



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

**TITLE V/STATE OPERATING PERMIT**

Issue Date:	May 21, 2019	Effective Date:	February 18, 2020
Revision Date:	February 18, 2020	Expiration Date:	May 21, 2024
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: 61-00011**

Federal Tax Id - Plant Code: 76-0083036-1

**Owner Information**

Name: SASOL CHEM USA LLC  
Mailing Address: 292 STATE ROUTE 8  
OIL CITY, PA 16301-5626

**Plant Information**

Plant: SASOL CHEMICALS (USA) LLC  
Location: 61 Venango County 61910 Cornplanter Township  
SIC Code: 2869 Manufacturing - Industrial Organic Chemicals, Nec

**Responsible Official**

Name: DAVID R. MCFETRIDGE  
Title: PLANT MANAGER  
Phone: (814) 677 - 2028 Ext.6205

**Permit Contact Person**

Name: LEE E WILSON  
Title: MGR SHES  
Phone: (814) 677 - 2028 Ext.6217

[Signature] \_\_\_\_\_  
ERIC A. GUSTAFSON, NORTHWEST REGION AIR PROGRAM MANAGER



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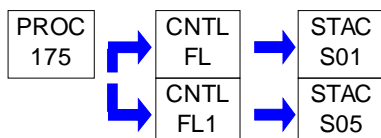
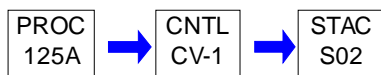
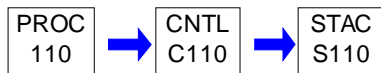
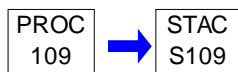
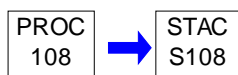
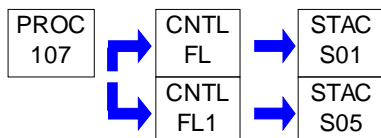
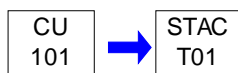
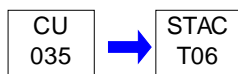
### Section H. Miscellaneous

**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
035	GAS/OIL BOILER #5	25.200 MMBTU/HR	
101	ECLIPSE FURNACE	35.100 MMBTU/HR	
102	KRYSTAL UNIT NORTH & SOUTH DRYERS		
107	314 & 340 DISTILLATION COLUMN VENTS		
108	CREEKSIDE DIESEL FIRE PUMP	30.000 Gal/HR	Diesel Fuel
109	NORTHSIDE DIESEL FIRE PUMP	30.000 Gal/HR	Diesel Fuel
110	BHT PACKAGING	100.000 Lbs/HR	PARTICULATE MATTER (F
125A	KRYSTAL UNIT PROCESS VESSELS		
175	M-CRESOL DISTILLATION COLUMN & ASSOCIATED EQPT		
177	COLD CLEANING PARTS CLEANERS (2)	0.500 Gal/HR	LOW VAPOR PRESSURE
2225	VESSEL 2225		
3003	PELLETIZER UNIT		
FUG	FACILITY VOC FUGITIVES		
PVAC	PNEUVAC PRODUCT/FINES CONVEYING SYSTEM		
T1220	HEADS STORAGE TANK		
T2236	POLYMER STORAGE TANK		
T2238	POLYMER STORAGE TANK		
T5665	ISOBUTYLENE STORAGE TANK		
TK121	ISOBUTYLENE STORAGE TANK		
TK422	ALKYLATE STORAGE TANK		
TK423	ALKYLATE STORAGE TANK		
TK9875	ALKYLATE STORAGE TANK		
BKUP	BAGHOUSE AFTER-FILTER		
C01	KRYSTAL UNIT BAGHOUSE		
C03	PELLETIZER SCRUBBER		
C110	AIR DYNAMICS REMOTE DUST COLLECTOR		
CB	PNEUVAC CYCLONIC BAGHOUSE		
CV-1	CONSERVATION VENT FOR KU PROCESS VESSELS		
CV-2	CONSERVATION VENT FOR TK422		
CV-3	CONSERVATION VENT FOR TK 423		
CV-4	CONSERVATION VENT FOR TK 1220		
CV-5	CONSERVATION VENT FOR TK 2236		
CV-6	CONSERVATION VENTS FOR 2238		
CV-7	CONSERVATION VENTS FOR TK 9875		
FL	FLARE	N/A	Natural Gas
FL1	PRIMARY PROCESS FLARE	N/A	Natural Gas
SF	PNEUVAC SECONDARY FILTER		
S01	FLARE STACK		
S02	KRYSTAL UNIT CONSERVATION VENT STACK		
S05	PRIMARY PROCESS FLARE STACK		

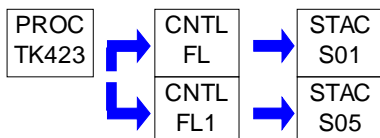
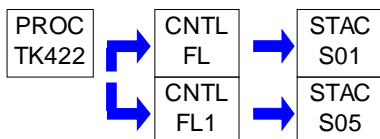
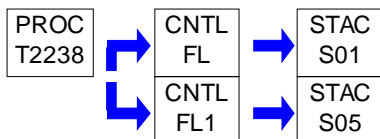
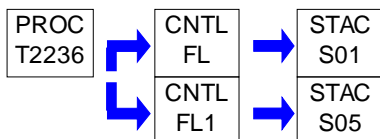
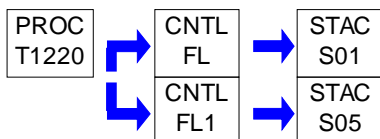
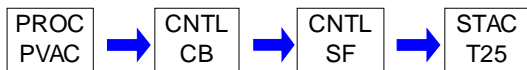
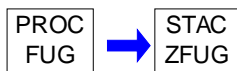
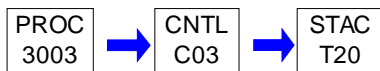
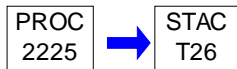
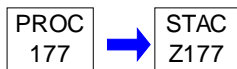
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput	Fuel/Material
S108	STACK FROM CREEKSIDE DIESEL FIRE PUMP		
S109	STACK FROM NORTHSIDE DIESEL FIRE PUMP		
S110	STACK FROM BAGHOUSE OF BHT PACKAGING		
T01	ECLIPSE FURNACE STACK		
T06	STACK FROM BOILER #035		
T20	PELLETIZER SCRUBBER VENT		
T25	PNEUVAC SYSTEM VENT		
T26	VESSEL 2225 VENT		
Z177	FUGITIVES FROM PARTS CLEANERS		
ZFUG	FUGITIVE EMISSION		

**PERMIT MAPS**

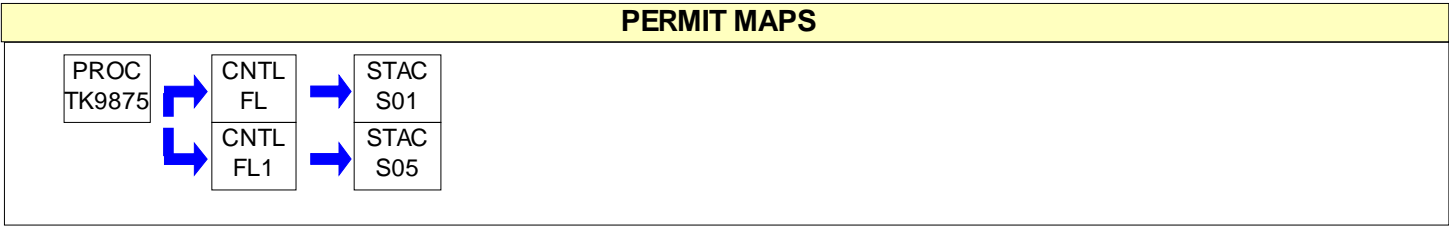


## PERMIT MAPS





**PERMIT MAPS**



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

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

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

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

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

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

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

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

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

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

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

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

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

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



**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

**#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

**SECTION B. General Title V Requirements**

to determine compliance with the permit.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**#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

**SECTION B. General Title V Requirements**

25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(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).

**SECTION B. General Title V Requirements**

(e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.

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

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

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

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

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

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

- (1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.
- (2) One ton of NO<sub>x</sub> from a single source during the term of the permit and 5 tons of NO<sub>x</sub> at the facility during the term of the permit.
- (3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.
- (4) Six-tenths of a ton of PM<sub>10</sub> from a single source during the term of the permit and 3.0 tons of PM<sub>10</sub> at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.
- (5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

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

- (1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.
- (2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.
- (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.

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the 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,

**SECTION B. General Title V Requirements**

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:

Office of Air Enforcement and Compliance Assistance (3AP20)  
United States Environmental Protection Agency  
Region 3  
1650 Arch Street  
Philadelphia, PA 19103-2029

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #022 of this section.

**#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)



**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

(1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,

(2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

(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.



**SECTION B. General Title V Requirements**

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #26 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

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

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

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

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

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

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

- (1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.
- (2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.
- (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.
- (4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

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

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

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

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

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

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

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

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

(1) Construction or demolition of buildings or structures.

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

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

(4) Clearing of land.

(5) Stockpiling of materials.

(6) Open burning operations.

(7) Not applicable.

(8) Not applicable.

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

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

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

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

(c) See work practice standard requirements.

(d) Not applicable.

**# 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 Section C, Condition #001 (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**

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

**SECTION C. Site Level Requirements****# 004 [25 Pa. Code §123.41]****Limitations**

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

- (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.

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

The limitations of 123.41 (relating to limitations)see condition # 004 above, shall not apply to a visible emission in any of the following instances:

- (1) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (2) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (3) When the emission results from sources specified in Section C, Condition #001(relating to prohibition of certain fugitive emissions).
- (4) Not Applicable.

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

(a) Not applicable,

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

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

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

- (1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.
- (2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.
- (3) A fire set for the prevention and control of disease or pests, when approved by the Department.
- (4) - (5) [Not applicable]
- (6) A fire set solely for recreational or ceremonial purposes.
- (7) A fire set solely for cooking food.

**SECTION C. Site Level Requirements**

(d) Clearing and grubbing wastes. The following is applicable to clearing and grubbing wastes:

(1) As used in this subsection the following terms shall have the following meanings:

Air curtain destructor -- A mechanical device which forcefully projects a curtain of air across a pit in which open burning is being conducted so that combustion efficiency is increased and smoke and other particulate matter are contained.

