	12-month rolling sum	PM10
3.130	Lbs/Hr	Measured by stack test	PM2.5
13.700	Tons/Yr	Measured by stack test	PM2.5
3.430	Lbs/Hr	12-month rolling average (calculated monthly)	SOX
15.000	Tons/Yr	12-month rolling sum	SOX
0.460	Lbs/Hr	Measured by stack test	VOC
1.650	Tons/Yr	fugitive emissions	VOC
2.000	Tons/Yr	12-month rolling sum	VOC
035	BOILER 10		
Emission Limit			Pollutant
10.000	PPMV	Measured by stack test	Ammonia
6.850	Lbs/Hr	12-month rolling average (calculated monthly)	CO
30.000	Tons/Yr	12-month rolling sum	CO
0.100	Lbs/MMBTU	Daily average	NOX
2.700	Lbs/Hr	12-month rolling average (calculated monthly)	NOX
11.800	Tons/Yr	12-month rolling sum	NOX
3.130	Lbs/Hr	Measured by stack test	PM10
13.700	Tons/Yr	12-month rolling sum	PM10
3.130	Lbs/Hr	Measured by stack test	PM2.5
13.700	Tons/Yr	Measured by stack test	PM2.5
3.430	Lbs/Hr	12-month rolling average (calculated monthly)	SOX
15.000	Tons/Yr	12-month rolling sum	SOX
0.460	Lbs/Hr	Measured by stack test	VOC
1.650	Tons/Yr	fugitive emissions	VOC
2.000	Tons/Yr	12-month rolling sum	VOC
053	BOILER 14		
Emission Limit			Pollutant
0.019	Lbs/MMBTU	Average of three (3) one-hr tests	CO
29.630	Tons/Yr	12-month rolling sum	CO
0.008	Lbs/MMBTU	30-day rolling average	NOX
0.210	Lbs/MMBTU	30-day rolling avg.	NOX