Clearing and grubbing wastes -- Trees, shrubs, and other native vegetation which are cleared from land during or prior to the process of construction. The term does not include demolition wastes and dirt laden roots.

(2) [Not applicable]

(3) Subsection (b) notwithstanding clearing and grubbing wastes may be burned outside of an air basin, subject to the following limitations:

(i) Upon receipt of a complaint or determination by the Department that an air pollution problem exists, the Department may order that the open burning cease or comply with subsection (b) of this section.

(ii) Authorization for open burning under this paragraph does not apply to clearing and grubbing wastes transported from an air basin for disposal outside of an air basin.

(4) During an air pollution episode, open burning is limited by Chapter 137 (relating to air pollution episodes) and shall cease as specified in such chapter.

[This permit does not constitute authorization to burn solid waste pursuant to Section 610(3) of the Solid Waste Management Act, 35 P.S. Section 6018.610(3), or any provision of Solid Waste Management Act.]

**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.**

**# 007 [25 Pa. Code §123.43]**

**Measuring techniques**

Visible emissions may be measured using either of the following:

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

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

**# 008 [25 Pa. Code §127.511]**

**Monitoring and related recordkeeping and reporting requirements.**

(a) The permittee shall conduct weekly monitoring of the facility property, while the plant is in operation, to observe for the presence of unpermitted fugitive emissions and visible emissions being emitted into the outdoor atmosphere.

(b) All detected fugitive and visible emissions shall be reported to the facility manager or his/her designee.

**IV. RECORDKEEPING REQUIREMENTS.**

**# 009 [25 Pa. Code §127.512]**

**Operating permit terms and conditions.**

The permittee can modify the mixture of pollutants regulated under Section 112 of the Clean Air Act (42 U.S.C.A. 7412) which are VOC or PM10 so long as the emission limitations of this permit are not violated. The permittee shall keep a log which

**SECTION C. Site Level Requirements**

identifies the mixture of pollutants regulated under section 112 and report the changes in the mixture of pollutants regulated under Section 112 with the next report required to be provided to the Department.

**# 010 [25 Pa. Code §129.100]****Compliance demonstration and recordkeeping requirements.**

Beginning with the compliance date specified in § 129.97(a), the owner or operator of an air contamination source claiming that the air contamination source is exempt from the applicable VOC emission rate threshold specified in § 129.99(c) and the requirements of § 129.97 based on the air contamination source's potential to emit shall maintain records that demonstrate to the Department or appropriate approved local air pollution control agency that the air contamination source is not subject to the specified emission rate threshold.

[25 Pa. Code § 129.100(f)]

[The RACT II proposal submitted on October 14, 2016 & the review memo for the 2019 renewal serve as records to demonstrate exemption from RACT II for several sources.]

**# 011 [25 Pa. Code §129.95]****Recordkeeping**

(a) The owner and operator of a major NO<sub>x</sub> emitting facility or a major VOCs emitting facility shall keep records to demonstrate compliance with 129.91 -- 129.94.

(b) The records shall provide sufficient data and calculations to clearly demonstrate that the requirements of 129.91 -- 129.94 are met.

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

(d) The records shall be retained for at least 5 years and shall be made available to the Department on request.

(e) An owner or operator claiming that a facility is exempt from the RACT requirements of 129.91 -- 129.94, based on the facility's potential to emit, shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to 129.91 -- 129.94.

**# 012 [25 Pa. Code §135.5]****Recordkeeping**

Source owners or operators shall maintain and make available upon request by the Department records including computerized records that may be necessary to comply with 135.21 (relating to reporting; and emission statements). These may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

**V. REPORTING REQUIREMENTS.****# 013 [25 Pa. Code §135.21]****Emission statements**

(a) The owner or operator of each stationary source emitting oxides of nitrogen or VOC's shall provide the Department with a statement, in a form as the Department may prescribe, for classes or categories of sources, showing the actual emissions of oxides of nitrogen and VOCs from that source for each reporting period, a description of the method used to calculate the emissions and the time period over which the calculation is based. The statement shall contain a certification by a company officer or the plant manager that the information contained in the statement is accurate.

(b) Annual emission statements are due by March 1 for the preceding calendar year beginning with March 1, 1993, for calendar year 1992 and shall provide data consistent with requirements and guidance developed by the EPA. The guidance document is available from: United States Environmental Protection Agency. The Department may require more frequent submittals if the Department determines that one or more of the following applies:

**SECTION C. Site Level Requirements**

- (1) A more frequent submission is required by the EPA.
- (2) Analysis of the data on a more frequent basis is necessary to implement the requirements of the act.

**VI. WORK PRACTICE REQUIREMENTS.****# 014 [25 Pa. Code §123.1]****Prohibition of certain fugitive emissions**

A person responsible for any source specified in Section C, Condition #001, shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

- (1) Use, where possible, of water or chemicals for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land.
- (2) Application of asphalt, oil, water or suitable chemicals on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts.
- (3) Paving and maintenance of roadways.
- (4) Prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

[From 25 Pa. Code §123.1(c)]

**VII. ADDITIONAL REQUIREMENTS.****# 015 [25 Pa. Code §129.96]****Applicability**

(a) The NOx requirements of this section and §§ 129.97—129.100 apply Statewide to the owner and operator of a major NOx emitting facility and the VOC requirements of this section and §§ 129.97—129.100 apply Statewide to the owner and operator of a major VOC emitting facility that were in existence on or before July 20, 2012, for which a requirement or emission limitation, or both, has not been established in §§ 129.51—129.52c, 129.54—129.63, 129.64—129.69, 129.71—129.75, 129.77, 129.101—129.107 and 129.301—129.310.

[Source 177 is subject to § 129.63 and therefore exempt from RACT II.]

[Source FUG is subject to § 129.71 and therefore exempt from RACT II.]

[Sources TK1220, TK2236, and TK2238 are subject to § 129.57 and therefore exempt from RACT II.]

[Sources T5665 and TK121 are subject to § 129.56(a) and therefore exempt from RACT II.]

[Source TK422, TK423, and TK9875 are subject to 129.56(a)(2) and therefore exempt from RACT II.]

(c) This section and §§ 129.97—129.100 do not apply to the owner and operator of a NOx air contamination source located at a major NOx emitting facility that has the potential to emit less than 1 TPY of NOx or a VOC air contamination source located at a major VOC emitting facility that has the potential to emit less than 1 TPY of VOC.

[The following sources have individual VOC PTE < 1 TPY and therefore are not covered by RACT II: 035, 101, 108, 109, 110, 125A, 175, 2225, 3003, PVAC, and all 65 insignificant sources listed in Section H(c), Miscellaneous of this permit.]

[§ 129.96(b) & (d) do not apply.]

**# 016 [25 Pa. Code §129.99]****Alternative RACT proposal and petition for alternative compliance schedule.**

(g) The emission limit and requirements specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection (f) supersede the emission limit and requirements in the existing plan approval or operating permit issued to the owner or operator of the source prior to April 23, 2016, on the date specified in the plan approval or operating permit issued by the Department or appropriate approved local air pollution control agency under subsection (f), except to the extent the existing plan approval or operating permit contains more stringent requirements.

**SECTION C. Site Level Requirements****VIII. COMPLIANCE CERTIFICATION.**

The permittee shall submit within thirty days of 05/10/2019 a certificate of compliance with all permit terms and conditions set forth in this Title V permit as required under condition #026 of section B of this permit, and annually thereafter.

**IX. COMPLIANCE SCHEDULE.**

No compliance milestones exist.

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

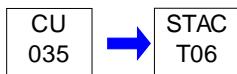
**SECTION D. Source Level Requirements**

Source ID: 035

Source Name: GAS/OIL BOILER #5

Source Capacity/Throughput: 25.200 MMBTU/HR

Conditions for this source occur in the following groups: GAS-FIRED BOILER  
OIL-FIRED BOILER

**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 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

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

(a) Nonair basin areas. Combustion units in nonair basin areas must conform with the following:

(1) General provision. A person may not permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO<sub>2</sub>, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over a 1-hour period, except as provided in paragraph (4).

(2) [See I. Restrictions, Fuel Restrictions for this source/source group.]

(3) - (4) [Not Applicable]

(b) - (e) [Not Applicable]

(f) [See VI. Additional Requirements for this source/source group. Added for informational purposes only.]

(g) [See IV. Recordkeeping Requirements for this source/source group.]

(h) [See V. Reporting Requirements for this source/source group.]

**# 003 [25 Pa. Code §127.514]****General operating permits at Title V facilities.****Best Available Technology Requirements**

(a) Combustion Units Constructed after December 2, 1995, with Rated Capacity Equal to or Greater than 10 Million Btu per Hour. As a condition of this Permit, the permittee shall construct qualifying small gas and No. 2 virgin oil fired combustion units capable of reducing nitrogen oxides (NO<sub>x</sub>) and carbon monoxide (CO) emissions to or below:

(i) 30 ppm<sub>d</sub>v NO<sub>x</sub> at 3% O<sub>2</sub> when firing gas;

(ii) 90 ppm<sub>d</sub>v NO<sub>x</sub> at 3% O<sub>2</sub> when firing No. 2 fuel oil; and

(iii) 300 ppm<sub>d</sub>v CO at 3% O<sub>2</sub>.

[From: General Permit # 61-00011, GP-1, condition # 17]



**SECTION D. Source Level Requirements****Fuel Restriction(s).****# 004 [25 Pa. Code §123.22]****Combustion units**

(a) Nonair basin areas. Combustion units in nonair basin areas must conform with the following:

(2) Commercial fuel oil.

(i) Except as specified in subparagraphs (ii) and (iii), a person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in nonair basin areas if the commercial fuel oil contains sulfur in excess of the applicable maximum allowable sulfur content set forth in the following tables:

MAXIMUM ALLOWABLE SULFUR CONTENT Beginning July 1, 2016,  
Expressed as Parts per Million (ppm) by Weight or Percentage by Weight

No. 2 and lighter oil - 500 ppm (0.05%)

(ii) [Not Applicable]

(iii) Beginning July 1, 2016, the Department may temporarily suspend or increase the applicable maximum allowable sulfur content for a commercial fuel oil set forth in subparagraph (i) if the following occur:

(A) The Department receives a written request at the address specified in subsection (h) for a suspension or increase on the basis that compliant commercial fuel oil is not reasonably available in a nonair basin area. The request must include the following:

(I) The nonair basin county or counties for which the suspension or increase is requested.

(II) The reason compliant commercial fuel oil is not reasonably available.

(III) The duration of time for which the suspension or increase is requested and the justification for the requested duration.

(B) The Department determines that an insufficient quantity of compliant commercial fuel oil is reasonably available in the nonair basin area and that the circumstances leading to the insufficiency are due to events that could not have been reasonably foreseen or prevented and are not due to lack of prudent planning on the part of the transferor of the commercial fuel oil into or within the specified nonair basin area.

(C) The Department approves the request, in writing, prior to the transferor distributing the noncompliant commercial fuel oil into or within the specified nonair basin area.

(iv) The Department will limit a suspension or increase in the applicable maximum allowable sulfur content granted under subparagraph (iii) to the shortest duration in which adequate supplies of compliant commercial fuel oil can be made reasonably available, but in no case longer than 60 days from the date the Department grants the suspension or increase.

**# 005 [25 Pa. Code §127.514]****General operating permits at Title V facilities.**

The combustion unit(s) shall be fired only on gas (natural or liquefied petroleum) or No. 2 commercial fuel oil to which there has been no reclaimed or waste oil or other waste materials added.

[From: General Permit # 61-00011, GP-1, condition # 17]

**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.**

**# 006 [25 Pa. Code §123.22]**

**Combustion units**

(g) Recordkeeping and reporting.

(1) Beginning with the refinery owner or operator who sells or transfers commercial fuel oil into or within this Commonwealth for use in this Commonwealth and ending with the ultimate consumer, each time the physical custody of, or title to, a shipment of commercial fuel oil changes hands on or after July 1, 2016, the transferor shall provide to the transferee an electronic or paper record described in this paragraph. This record must legibly and conspicuously contain the following information:

- (i) The date of the sale or transfer.
- (ii) The name and address of the transferor.
- (iii) The name and address of the transferee.
- (iv) The volume of commercial fuel oil being sold or transferred.

(v) The identification of the sulfur content of the shipment of commercial fuel oil, determined using the sampling and testing methods specified in subsection (f)(1), expressed as one of the following statements:

(A) For a shipment of No. 2 and lighter commercial fuel oil, "The sulfur content of this shipment is 500 ppm or below."

(B) - (C) [Not Applicable]

(vi) The location of the commercial fuel oil at the time of transfer.

(vii) [Not Applicable]

(2) - (3) [Not Applicable]

(4) A person subject to this section shall do both of the following:

(i) Maintain the applicable records required under paragraphs (1)—(3) in electronic or paper format for 2 years unless a longer period is required under § 127.511(b)(2) (relating to monitoring and related recordkeeping and reporting requirements).

(ii) Provide an electronic or written copy of the applicable record to the Department upon request.

(5) The ultimate consumer shall maintain in electronic or paper format the record containing the information listed in paragraph (1), except in either of the following situations:

(i) - (ii) [Not Applicable]

**SECTION D. Source Level Requirements****# 007 [25 Pa. Code §127.514]****General operating permits at Title V facilities.**

Combustion Units for Which Construction Commenced After June 9, 1989 and Subject to Federal New Source Performance Standards.

This combustion unit shall also comply with this Condition, subparagraphs a. through e. of this Permit and the emission limitations of the New Source Performance Standards prescribed in 40 CFR Part 60, Subpart Dc.

- (a) [See VI. Work Practice Requirements for this source.]
- (c) The permittee shall maintain daily fuel consumption records in accordance with 40 CFR §60.48c(g).

[From: General permit GP-1/ GP-61-00011, condition # 16. Paragraphs (b), (d), & (e) will only apply if operated as oil-fired boiler. See Source Group OIL-FIRED BOILER in Section E of this permit.]

**V. REPORTING REQUIREMENTS.****# 008 [25 Pa. Code §123.22]****Combustion units**

(h) Written request. The written request for suspension of or increase in the sulfur content limit on the basis that compliant commercial fuel oil is not reasonably available shall be addressed to the Department of Environmental Protection, Bureau of Air Quality, Chief of the Division of Compliance and Enforcement, P.O. Box 8468, Harrisburg, Pennsylvania 17105-8468.

**VI. WORK PRACTICE REQUIREMENTS.****# 009 [25 Pa. Code §127.514]****General operating permits at Title V facilities.**

The combustion unit and any associated air cleaning devices shall be:

- (a) Operated in such a manner as not to cause air pollution.
- (b) Operated and maintained in a manner consistent with good operating and maintenance practices.
- (c) Operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this Permit.

[From: General Permit # GP-61-0011/GP-1, condition #4]

**# 010 [25 Pa. Code §127.514]****General operating permits at Title V facilities.**

Combustion Units for Which Construction Commenced After June 9, 1989 and Subject to Federal New Source Performance Standards.

This combustion unit shall also comply with this Condition, subparagraphs a. through e. of this Permit and the emission limitations of the New Source Performance Standards prescribed in 40 CFR Part 60, Subpart Dc.

- (a) The permittee shall install and maintain the necessary meter(s) to determine and to record amount of fuel usage.

[From: General permit GP-1/ GP-61-00011, condition # 16.]

**VII. ADDITIONAL REQUIREMENTS.****# 011 [25 Pa. Code §123.22]****Combustion units**

[As an ultimate consumer, the permittee is not subject to testing requirements pursuant to § 123.22(f). Cited in § 123.22(g)(1)(v), § 123.22(f) is incorporated into the permit for informational purposes only.]

**SECTION D. Source Level Requirements**

(f) Sampling and testing.

(1) For the purpose of determining compliance with the requirements of this section, the actual sulfur content of commercial fuel oil shall be determined by one of the following:

(i) In accordance with the sample collection, test methods and procedures specified under § 139.16 (relating to sulfur in fuel oil).

(ii) Other methods developed or approved by the Department or the Administrator of the EPA, or both.

(2) - (3) [Not Applicable]

**# 012 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

This boiler must comply with:

(a) Restrictions and requirements incorporated in Section D for this source at all times.

(b) If considered as gas-fired boiler as defined in § 63.11237, restrictions and requirements for Source Group GAS-FIRED BOILER in Section E.

(c) If considered as oil-fired boiler as defined in § 63.11237, restrictions and requirements for Source Group OIL-FIRED BOILER in Section E. Requirements include § 63 Subpart JJJJJJ and recordkeeping and reporting requirements from GP-1.

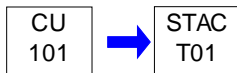
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 101

Source Name: ECLIPSE FURNACE

Source Capacity/Throughput: 35.100 MMBTU/HR

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

a) The NO<sub>x</sub> emissions from the eclipse heater shall not exceed 0.064 lbs/MMBTU and 9.84 TPY (based on a 12-month rolling total).

b) The CO emissions from the eclipse heater shall not exceed 0.126 lbs/MMBTU and 19.37 TPY (based on a 12-month rolling total).

[From Plan Approval 61-011C condition #001]

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

a) The particulate emissions from the eclipse heater shall not exceed 1.76 TPY (based on a 12-month rolling total).

b) The SO<sub>x</sub> emissions from the eclipse heater shall not exceed 0.14 TPY (based on a 12-month rolling total).

[Compliance with the requirements specified in the streamlined permit conditions (a and b) assures compliance with the provisions in 25 Pa. Code Sections 123.11 and 123.22, respectively]

[From Plan Approval 61-011C condition #002]

**Fuel Restriction(s).****# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall use only natural gas or heptane as fuel for this source.

[From Plan Approval 61-011C condition #003]

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

The exhaust gases from the baghouse (which include the Heptane emissions) shall be ducted to the Eclipse Heater at all times except for emergency bypass, which shall not exceed 292 hours per year (based on a 12 month rolling total).

[Authority for this condition is also derived from 25 Pa. Code § 129.99 (RACT II). This condition streamlines out the RACT# OP 61-00011, Condition #3 under the authority of 25 Pa. Code § 129.92 (RACT I).]

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

The facility shall perform an annual adjustment or tune-up of the heater and test the heater for NO<sub>x</sub> and CO emissions utilizing a portable analyzer.

**SECTION D. Source Level Requirements**

[From Plan Approval 61-011C condition #007]

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

The permittee shall monitor the natural gas used by the eclipse heater using a gas flow meter or equivalent method as determined by the Department.

[From Plan Approval 61-011C condition #008]

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

a) The permittee shall keep records of the natural gas usage on a daily basis.

b) The permittee shall keep a record of the results from the annual NO<sub>x</sub> and CO portable analyzer tests.

c) Records of the emissions, hours of operation, and gas usage shall be kept onsite and made available to the Department upon request. The records shall be maintained for a minimum of 5 years.

[From Plan Approval 61-011C condition #009]

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

a) The particulate and SO<sub>2</sub> emissions shall be calculated on a monthly basis for the eclipse heater based on the most recent AP-42 emission factor multiplied by the fuel usage and the hours of operation.

b) The NO<sub>x</sub> and CO emissions shall be calculated on a monthly basis for the eclipse heater based on the most recent results of the emission test and multiplied by the fuel usage and the hours of operation.

[From Plan Approval 61-011C condition #014]

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

The permittee shall demonstrate compliance with the minimum destruction rate (95%) by continuously monitoring the temperature of the Eclipse Furnace breech (firebox exit) temperature and maintaining records of the hours of operation of the furnace and hours of operation of uncontrolled system emissions from the Heptane bypass vent.

[From: RACT approval # OP 61-00011, condition # 5]

[Authority for this condition is also derived from 25 Pa. Code § 129.92]

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

a) The permittee shall keep records of the hours of operation of the eclipse furnace.

b) The furnace operation hours shall be recorded based on the valve position in the bypass stream. The hours of operation shall be recorded monthly (on a calendar basis) and shall be calculated on a rolling sum 12-month basis.

[From: RACT approval # OP 61-00011, condition # 6]

[Authority for this condition is also derived from 25 Pa. Code § 129.92]

**SECTION D. Source Level Requirements****# 011 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The owner or operator of the facility shall keep records of when the heater is used for control of the Heptene emissions, the hours of operation of the heater, and the hours of operation of the uncontrolled Heptane emissions (based on a 12 month rolling total).