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
	11.700 Tons/Yr	12-month rolling sum	NOX
	0.009 Lbs/MMBTU	Average of three (3) one-hr tests	PM10
	13.520 Tons/Yr	12-month rolling sum	PM10
	0.009 Lbs/MMBTU	Average of three (3) one-hr tests	PM2.5
	9.900 Tons/Yr	12-month rolling sum	PM2.5
	12.020 Tons/Yr	12-month rolling sum	SOX
	0.001 Lbs/MMBTU	Average of three (3) one-hr tests	VOC
	1.980 Tons/Yr	12-month rolling sum	VOC
101	FCC UNIT		
	Emission Limit		Pollutant
	434.100 Tons/Yr	12-month rolling sum	CO
	500.000 PPMV	dry at 0% O2, 1-hr average	CO
	1.000 Lbs/MMBTU	Full burn	NOX
	121.100 PPMV	dry at 0% O2, 365-day rolling average	NOX
	155.300 PPMV	dry at 0% O2, 7-day rolling average	NOX
	500.000 PPMV	at 0% O2, 3-hour rolling average	NOX
	654.500 Tons/Yr	12-month rolling sum	NOX
	25.000 PPMV	dry at 0% O2, 365-day rolling average	SOX
	50.000 PPMV	dry at 0% O2, 7-day rolling average	SOX
	165.800 Tons/Yr	12-month rolling sum	SOX
	93.300 Tons/Yr	12-month rolling sum	TSP
	8.100 Tons/Yr	12-month rolling sum	VOC
102	CLAUS SULFUR RECOV. PLT.		
	Emission Limit		Pollutant
	3.390 Tons/Yr	12-month rolling basis	NOX
	0.760 Tons/Yr	12-month rolling basis	PM2.5
	250.000 PPMV	at 0% excess air	SOX
	0.040 gr/DRY FT3	Particulate Matter	TSP
	0.620 Tons/Yr	12-month rolling basis	VOC
103	MAIN FLARE		
	Emission Limit		Pollutant
	1.300 Tons/Day		NOX
	69.000 Tons/Yr		NOX
	0.500 Tons/Day		SOX
	25.000 Tons/Yr		SOX
113	LPG RECOVERY UNIT		
	Emission Limit		Pollutant
	4.600 Tons/Yr	12-month rolling sum	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
119	PLATFORMER REGENERATOR		
Emission Limit		Pollutant	
0.370	Tons/Yr	12-month rolling sum	Hydrochloric Acid
137	#152 INT. FLOAT 61M BBL		
Emission Limit		Pollutant	
5.060	Tons/Yr	12-month rolling basis	VOC
138	#153 EXT.FLOAT 53M BBLS		
Emission Limit		Pollutant	
0.700	Tons/Yr	12-month rolling sum	VOC
139	#154A INT. FLOAT 105M BBLS		
Emission Limit		Pollutant	
4.000	Tons/Yr	12-month rolling sum	VOC
150	#168 INT. FLOAT 79M BBLS.		
Emission Limit		Pollutant	
2.890	Tons/Yr	12-month rolling basis	VOC
165	#93 EXT.FLOAT 244M BBL		
Emission Limit		Pollutant	
6.500	Tons/Yr	12-month rolling sums	VOC
166	#94 EXT.FLOAT 243M BBL		
Emission Limit		Pollutant	
6.500	Tons/Yr	12-month rolling sum	VOC
194	#160 INT. FLOAT 85 M BBLS		
Emission Limit		Pollutant	
0.300	Tons/Yr	12-month rolling sum	VOC
701	COOLING TOWERS (CLOSED LOOP RECIRCULATING HEAT EXCHANGERS)		
Emission Limit		Pollutant	
0.020	gr/DRY FT3	Dry standard conditions	PM10
32.080	Tons/Yr	12-month rolling sum for Crude Cooling	VOC
702	ULSG COOLING TOWER		
Emission Limit		Pollutant	
0.020	gr/DRY FT3		TSP
6.020	Tons/Yr	12-month rolling basis	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
733	FCCU FEED HEATER		
Emission Limit			Pollutant
33.100	Tons/Yr	12-month rolling sum	CO
12.480	Tons/Yr	12-month rolling sum	NOX
3.000	Tons/Yr	12-month rolling sum	PM10
2.200	Tons/Yr	12-month rolling sum	VOC
735	KEROSENE/HCN HTU HEATER		
Emission Limit			Pollutant
12.090	Tons/Yr	12-month rolling sum	CO
14.320	Tons/Yr	12-month rolling sum	NOX
736	DIESEL HTU HEATER		
Emission Limit			Pollutant
14.200	Tons/Yr	12-month rolling sum	CO
24.360	Tons/Yr	12-month rolling sum	NOX
1.500	Tons/Yr	12-month rolling sum	PM10
3.400	Tons/Yr	12-month rolling sum	VOC
737	NAPHTHA HDS HEATER		
Emission Limit			Pollutant
0.200	Lbs/MMBTU	refinery fuel gas	NOX
2.410	Tons/Yr	12-month rolling basis	PM2.5
1.740	Tons/Yr	12-month rolling basis	VOC
738	PLATFORMER FEED HEATER		
Emission Limit			Pollutant
48.000	PPMV	12-month rolling average	Hydrogen Sulfide
0.120	Lbs/MMBTU		NOX
317.000	Tons/Yr		NOX
17.190	Tons/Yr	12-month rolling basis	PM2.5
0.011	Lbs/MMBTU	12-month rolling average	SOX
739	ISOCRACKER 1ST STAGE HEATER.		
Emission Limit			Pollutant
0.200	Lbs/MMBTU	refinery fuel gas	NOX
30.660	Tons/Yr	refinery fuel gas	NOX
0.011	Lbs/MMBTU	refinery fuel gas	SOX
740	ISOCRACKER SPLITTER RBLR		
Emission Limit			Pollutant
0.450	Lbs/MMBTU	refinery fuel gas	NOX

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
743	VCD 542 VAC HEATER		
Emission Limit		Pollutant	
4.000	Lbs/Hr		CO
13.800	Tons/Yr		CO
10.800	Lbs/Hr		NOX
31.300	Tons/Yr		NOX
1.780	Lbs/Hr		SOX
7.800	Tons/Yr		SOX
1.000	Lbs/Hr	Particulate Matter	TSP
3.100	Tons/Yr	Particulate Matter	TSP
0.180	Lbs/Hr		VOC
0.790	Tons/Yr		VOC
744	ACD 543 CRUDE HEATER		
Emission Limit		Pollutant	
0.200	Lbs/MMBTU	Refinery gas	NOX
9.760	Tons/Yr	12-month rolling basis	PM2.5
7.070	Tons/Yr	12-month rolling basis	VOC
745	ACD 544 CRUDE HEATER		
Emission Limit		Pollutant	
0.200	Lbs/MMBTU		NOX
746	VCD 544 VAC HEATER		
Emission Limit		Pollutant	
84.100	Tons/Yr		CO
0.060	Lbs/MMBTU		NOX
42.050	Tons/Yr		NOX
9.100	Tons/Yr		TSP
5.500	Tons/Yr		VOC
747A	REACTOR EFFLUENT HEATER H-124-01 (H01)		
Emission Limit		Pollutant	
8.520	Tons/Yr	12-month rolling basis	CO
60.000	PPMV	fuel gas conc. daily on a 365 successive calendar day rolling average basis	Hydrogen Sulfide
162.000	PPMV	fuel gas conc. hourly on a 3-hr rolling average basis	Hydrogen Sulfide
0.035	Lbs/MMBTU	30-operating day rolling average	NOX
11.000	Tons/Yr	12-month rolling basis	NOX
1.570	Tons/Yr	12-month rolling basis	PM10
1.570	Tons/Yr	12-month rolling basis	PM2.5
2.210	Tons/Yr	12-month rolling basis	SO2
1.570	Tons/Yr	12-month rolling basis	TSP
1.570	Tons/Yr	12-month rolling basis	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
748A	STRIPPER REBOILER HEATER H-124-02 (H02)		
Emission Limit			Pollutant
5.250	Tons/Yr	12-month rolling basis	CO
60.000	PPMV	fuel gas conc. daily on a 365 successive calendar day rolling average basis	Hydrogen Sulfide
162.000	PPMV	fuel gas conc. hourly on a 3-hr rolling average basis	Hydrogen Sulfide
0.035	Lbs/MMBTU	30-operating day rolling average	NOX
6.770	Tons/Yr	12-month rolling basis	NOX
0.970	Tons/Yr	12-month rolling basis	PM10
0.970	Tons/Yr	12-month rolling basis	PM2.5
1.360	Tons/Yr	12-month rolling basis	SO2
0.970	Tons/Yr	12-month rolling basis	TSP
0.970	Tons/Yr	12-month rolling basis	VOC