[From: RACT approval # OP 61-00011, condition # 8]

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in Plan Approval # PA 61011A, condition #12]

[Authority for this condition is also derived from 25 Pa. Code § 129.92]

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

The Eclipse Furnace breach (firebox exit) temperature shall be maintained above 275°F while heptane is being directed to the furnace for destruction to ensure the control device efficiency restriction is being met (i.e., 275°F temperature ensures no less than a 95% heptane destruction). The temperature shall be recorded on a strip chart or equivalent recording device.

[From: RACT approval # OP 61-00011, condition # 7]

[Authority for this condition is also derived from 25 Pa. Code § 129.92]

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

The owner or operator of the facility shall maintain and operate the heater in accordance with the manufacturer's specifications and in accordance with good air pollution control practices. While the unit is used to control Heptane emissions from the North and South BHT dryers, a minimum overall destruction rate of 95% shall be maintained.

[From: RACT approval # OP 61-00011, condition # 4]

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in Plan Approval # PA 6011A, condition #11]

**VII. ADDITIONAL REQUIREMENTS.****# 014 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The owner or operator of the facility shall install, maintain, and operate the Low NOx Burner in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

[From Plan Approval 61-011C condition #015]

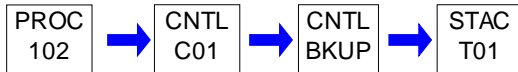
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 102

Source Name: KRYSTAL UNIT NORTH &amp; SOUTH DRYERS

Source Capacity/Throughput:

**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, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

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

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

**# 003 [25 Pa. Code §129.99]****Alternative RACT proposal and petition for alternative compliance schedule.**

VOC bypass emissions from Source 102 shall not exceed 8.9 TPY (based on a 12-month rolling total).

[Compliance with this RACT II Case-by-Case emission limitation is demonstrated through compliance with the RACT II Case-by-Case work practice requirement of 292-hr/yr (12-month rolling) for emergency bypass for this source.]

**Control Device Efficiency Restriction(s).****# 004 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

While the units are used to control Heptane emissions from the North and South BHT dryers, a minimum overall destruction rate of 95% shall be maintained.

[From: Plan Approval # PA 61-0011A, condition # 11]

**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 following are CAM related requirements for volatile organic compound:

(a) The permittee shall use the following approved process parameters or indicators to obtain data and monitor the emission control equipment performance:

- (1) Breech (firebox exit) temperature
- (2) Atmosphere bypass valve position during Krystal Unit VOC generation, time recording.



**SECTION D. Source Level Requirements**

(3) Inspection/Maintenance.

(b) The permittee shall use the following approved means or devices to measure the applicable indicators.

- (1) Thermocouple readings.
- (2) Time recorded of bypass hours by the Data Acquisition System (DAS).
- (3) Periodic in-service inspections and maintenance performed as required by qualified personnel.

(c) The permittee shall use the following approved frequencies for conducting monitoring of indicators.

- (1) Thermocouple reading- Once every 15 minutes
- (2) Bypass time monitored continuously.
- (3) Annual thermocouple calibration.

(d) The permittee shall use the approved period over which discrete data points for approved indicators will be collected for the purpose of determining an excursion.

- (1) The thermocouple temperature readings are taken from the breech (firebox exit) ductwork-once every 15 minutes.
- (2) Time monitored during the i) by pass valve open ii) heptane being fed to unit and iii) baghouse fan operating.
- (3) Inspections are performed at the furnace-periodically.

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

The following are CAM related requirements for particulate matter.

(a)The permittee shall use the following approved process parameters or indicators to obtain data and monitor the emission control equipment performance:

- (1) Baghouse differential pressure.
- (2) Visible emission check at the exhaust outlet of the control device.
- (3) Outlet particle flow measured by Auburn Triboguard II particle sensor, or equivalent sensor.
- (4) Inspection/maintenance.

(b) The permittee shall use the following approved means or devices to measure the applicable indicators.

- (1) Differential pressure gauge.
- (2) U.S. EPA Method 22-like procedures.
- (3) Auburn Triboguard II particle sensor or equivalent sensor.
- (4) Periodic in-service inspections and maintenance by a qualified professional.

(c) The permittee shall use the following approved frequencies for conducting monitoring of indicators.

**SECTION D. Source Level Requirements**

- (1) Baghouse differential pressure- continuously.
- (2) Visible emission- Weekly 3-minute observation.
- (3) Outlet particle flow is monitored continuously.
- (4) Operator inspection -Daily, Annual baghouse inspection by maintenance personnel.

(d) The permittee shall use the approved period over which discrete data points for approved indicators will be collected and averaged for the purpose of determining an excursion.

(1) The pressure drop across the baghouse is monitored at the baghouse inlet and exhaust. The accuracy of the device is +/- 0.05 inch H<sub>2</sub>O and is monitored continuously. No averaging period will be used for this indicator. An excursion will be based on a discrete reading exceeding 1 inch H<sub>2</sub>O or less than 0.1.

(2) Observations for visible emission are performed at the Eclipse furnace exhaust while the baghouse is in operation- Weekly 3-minute observation.

(3) To measure outlet particle flow the probe is located inside the baghouse duct before the backup filter. The triboelectric signal is directly proportional to the amount of particle and is monitored continuously. No averaging period will be used for this indicator. An excursion will be based on a reading exceeding 60% for more than 1 minute.

(4) Inspection is performed at the baghouse- Daily.

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

The owner or operator of the facility shall keep records of which heater is used for control of the Heptane emissions, the hours of operation of heaters, and the hours of operation of the uncontrolled Heptane emissions (based on a 12-month rolling total).

[From: Permit PA61011A, condition number 12]

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

The owner or operator of facility shall maintain a log of all preventive maintenance inspections of the fabric collector. The inspection log at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, the steps taken to correct them, and the measured pressure drop across the fabric collector.

[From: Permit # PA61011A, condition # 9]

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

The following are CAM related requirements for Particulate matter:

- (a) The permittee shall ensure the pressure drop readings are recorded by the Data Acquisition System (DAS) every 15 minutes and on the log sheet each shift.
- (b) The permittee shall record the weekly visible inspections. The record will be documented on a log sheet with deviations noted.
- (c) The permittee shall keep a record of particle flow readings. The readings are recorded by the Data Acquisition System (DAS) every minute.
- (d) The permittee shall keep a record of inspection. The records are maintained to document inspections and any required

**SECTION D. Source Level Requirements**

maintenance (operator logs, SAP System).

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

The following are CAM related requirements:

- (1) The permittee shall record all inspections, repair and maintenance performed on the monitoring equipment.
- (2) The permittee shall record all excursions and corrective actions taken in response to an excursion and the time elapsed until corrective actions have been taken.
- (3) The permittee shall maintain records of all monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable). The permittee shall also record the dates, times and durations, possible causes and corrective actions taken for the incidents.
- (4) The permittee shall keep all records for a period of five (5) years and make the records available to the Department upon request.

[Additional authority for the above permit conditions are also derived from 40 CFR §64.9]

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

The following are CAM related requirements for volatile organic compound:

- (a) The permittee shall record the breach (firebox exit) readings. The temperatures are recorded by Data Acquisition System (DAS) every 15 minutes.
- (b) The permittee shall record the bypass time. The bypass hours are recorded by the Data Acquisition System (DAS) every 24-hours.
- (c) The permittee shall keep the record of inspection. The records are maintained to document inspections and any required maintenance (SAP System).

**# 012 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

The permittee shall keep a record of pressure drop across the baghouse.

**# 013 [25 Pa. Code §129.100]****Compliance demonstration and recordkeeping requirements.**

The records for demonstration of compliance with emission limits and requirements established pursuant to § 129.99 shall be retained by the owner or operator for 5 years and made available to the Department or appropriate approved local air pollution control agency upon receipt of a written request from the Department or appropriate approved local air pollution control agency.

[Authority from this condition is derived from § 129.100(i). These records include PA 61-011, Condition #12 (see Condition #007 for this source) & CAM-related recordkeeping requirement using Data Acquisition System (see Condition #012 for this source).]

**# 014 [25 Pa. Code §129.51]****General**

- (a) Not Applicable
- (b) Not Applicable
- (c) Not Applicable

**SECTION D. Source Level Requirements**

(d) Records. The owner or operator of a facility or source subject to the VOC emission limitations and control requirements in this chapter shall keep records to demonstrate compliance with the applicable limitation or control requirement. The records shall provide sufficient data and calculations to clearly demonstrate that the emission limitations or control requirements are met. Data or information required to determine compliance with an applicable limitation shall be recorded and maintained in a time frame consistent with the averaging period of the standard. The records shall be retained at least 5 years and shall be made available to the Department on request. An owner or operator claiming that a facility or source is exempt from the VOC control provisions of this chapter shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to the VOC emission limitations or control requirements.

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

The following conditions are related to CAM Rule:

(1) The permittee shall report all excursions and corrective actions taken, the dates, times, durations and possible causes, every six (6) months.

[Additional authority for this permit condition is also derived from 40 CFR §64.9 & §70.6(a)(3)(iii)(A)]

(2) The permittee shall report all monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable), their dates, times and durations, possible causes and corrective actions taken, every six (6) months.

[Additional authority for this permit condition is also derived from 40 CFR §64.9]

**VI. WORK PRACTICE REQUIREMENTS.****# 016 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) BHT dryer emissions shall be ducted to the dedicated baghouse (Hosokawa Mikropol Environmental Systems Model 55-8-100) to control particulate emissions.

(b) The facility shall keep at least 11 spare bags on hand at the facility for replacement for the baghouse as necessary.

(c) A magnehelic gauge (or equivalent) shall be permanently installed and maintained at a conveniently readable location to indicate the pressure drop across the collector.

(d) The owner or operator of the facility shall maintain the fabric collector in accordance with the manufacturer's specifications and shall operate the collector in accordance with good air pollution control practices.

(e) The owner or operator shall perform weekly preventive maintenance inspections of the fabric collector, and check the pressure drop across the fabric collector.

[From Permit # PA61-0011A, Conditions # 6,7,8]

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

The following CAM rule is for volatile organic compound.

(a) The permittee shall adhere to approved ranges for the selected indicators so that operation within the range shall provide reasonable assurance of compliance. A departure from the specified indicator range over a specified averaging period shall be defined as an excursion:

(1) The breech (firebox exit) shall be > 275° F during periods other than start up and shutdown.

**SECTION D. Source Level Requirements**

(2) Atmosphere bypass valve opening position shall not exceed 292 hours per year on a 12-month rolling total.

[The RACT II Case-by-Case requirement of 292-hr/yr for the emergency bypass streamlines out the original CAMs 876-hr/yr requirement.]

(b) For QA/QC purposes, the permittee shall calibrate and check the accuracy of monitoring equipment taking into account the manufacturer's specifications at approved time intervals.

- (1) Thermocouple calibration will be checked during annual inspections.
- (2) The bypass time data will be reviewed monthly and checked against operation records.
- (3) Qualified personnel perform inspections.

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

The following CAM Rule is for Particulate Matter:

(a) The permittee shall adhere to approved ranges for the selected indicators so that operation within the range shall provide reasonable assurance of compliance. A departure from the specified indicator range over a specified averaging period shall be defined as an excursion:

- (1) Baghouse differential pressure range will be in between 0.1 to 1.0 inch water column.
- (2) Presence of any visible emissions observed using a U.S. EPA Method-22 like procedure.
- (3) Outlet particle flow indicator range is < 60%.

(b) For QA/QC purposes, the permittee shall calibrate and check the accuracy of monitoring equipment taking into account the manufacturer's specifications at approved time intervals.

- (1) Baghouse differential pressure gauge shall be calibrated annually.
- (2) US EPA Method 22-like procedures reviewed every six months.
- (3) Particulate meter cleaned, zeroed, and checked annually.
- (4) Qualified personnel perform inspection.

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

The following are CAM related requirements:

(1) The permittee shall utilize approved QA/QC practices that are adequate to ensure continuing validity of data and proper performance of the device.

(a) The permittee shall, for an approved device(s), install detectors or sensors at a location approved by the Department for obtaining data that are representative of the monitored indicator.

(b) The permittee shall develop verification procedures to confirm the operational status of new or modified monitoring equipment prior to commencement of the monitoring process.

[Additional authority for the following permit conditions are also derived from 40 CFR §64.3]

(2) The permittee shall maintain all monitoring equipment and stock parts necessary for routine repairs onsite.

**SECTION D. Source Level Requirements**

(3) The permittee shall ensure that at least 90% of the monitoring data has been properly and accurately collected.

(4) The permittee shall submit an implementation plan and schedule if the approved monitoring requires the installation, testing or other necessary activities. The schedule for completing installation and beginning operation of the monitoring may not exceed 180 days after the issuance date of the permit.

[Additional authority for this permit condition is also derived from 40 CFR § 64.4]

**# 020 [25 Pa. Code §127.511]**

**Monitoring and related recordkeeping and reporting requirements.**

The permittee shall operate the baghouse at all times this source is in operation.

**# 021 [25 Pa. Code §129.99]**

**Alternative RACT proposal and petition for alternative compliance schedule.**

The exhaust gas from Source 102 shall be ducted to the Eclipse Heater at all times except for emergency bypass, which shall not exceed 292 hours per year (based on a 12-month rolling total).

[Compliance with this condition assures compliance with the 876-hr/year restriction for emergency bypass pursuant to PA 61-011A, Condition #10 & this source's original CAM-related requirement.]

**VII. ADDITIONAL REQUIREMENTS.**

**# 022 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The following conditions are related to CAM rule:

(1) The permittee shall develop and implement a quality improvement plan (QIP) as expeditiously as practicable if any of the following occurs:

(a) For properly and accurately collected data, accumulated excursions exceed two percent (2%) of the data for VOC or five percent (5%) of the data for particulate matter.

(b) Six excursions occur in a six-month reporting period.

(c) The Department determines after review of all reported information that the permittee has not responded acceptably to an excursion.

[ Additional authority for the following permit conditions are also derived from 40 CFR §64.8]

(2) In general, the QIP plan should be developed within 60 days and the permittee shall provide a copy of QIP to the Department. Furthermore the permittee shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

[ Additional authority for this permit condition is also derived from 40 CFR § 64.8]

(3) The permittee shall record actions taken to implement a QIP during a reporting period and all related actions including, but not limited to inspections, repairs and maintenance performed on the monitoring equipment.

[ Additional authority for this permit condition is also derived from 40 CFR § 64.9]

(4) In accordance with 40 CFR § 64.8, the QIP shall include procedures for evaluating the control performance problems. Based on the results of the evaluation procedures, the permittee shall modify the QIP, and provide a copy to the Department, to include procedures for conducting more frequent or improved monitoring in connection with one or more of the following:

(a) Improved preventive maintenance practices.

**SECTION D. Source Level Requirements**

- (b) Process operation changes.
- (c) Appropriate improvements to control methods
- (d) Other steps appropriate to correct performances.

[ Additional authority for this permit condition is also derived from 40 CFR § 64.8]

(5) Following implementation of a QIP, the Department will require reasonable revisions to the QIP if the plan has failed to either:

- (a) Address the cause of the control device performance problem.
- (b) Provide adequate procedures for correcting control device performance problems in as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

[ Additional authority for this permit condition is also derived from 40 CFR § 64.8]

(6) Implementation of a QIP, shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under any federal, state, or local laws or any other applicable requirements under the Clean Air Act.

[ Additional authority for this permit condition is also derived from 40 CFR § 64.8]

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

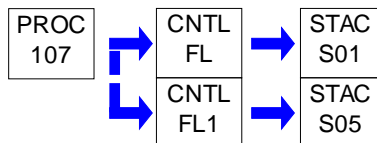
**SECTION D. Source Level Requirements**

Source ID: 107

Source Name: 314 &amp; 340 DISTILLATION COLUMN VENTS

Source Capacity/Throughput:

Conditions for this source occur in the following groups: CAM- SOURCES 107, 175

**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, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

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

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

**# 003 [25 Pa. Code §129.99]****Alternative RACT proposal and petition for alternative compliance schedule.**

VOC bypass emissions from Source 107 shall not exceed 13.2 TPY (based on a 12-month rolling total).

[Compliance with this RACT II Case-by-Case emission limitation is demonstrated through compliance with the RACT II Case-by-Case work practice requirement of 5% of distillation operating hours for emergency bypass for 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) and/or Section E (Source Group Restrictions).

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

a) The facility shall monitor the flares for the presence of a flame on a continuous basis. The thermocouples shall be equipped with an alarm that will notify operators if the flame is out. The facility shall keep records of the presence of a flame at the flare tips (thermocouple readings) and log this at least twice per shift.

[From: RACT approval #OP 61-00011, condition # 11]

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in Plan Approval # 61-011B, Condition # 12]

b) The isobutylene compressor discharge pressure, isobutylene final condenser temperature, and recovered isobutylene flow shall be checked twice per shift. Any parameters not in the operating ranges shall be relayed to the Operations Manager at the plant for follow-up.

[From: RACT approval #OP 61-00011, condition # 13]



**SECTION D. Source Level Requirements**

[Authority for this condition is also derived from 25 Pa Code Section 129.92]]

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in Plan Approval # 61-011B, Condition # 14]

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

The isobutylene compressor discharge pressure, isobutylene final condenser temperature, and recovered isobutylene flow shall be recorded on a log sheet twice per shift. Total isobutylene recovered shall be tabulated on a monthly basis. The usage of heptane and isobutylene will be tracked on a monthly basis and be recorded in an accounting report. The facility shall also keep records of isobutylene and heptane purchased for a period of five years.

[From: RACT approval #OP 61-00011, condition # 13]

[Authority for this condition is also derived from 25 Pa. Code § 129.92]

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in Pan Approval #61011B, condition #14]

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

All log sheets and reports containing the above data shall be considered as compliance records and will be maintained for a period of five years.

[From: RACT approval # OP 61-00011, condition # 15]

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in Plan Approval # 61011B, condition # 16]

**# 007 [25 Pa. Code §129.100]****Compliance demonstration and recordkeeping requirements.**

The records for demonstration of compliance with emission limits and requirements established pursuant to § 129.99 shall be retained by the owner or operator for 5 years and made available to the Department or appropriate approved local air pollution control agency upon receipt of a written request from the Department or appropriate approved local air pollution control agency.

[Authority from this condition is derived from § 129.100(i). The required recordkeeping is included in the RACT II Case-by-Case work practice requirement (see Condition #11 for this source).]

**V. REPORTING REQUIREMENTS.**

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

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

The sources and air pollution control devices shall be maintained and operated in accordance with the manufacturer's specifications and consistent with good air pollution control practices.

[From: RACT approval # OP 61-00011, condition #10]

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in

**SECTION D. Source Level Requirements**

Plan approval # 61011B, condition #11]

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

The permittee shall maintain the following parameters for isobutylene:

- (a) The isobutylene compressor discharge pressure will be 10 to 100 psig, on a 24 hour averaged basis.
- (b) Isobutylene final condenser temperature will be less than 60°C, on a 24 hour averaged basis.
- (c) Recovered isobutylene mass flow rate will be 5 to 1200 lbs/hr, on a 24 hour averaged basis.

[Derived from: RACT approval # OP 61-00011, condition #13]

[Authority for this condition is also derived from 25 Pa. Code §129.92]

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions found in Plan Approval #61011B, condition #14]

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

(a) The source and air pollution control device shall be maintained and operated in accordance with the manufacturer's specifications and consistent with good air pollution control practices.

(b) The permittee shall perform preventative maintenance and inspections on the source and control device in accordance with the manufacturer's specifications and consistent with good air pollution control practices.

(c) The permittee shall operate the flare (primary or backup flare as applicable) during all times that the source is in operation.

**# 011 [25 Pa. Code §129.99]****Alternative RACT proposal and petition for alternative compliance schedule.**

(a) The company shall limit atmospheric bypass time to 5% of distillation operating hours to minimize annual startup, shutdown, and malfunction emissions. Atmospheric bypass time shall be monitored and recorded at least twice per shift. Any atmospheric bypass or flare "flame out" incident exceeding 48 hours shall be verbally reported to the Department within 24 hours. A written account of such events including the corrective measures shall be provided to the Department semi-annually.