Site Emission Restriction Summary

Emission Limit	Pollutant
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**SECTION H. Miscellaneous.**

The emission limitations contained in Section F of this permit are: incomplete, provided for informational purposes only, and are not enforceable emission limitations. The actual emission limitations are provided in Sections C or D of this permit.

The following operating permits and plan approval serves as a basis for the conditions in this permit:

OP-23-0003,
23-312-213-GP,
PA-23-0041,
NOx Allowance permit.

The Department has determined that the emissions from the following activities or sources, excluding those indicated as site level requirements, in Section C, of this permit, do not require additional limitations, monitoring, recordkeeping, or testing requirements. However, emissions from these sources, if used for regulated substances and produce air emissions, need to be reported pursuant to 25 Pa. Code Chapter 135 and the relevant sections of the Annual Emissions Statement instructions:

- Chemical vendor tanks
- Firewater pump
- Maintenance activities
- Cold cleaning maintenance degreasers
- Gasoline vehicle refueling
- Sand Blasting
- Touchup/repair/maintenance painting
- QA/QC laboratories
- Blind Changing
- Miscellaneous storage tanks (103, 5, 54, 55, 56, 60, 61, 64, 65, 77, 79, 99, 100, 101, 102, 105, 106, 107, 108, 173, 176, 177, 183, 322, 325, 326, 332, 333, 334, 335, 443, 444, 445, 446, 447, 448 and 82-TK-3)
- Lube oil tanks (LUBE, 331, 13V30, 44T1, 81TK2, 81TK5, and T511)
- Empty tanks (109, 104, 116)
- Non-VOC containing tanks (101A, 116A, 111A, 112A, 113A, 114A, 26, 27, 27A, 115, 115A, 312, 313, 34T1, PR568, 88, 13T4, 81TK3, 81TK4, 90T1311, 90T1317A, 90T1317B, 90T1400, 90T403, NA6565, PV2504, PV2506, PV3565, 306A, 306B, 307, 308, 1314, 90T8, 90T9, 90T11, 90T12, 90T13, 90T70, 90T83, 90T84, 90T1314, 87, 72V1, 72V2, 90T1304, 90T303, 90T800, B911099, B921024, B930429, B951580, B951609, B910874, B951565, B951579, C142906, C142907, C151378, C151379, C151380, C151381, C151382, C151547)
- Platform Re-heater
- Barge loading (No. 2 fuel oil, No. 6 fuel oil, and kerosene)
- UPS Generator

March 2003. Auth ID: 495399, APS: 345212. Administrative amendment to address a Change of Ownership from Tosco Corporation - Trainer Refinery, Tax ID - 95-1865716-1, to ConocoPhillips - Trainer Refinery, Tax ID - 73-0400345-1.
Auth ID - 495399, APS - 345212

February 2005. Auth ID - 500964, APS - 345212. The permit was amended to address the appeal of the Title V Operating Permit.
EHB Docket No. 2003-074-K.

January 2006. APS : 599218, AUTH ID: 599218. The Department issued this permit modification is to incorporate consent decree (Civil Action H-05-258) requirements, new applicable requirements (40 C.F.R. 63, Subparts UUU and DDDDD) and correct typographical errors.

August 2006. APS: 558223, AUTH: 639295. The Department amended this permit for cause to include the milestones from the voluntary disclosure for this facility and the incorporation of the milestones (in Section C, of this permit) from 40 C.F.R. 60, Subpart QQQ.