[Compliance with this condition assures compliance with the 10% of distillation operating hours requirement for emergency bypass pursuant to RACT # OP 61-00011, Condition #12 (§ 129.92) & with the provisions in PA 61-011B, Condition #13.]

(b) Annual out-of-service inspections and periodic in-service inspections shall be performed on this source (314 & 340 Distillation Columns) and associated equipment. Based on these inspections, maintenance will be performed as required to minimize air leaks into the system to reduce high oxygen conditions in the vent system that can cause atmospheric bypass.

**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: 108

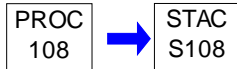
Source Name: CREEKSIDE DIESEL FIRE PUMP

Source Capacity/Throughput:

30.000 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: DIESEL FIRE PUMPS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

Source ID: 109

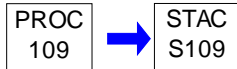
Source Name: NORTHSIDE DIESEL FIRE PUMP

Source Capacity/Throughput:

30.000 Gal/HR

Diesel Fuel

Conditions for this source occur in the following groups: DIESEL FIRE PUMPS

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

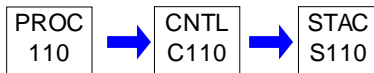
Source ID: 110

Source Name: BHT PACKAGING

Source Capacity/Throughput:

100.000 Lbs/HR

PARTICULATE MATTER (PM), BH

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

No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

**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 §127.511]****Monitoring and related recordkeeping and reporting requirements.**

The permittee shall maintain a record of all preventive maintenance inspections of the air dynamics remote dust collector. These records shall at a minimum contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, any routine maintenance performed, and, the pressure drop across the air dynamics remote dust collector.

**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 §127.511]****Monitoring and related recordkeeping and reporting requirements.**

- (a) The permittee shall perform a daily preventive maintenance inspection of the air dynamics remote dust collector.
- (b) The permittee shall maintain a manometer or similar device to measure the pressure drop across the air dynamics remote dust collector.
- (b) The permittee shall operate the air dynamics remote dust collector at all times that this is in operation.
- (c) The permittee shall maintain and operate this source and the air dynamics remote dust collector accordance with the manufacturer's specifications.

**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).

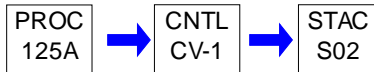
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 125A

Source Name: KRYSTAL UNIT PROCESS VESSELS

Source Capacity/Throughput:

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.****# 001 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

The permittee shall maintain a record of all preventive maintenance inspections of the control device. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, any routine maintenance performed.

**# 002 [25 Pa. Code §129.51]****General**

(a) to (c): Not Applicable.

(d) Records. The owner or operator of a facility or source subject to the VOC emission limitations and control requirements in this chapter shall keep records to demonstrate compliance with the applicable limitation or control requirement. The records shall provide sufficient data and calculations to clearly demonstrate that the emission limitations or control requirements are met. Data or information required to determine compliance with an applicable limitation shall be recorded and maintained in a time frame consistent with the averaging period of the standard. The records shall be retained at least 5 years and shall be made available to the Department on request. An owner or operator claiming that a facility or source is exempt from the VOC control provisions of this chapter shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to the VOC emission limitations or control requirements.

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.****# 003 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

(a) The permittee shall maintain the conservation vent at all times that this source is in operation.

(b) The permittee shall maintain and operate this source and the control device in accordance with the manufacturer's specifications.



**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. \*\*\***

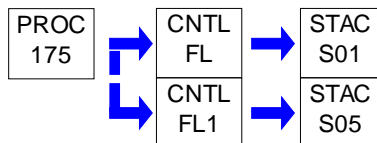
**SECTION D. Source Level Requirements**

Source ID: 175

Source Name: M-CRESOL DISTILLATION COLUMN &amp; ASSOCIATED EQPT

Source Capacity/Throughput:

Conditions for this source occur in the following groups: CAM - SOURCES 107, 175

**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, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

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

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry 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) 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.****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The source and air pollution control device shall be maintained and operated in accordance with the manufacturer's specifications and consistent with good air pollution control practices.

[From Plan Approval 61-011C condition #008]

**SECTION D. Source Level Requirements****# 004 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

The permittee shall perform preventative maintenance and inspections on the source and control device in accordance with the manufacturer's specifications and consistent with good air pollution control practices.

[From Plan Approval 61-011C Condition #009]

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

The permittee shall operate the flare (primary or backup flare as applicable) during all times that the source is in operation.

[From Plan Approval 61-011C Condition #010]

**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**

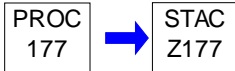
Source ID: 177

Source Name: COLD CLEANING PARTS CLEANERS (2)

Source Capacity/Throughput:

0.500 Gal/HR

LOW VAPOR PRESSURE SOLVE

**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 §129.63]****Degreasing operations**

(a) Cold cleaning machines. Except for those subject to the Federal National emissions standards for hazardous air pollutants (NESHAP) for halogenated solvent cleaners under 40 CFR Part 63 (relating to National emission standards for hazardous air pollutants for source categories), this subsection applies to cold cleaning machines that use 2 gallons or more of solvents containing greater than 5% VOC content by weight for the cleaning of metal parts.

(1) Immersion cold cleaning machines shall have a freeboard ratio of 0.50 or greater.

(2) Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:

(i) Have a permanent, conspicuous label summarizing the operating requirements in paragraph (3). In addition, the label shall include the following discretionary good operating practices:

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

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

**SECTION D. Source Level Requirements**

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

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

(3) Cold cleaning machines shall be operated in accordance with the following procedures:

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

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

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

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

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

(4) After December 22, 2002, a person may not use, sell or offer for sale for use in a cold cleaning machine any solvent with a vapor pressure of 1.0 millimeter of mercury (mm Hg) or greater and containing greater than 5% VOC by weight, measured at 20°C (68°F) containing VOCs.

(5) On and after December 22, 2002, a person who sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine shall provide, to the purchaser, the following written information:

(i) The name and address of the solvent supplier.

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

(iii) The vapor pressure of the solvent measured in mm hg at 20°C (68°F).

(6) A person who operates a cold cleaning machine shall maintain for at least 2 years and shall provide to the Department, on request, the information specified in paragraph (5). An invoice, bill of sale, certificate that corresponds to a number of sales, Material Safety Data Sheet (MSDS), or other appropriate documentation acceptable to the Department may be used to comply with this section.

(7) Paragraph (4) does not apply:

(i) To cold cleaning machines used in extreme cleaning service.

(ii) If the owner or operator of the cold cleaning machine demonstrates, and the Department approves in writing, that compliance with paragraph (4) will result in unsafe operating conditions.

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

(b) to (e): Not applicable.

**VII. ADDITIONAL REQUIREMENTS.**

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



**SECTION D. Source Level Requirements**

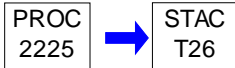
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 2225

Source Name: VESSEL 2225

Source Capacity/Throughput:

**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, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

# 002 [25 Pa. Code §123.21]

**General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry 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).

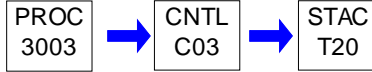
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: 3003

Source Name: PELLETIZER UNIT

Source Capacity/Throughput:

**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, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

# 002 [25 Pa. Code §123.21]

**General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry 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.**

# 003 [25 Pa. Code §127.511]

**Monitoring and related recordkeeping and reporting requirements.**

The permittee shall maintain a record of all preventive maintenance inspection of the control device. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, any routine maintenance performed, pressure of the oil(adsorbent) applied to the scrubber nozzle, and the scrubber inlet-draft reading.

**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 §127.511]

**Monitoring and related recordkeeping and reporting requirements.**

(a) The permittee shall measure the pressure of the oil (adsorbent) applied to the scrubber nozzle and the scrubber inlet draft reading using a magnehelic gauge or similar device.



**SECTION D. Source Level Requirements**

- (b) The permittee shall perform a weekly preventive maintenance inspection of absorber.
- (c) The permittee shall maintain and operate this source and the scrubber in accordance with the manufacturer's specifications.
- (d) The permittee shall maintain the saturation and solubility of the mineral oil by changing the oil every calendar quarter or when the scrubber oil reaches a BHT concentration of 40%, whichever comes later. Determination of BHT concentration shall be performed on a monthly basis.
- (e) The permittee shall maintain and run the scrubber when source is in operation.
- (f) The permittee shall maintain the the scrubber oil pump in running condition and check the scrubber reservoir oil level in absorber every calendar quarter.

**VII. ADDITIONAL REQUIREMENTS.**

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

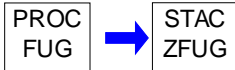
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: FUG

Source Name: FACILITY VOC FUGITIVES

Source Capacity/Throughput:

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §129.71]****Synthetic organic chemical and polymer manufacturing -- fugitive sources**

(a) This section applies to surface active agent manufacturing facilities subject to 129.72 (relating to manufacture of surface active agents) and to a facility with design capability to manufacture 1,000 tons per year or more of one or a combination of the following:

- (1) Synthetic organic chemicals listed in 40 CFR 60.489 (relating to list of chemicals provided by affected facilities).
- (2) Polyethylene.
- (3) Polypropylene.
- (4) Polystyrene.

(b) Exempt from this section are systems operated entirely under a vacuum, or process fluids that contain less than 10% by weight of VOCs and systems in service handling compounds with vapor pressures less than 0.044 psia at 68F.

(c) The owner or operator of a newly affected facility shall complete the following by May 24, 1993.

- (1) Install a second valve, blind flange, plug, cap or other equivalent sealing system on open ended lines, except for safety pressure relief valves.
- (2) Streamlined permit condition
- (d) Streamlined permit condition.
- (e) Streamlined permit condition.

**II. TESTING REQUIREMENTS.****# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.485]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Test methods and procedures.**

(a) In conducting the performance tests required in 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in 60.8(b).

(b) The owner or operator shall determine compliance with the standards in 60.482, 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.

**SECTION D. Source Level Requirements**

(c) The owner or operator shall determine compliance with the no detectable emission standards in 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 indicates by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator 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 E-260, E-168, E-169 (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) of this section shall be used to resolve the disagreement.

(e) The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20C. Standard reference texts or ASTM D-2879 (incorporated by reference-see 60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20C is equal to or greater than 20 percent by weight.

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

(f) -(g) : Not Applicable.

**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 [25 Pa. Code §129.51]**

**General**

(a) Not Applicable

(b) Not Applicable

(c) Not Applicable

(d) Records. The owner or operator of a facility or source subject to the VOC emission limitations and control requirements in this chapter shall keep records to demonstrate compliance with the applicable limitation or control requirement. The records shall provide sufficient data and calculations to clearly demonstrate that the emission limitations or control

**SECTION D. Source Level Requirements**

requirements are met. Data or information required to determine compliance with an applicable limitation shall be recorded and maintained in a time frame consistent with the averaging period of the standard. The records shall be retained at least 5 years and shall be made available to the Department on request. An owner or operator claiming that a facility or source is exempt from the VOC control provisions of this chapter shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to the VOC emission limitations or control requirements.

**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.486]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Recordkeeping requirements.**

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.

(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

(b) When each leak is detected as specified in 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, 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 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 60.482-2, 60.482-3, 60.482-7, 60.482-8, and 60.483-2, the following information shall be recorded in a log and shall be kept for 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 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.

(6) The signature of the owner or operator (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 shutdown that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) Not Applicable.

(e) The following information pertaining to all equipment subject to the requirements in 60.482-1 to 60.482-10 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 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 60.482-2(e), 60.482-3(i) and 60.482-7(f).
  - (ii) The designation of equipment as subject to the requirements of 60.482-2(e), 60.482-3(i), or 60.482-7(f) shall be signed by the owner or operator.
- (3) A list of equipment identification numbers for pressure relief devices required to comply with 60.482-4.
- (4)(i) The dates of each compliance test as required in 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.
- (f) The following information pertaining to all valves subject to the requirements of 60.482-7(g) and (h) shall be recorded in a log that is kept in a readily accessible location:
  - (1) A list of identification numbers for valves that are designated as unsafe-to-monitor, an explanation for each valve stating why the valve is unsafe-to-monitor, and the plan for monitoring each valve.
  - (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 value.
- (g) The following information shall be recorded for valves complying with 60.483-2:
  - (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 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 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) Not Applicable.

**SECTION D. Source Level Requirements****V. REPORTING REQUIREMENTS.****# 005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.487]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Reporting requirements.**

(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial start up date.

(b) The initial semiannual report to the Administrator shall include the following information:

(1) Process unit identification.

(2) Number of valves subject to the requirements of 60.482-7, excluding those valves designated for no detectable emissions under the provisions of 60.482-7(f).

(3) Number of pumps subject to the requirements of 60.482-2, excluding those pumps designated for no detectable emissions under the provisions of 60.482-2(e) and those pumps complying with 60.482-2(f).

(4) Number of compressors subject to the requirements of 60.482-3, excluding those compressors designated for no detectable emissions under the provisions of 60.482-3(i) and those compressors complying with 60.482-3(h).

(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in 60.486:

(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 60.482(7)(b) or 60.483-2,

(ii) Number of valves for which leaks were not repaired as required in 60.482-7(d)(1),

(iii) Number of pumps for which leaks were detected as described in 60.482-2(b) and (d)(6)(i),

(iv) Number of pumps for which leaks were not repaired as required in 60.482-2(c)(1) and (d)(6)(ii),

(v) Number of compressors for which leaks were detected as described in 60.482-3(f),

(vi) Number of compressors for which leaks were not repaired as required in 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) An owner or operator electing to comply with the provisions of 60.483-1 and 60.483-2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

(e) An owner or operator shall report the results of all performance tests in accordance with 60.8 of the General Provisions. The provisions of 60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

**SECTION D. Source Level Requirements**

(f) The requirements of paragraphs (a) through (c) of this section 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) of this section, provided that they comply with the requirements established by the State.

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

The facility shall comply with the fugitive VOC source requirements of 25 Pa Code Section 129.71 by maintaining a Leak Detection and Repair (LDAR) program. The LDAR program shall be implemented in accordance with 40 CFR Part 60 Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry (SOCMI). New pieces of equipment in VOC service shall be added to this program.

[From: RACT approval # OP 61-00011, condition #9]

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

The facility shall keep records pertaining to LDAR in accordance with 40 CFR Section 60.486. The facility shall maintain a log containing the components checked, identification of leaking components, location and repair of components for heptane, isobutylene or cresol service equipment. The facility shall follow the reporting requirements of 40 CFR Section 60.487 pertaining to LDAR. This includes submittal of semi-annual reports pertaining to the monitoring of valves, pumps, and compressors.

[From: RACT approval # OP 61-00011, condition #14]

**# 008 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-2]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Standards: Pumps in light liquid service.**

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in 60.485(b), except as provided in 60.482-1(c) and paragraphs (d), (e), and (f) of this section.

(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c)(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 60.482-9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), Provided the following requirements 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) Equipment with a barrier fluid degassing reservoir that is connected by a closed vent system to a control device that

**SECTION D. Source Level Requirements**

complies with the requirements of 60.482-10; or

(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

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

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

(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii), a leak is detected.

(ii) 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 60.482-9.

(iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) Any pump that is designated, as described in 60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (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 60.485(c), and

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

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with the requirements of 60.482-10, it is exempt from the paragraphs (a) through (e).

**# 009 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-4]**

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Standards: Pressure relief devices in gas/vapor service.**

(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 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 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 60.485(c).



**SECTION D. Source Level Requirements**

(c) Any pressure relief device that is equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in 60.482-10 is exempted from the requirements of paragraphs (a) and (b).

**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-7]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Standards: Valves in gas/vapor service and in light liquid service.**

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in 60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), 60.483-1, 2, and 60.482-1(c).

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(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 60.482-9.

(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 60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (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 60.485(c), and

(3) Is tested for compliance with paragraph (f)(2) initially upon designation, annually, and at other times requested by the Administrator.

(g) Any valve that is designated, as described in 60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator 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 paragraph (a), and

(2) The owner or operator 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 60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:

**SECTION D. Source Level Requirements**

(1) The owner or operator 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 either becomes an affected facility through 60.14 or 60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

**# 011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-8]**

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

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

(a) Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and flanges and other connectors shall be monitored within 5 days by the method specified in 60.485(b) if evidence of a potential leak is found by visual, audible, olfactory, or any other detection method.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(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 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 60.482-7(e).

**# 012 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.482-9]**

**Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry**

**Standards: Delay of repair.**

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

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:

(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with 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.

**SECTION D. Source Level Requirements****# 013 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.483-1]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Alternative standards for valves - allowable percentage of valves leaking.**

(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:

(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in 60.487(b).

(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.

(3) If a valve leak is detected, it shall be repaired in accordance with 60.482-7(d) and (e).

(c) Performance tests shall be conducted in the following manner:

(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in 60.485(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.

**# 014 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.483-2]****Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry****Alternative standards for valves-skip period leak detection and repair.**

(a)(1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in 60.487(b).

(b)(1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in 60.482-7.

(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in 60.482-7 but can again elect to use this section.

**SECTION D. Source Level Requirements**

(5) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.

(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.

**VII. ADDITIONAL REQUIREMENTS.**

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

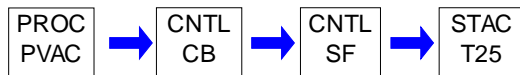
**\*\*\* Permit Shield in Effect. \*\*\***

**SECTION D. Source Level Requirements**

Source ID: PVAC

Source Name: PNEUVAC PRODUCT/FINES CONVEYING SYSTEM

Source Capacity/Throughput:

**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, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

# 002 [25 Pa. Code §123.21]

**General**

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry 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.**

# 003 [25 Pa. Code §127.511]

**Monitoring and related recordkeeping and reporting requirements.**

The permittee shall maintain a record of all preventive maintenance inspections of the control device. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, any routine maintenance performed.

**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 §127.511]

**Monitoring and related recordkeeping and reporting requirements.**

- The permittee shall operate the control devices at all times that this source is in operation.
- The permittee shall inspect weekly the Pneuvac secondary filter (at the vacuum pump) for any indication of baghouse particulate carryover.
- The permittee shall maintain a weekly preventive maintenance inspection of the control devices.

**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. \*\*\***

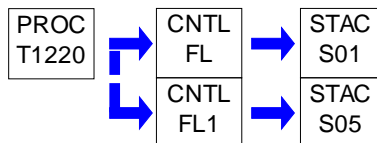
**SECTION D. Source Level Requirements**

Source ID: T1220

Source Name: HEADS STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: STORAGE TANKS - HEADS, POLYMER

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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

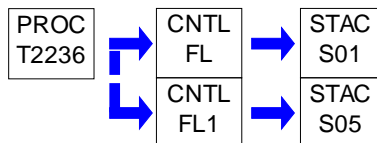
**SECTION D. Source Level Requirements**

Source ID: T2236

Source Name: POLYMER STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: STORAGE TANKS - HEADS, POLYMER

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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



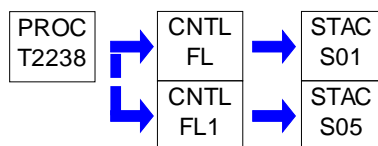
**SECTION D. Source Level Requirements**

Source ID: T2238

Source Name: POLYMER STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: STORAGE TANKS - HEADS, POLYMER

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

Source ID: T5665

Source Name: ISOBUTYLENE STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: STORAGE TANKS - ISOBUTYLENE

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

Source ID: TK121

Source Name: ISOBUTYLENE STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: STORAGE TANKS - ISOBUTYLENE

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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

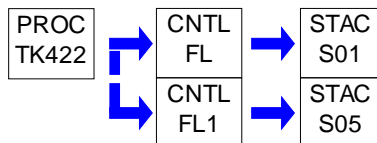
**SECTION D. Source Level Requirements**

Source ID: TK422

Source Name: ALKYLATE STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: STORAGE TANKS - ALKYLATE

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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

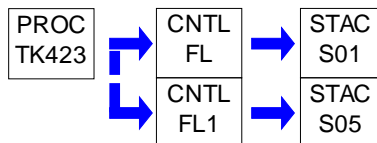
**SECTION D. Source Level Requirements**

Source ID: TK423

Source Name: ALKYLATE STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: STORAGE TANKS - ALKYLATE

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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

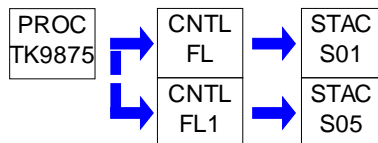
**SECTION D. Source Level Requirements**

Source ID: TK9875

Source Name: ALKYLATE STORAGE TANK

Source Capacity/Throughput:

Conditions for this source occur in the following groups: STORAGE TANKS - ALKYLATE

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.**

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

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.**

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

**VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION D. Source Level Requirements**

Source ID: FL

Source Name: FLARE

Source Capacity/Throughput:

N/A

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, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

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

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry 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.****# 003 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

The permittee shall keep records of the dates and times that this emergency and backup process flare is utilized for process flows along with the explanation (i.e., primary process flare down for maintenance, excess pressure at the primary process flare, etc.).