October 2006. APS: 345212, AUTH: 650280. The Department amended this permit to incorporate Consent Decree Requirements into this Federally enforceable permit (Consent Decree No. H-05-0258).

August 2007. APS: 343212, Auth 683028. Amendment to incorporate three plan approvals:
- 23-0003F for the Continuous Catalyst Reforming Unit modification
- 23-0003G for the Platformer Heater Revamp project, and
- 23-0003H for the Isocracker Expansion Project.

**SECTION H. Miscellaneous.**

August 29, 2007, APS: 345212; AUTH: 698075. TVOP renewal.

March 26, 2008, APS: 345212; AUTH ID: 720264. Minor Operating Permit Modification to include consent decree requirements for source IDs 120 and 122.

AUTH ID 745811 includes the following changes:

July 14, 2008, AUTH: 737603; Minor modification to Source ID:739

September 9, 2008, AUTH: 745811; Amendment to incorporate 23-0003J into TVOP

December 30, 2008, AUTH: 759221; Minor modification to Source ID: 031 and 032

February 12, 2009, Appeal - TVOP 23-00003 (EHB Docket No. 2009-008-MG)

December 11, 2009, Amendment to incorporate 23-0003K and 23-0003N into TVOP

July 2010. APS: 345212, Auth: 840413. Amendment to incorporate plan approval, number 23-0003I into the Title V permit. Affected Sources are two boilers, source numbers 034 and 035.

October 8, 2010, APS ID: 345212; AUTH ID: 856142. Modify FCCU NOx emission limits based on CO&A (H-05-0258).

October 13, 2011, APS ID: 345212; AUTH ID: 899011. Administrative Amendment to incorporate Plan Approval No. 23-0003M requirements.

April 15, 2012, AUTH ID: 926895, Administrative amendment for change of ownership from ConocoPhillips Company (EIN: 73-0400345) to Phillips 66 Company (EIN: 37-1652702).

June 22, 2012, APS ID: 786636; AUTH ID: 935887, Administrative amendment for change of ownership from Phillips 66 Company (EIN: 37-1652702) to Monroe Energy, LLC (EIN: 45-5201144).

May 21, 2013, AUTH ID 977672: Administrative amendment to incorporate Plan Approval No. 23-0003P conditions into Title V Operating Permit.

June 28, 2013, AUTH ID 984000: OP minor modification for Peabody Heater (Source ID 130) allowed under RFD # 3561 (exempt from PA requirements on April 4, 2013).

June 18, 2013, AUTH ID 983210: OP renewal.

Issued under AUTH ID 983210:
Boiler MACT application No. 23-0003Q (APS ID 786653, AUTH ID 935910)

Minor OP modification for Source ID 736 (AUTH ID 996326).

June 23, 2014, AUTH ID 1031147: to incorporate Plan Approval Nos. 23-0003W and 23-0003X into TVOP 23-00003.

March 30, 2015, AUTH ID 1067457: OP minor modification to permit conditions for Source ID 194.

June 16, 2016, Auth Id 1141575: Administrative Amendment to incorporate the Plan Approval Nos. 23-0003S and 23-0003AA.

October 25, 2016, AUTH ID 1156874: RACT II application.

April 2018, Auth Id 1216432: Administrative Amendment to incorporate Plan Approval No. 23-0003Y, for Boiler 14 (Source 053).

July 2018, AUTH 1235010: An Administrative Amendment is being processed to change the Responsible Official from Jeffrey K. Warmann, CEO & President, to Michael Capone, Refinery Leader.

April 2023, Auth No. 1238881, APS No. 786636: Title V Operating Permit Renewal

**SECTION H. Miscellaneous.**

- Enhanced LDAR and BWON requirements from the Consent Decree (United States, et al.v.Phillips 66 Company, Civil Action No. H-05-0258 (Southern District of Texas) and subsequent amendments are incorporated in the operating permit.

- The Refinery Sector Rule (RSR) is incorporated.

- Plan approvals incorporated into the operating permit

23-0003Z – Crude Cooling Tower – CT-03 (Area 3 Cooling Tower) was installed. The two other cooling towers are scheduled for installation as presented in the plan approval application.

23-0003AC – ULSG Unit and Crude throughput increase

23-0003AD – LPG Tank Truck Loading Rack

- Plan Approval 23-0003AE was allowed to expire on November 8, 2020.

- Request for Determinations that have been incorporated into the operating permit

RFD 4506 - MONROE will use tank 82-TK-3 to store fuel additive that contains VOC. Previously the tank stored non-VOC liquids. The tank is moved from the list of non- VOC containing tanks to the list of miscellaneous storage tanks listed in Section H.

May 2025, Auth No. 1421281, APS No. 786636: Significant Operating Permit Modification - RACT III



***** End of Report *****