[From Plan Approval 61-011C condition #004]

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

The permittee shall maintain a record of all preventive maintenance inspections of the control device. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, any routine maintenance performed.

[From Plan Approval 61-011C condition #003]

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

The permittee shall perform preventative maintenance and inspections on the control device in accordance with the

**SECTION D. Source Level Requirements**

manufacturers specifications and consistent with good air pollution control practices.

[From Plan Approval 61-011C condition #005]

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

a) The permittee shall operate this flare at all times that the sources are in operation and the emissions from the primary process flare are being bypassed to this flare.

(b) The permittee shall maintain a weekly preventive maintenance inspection of this flare.

[From Plan Approval 61-011C Condition #006]

**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: FL1

Source Name: PRIMARY PROCESS FLARE

Source Capacity/Throughput:

N/A

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, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

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

No person may permit the emission into the outdoor atmosphere of sulfur oxides from a source in a manner that the concentration of the sulfur oxides, expressed as SO<sub>2</sub>, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

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

The new flare shall be designed with the net heating value of the gas being combusted at 11.2 MJ/scm (300 Btu/scf) or greater. The net heating value of the gas being combusted in a flare shall be calculated using the following equation:

$$HT = K \sum_{i=1}^n C_i H_i$$

Where:

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

K=Constant=  $1.740 \times 10^{-7} [1/\text{ppmv}] [\text{g-mole/scm}] [\text{MJ/kcal}]$

where the standard temperature for (g-mole/scm) is 20°C.

S= summation from i=1 to n

C<sub>i</sub>=Concentration of sample component i in ppmv on a wet basis, as measured for organics by Test Method 18 and measured for hydrogen and carbon monoxide by American Society for Testing and Materials (ASTM) D1946-77 or 90 (Reapproved 1994) (incorporated by reference as specified in §63.14).

H<sub>i</sub>=Net heat of combustion of sample component i, kcal/g-mole at 25°C and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 or 88 or D4809-95 (incorporated by reference as specified in §63.14) if published values are not available or cannot be calculated.

n=Number of sample components.

[From Plan Approval 61-011C condition #003]

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

The maximum exit velocity of the new flare shall be less than the velocity V<sub>max</sub>. The maximum permitted velocity, V<sub>max</sub>, for the air-assisted flare shall be determined by the following equation:

$$V_{max} = 8.71 + 0.708(HT)$$

**SECTION D. Source Level Requirements**

Where:

$V_{max}$ =Maximum permitted velocity, m/sec.

8.71=Constant.

0.708=Constant.

HT=The net heating value as determined in condition number 003 above.

[From Plan Approval 61-011C condition #004]

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

The permittee shall maintain a record of all preventive maintenance inspections of the control device. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, any routine maintenance performed.

[From Plan Approval 61-011C condition #006]

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.****# 006 [25 Pa. Code §127.12b]****Plan approval terms and conditions.**

(a) The permittee shall operate the flare at all times that the sources are in operation.

(b) The permittee shall maintain and operate the flare in accordance with the manufacturers specifications and consistent with good air pollution control practices.

(c) The permittee shall maintain a weekly preventive maintenance inspection of the flare.

[From Plan Approval 61-011C condition #007]

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

All normal process VOCs and process upset VOCs shall be directed to the primary process flare. In the event of high

**SECTION D. Source Level Requirements**

pressure (greater than 12 inches of water), the primary process flare shall be bypassed and the VOCs shall be directed to the emergency/backup flare.

[From Plan Approval 61-011C condition #008]

**VII. ADDITIONAL REQUIREMENTS.**

**# 008 [25 Pa. Code §127.12b]**

**Plan approval terms and conditions.**

The flare shall be equipped with an air-assist blower and a pilot with automatic pilot re-light controls. The flare shall also be equipped with a knock-out pot to assist in the removal of liquids from the gases being flared.

[From Plan Approval 61-011C condition #009]

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

**SECTION E. Source Group Restrictions.**

Group Name: CAM - SOURCES 107, 175

Group Description: CAM Requirements for Sources 107 &amp; 175 (Distillation Columns)

**Sources included in this group**

ID	Name
107	314 & 340 DISTILLATION COLUMN VENTS
175	M-CRESOL DISTILLATION COLUMN & ASSOCIATED EQPT

**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 following are CAM related requirements.

[Additional authority for parts (1)-(3) of this permit condition is also derived from 40 CFR §64.6 & §64.3]

(1) The permittee shall monitor the flares for the presence of a flame on a continuous basis. The presence of a flame shall be monitored using a thermocouple or equivalent device approved by the Department.

(2) The permittee shall monitor the primary process flare "Trouble Indicators" on a continuous basis. The "Trouble Indicators" include low-low pressure, high-high pressure, high liquid level in the knock-out pot, and blower failure.

(3) The permittee shall monitor the visible emissions from the two flare exhausts using USEPA Method 22-like procedures on a weekly basis.

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

The following are CAM related requirements:

[Additional authority for parts (1) - (3) of this permit condition is also derived from 40 CFR §64.9]

(1) The permittee shall record all excursions and corrective actions taken in response to an excursion and the time elapsed until the corrective actions have been taken.

(2) The permittee shall record all inspections, repair and maintenance performed on the monitoring equipment.

(3) The permittee shall maintain records of all monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable). The permittee shall also record the dates, times and durations, possible causes and corrective actions taken for the incidents.

[Additional authority for part (4) of this permit condition is also derived from 40 CFR §70.6(a)(3)(ii)(B)]

(4) The permittee shall keep all records for a period of five (5) years and make the records available to the Department upon request.

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

The following are CAM related requirements:

**SECTION E. Source Group Restrictions.**

- (1) The permittee shall monitor thermocouple readings at the flare tips. Flame/no flame records (based on the flare tip thermocouple readings corresponding to a temperature of approximately 250 F) shall be recorded on a logsheet twice per shift (or be electronically recorded at least every 4 hours).
- (2) The "trouble/no trouble" records shall be recorded on a log sheet twice per shift (or the data may be electronically recorded at least every 4 hours).
- (3) The permittee shall record the weekly 3-minute visible observation on a log sheet.
- (4) The permittee shall keep the record of all preventative maintenance inspections and document all required maintenance utilizing the facility SAP system or equivalent hardcopy records.

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

The following are CAM related requirements:

[Additional authority for parts (1)-(2) of this permit condition is also derived from 40 CFR §64.9 & §70.6(a)(3)(iiii)(A)]

- (1) The permittee shall report all excursions and corrective actions taken, the dates, times, durations and probable causes, every six (6) months.
- (2) The permittee shall report all monitoring downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable), their dates, times and durations, probable causes and corrective actions taken, every six (6) months.

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

The following are CAM related requirements:

[Additional authority for part (1) of this permit condition is also derived from 40 CFR §64.3 & §64.6]

- (1) The permittee shall adhere to the approved range for the selected indicators so that operation within the range shall provide reasonable assurance of compliance. A departure from the specified indicator range over a specified averaging period shall be defined as an excursion.
  - (a) The approved range for the presence of a flame at the flare tip is a temperature greater than 250 F (or equivalent for an alternative device as approved by the Department) during periods other than start up and shutdown.
  - (b) The approved range for the trouble indicator is a trouble signal signifying either low-low pressure, high-high pressure, high level of the knock out pot, or blower failure.
  - (c) The approved range for the visible emissions indicator is the presence of any visible emissions observed using a USEPA Method-22 like procedure.

[Additional authority for parts (2) - (4) of the following permit conditions are also derived from 40 CFR §64.3]

- (2) The permittee shall utilize approved QA/QC practices that are adequate to ensure continuing validity of data and proper performance of the devices.
  - (a) The permittee shall, for an approved device(s), install detectors or sensors at a location approved by the Department for obtaining data that are representative of the monitored indicator.
  - (b) The permittee shall develop verification procedures to confirm the operational status of new or modified monitoring equipment prior to commencement of the monitoring process.

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(c) For QA/QC purposes, the permittee shall calibrate and check the accuracy of monitoring equipment taking into account the manufacturer's specifications at approved time intervals.

(1) Thermocouple calibration shall be checked during scheduled plant shutdowns (approximately every 2-3 years).

(2) The permittee shall perform periodic maintenance and testing of the "trouble" systems.

(3) The visible emissions observers shall be initially trained in Reference Method 22-like procedures.

(3) The permittee shall maintain all monitoring equipment and stock parts necessary for routine repairs onsite.

(4) The permittee shall ensure that at least 90% of the monitoring data has been properly and accurately collected.

[Additional authority for part (5) of this permit condition is also derived from 40 CFR §64.4]

(5) The permittee shall submit an implementation plan and schedule if the approved monitoring requires the installation, testing or other necessary activities. The schedule for completing installation and beginning operation of the monitoring may not exceed 180 days after the issuance date of the permit.

**VII. ADDITIONAL REQUIREMENTS.**

**# 006 [25 Pa. Code §127.441]**

**Operating permit terms and conditions.**

The following conditions are related to CAM rule:

[Additional authority for the following permit conditions are also derived from 40 CFR §64.8 and 40 CFR §64.9]

**Quality Improvement Plan Requirements**

(1) The permittee shall develop and implement a quality improvement plan (QIP) as expeditiously as practicable if any of the following occurs:

(a) For properly and accurately collected data, accumulated excursions exceed two percent (2%) of the data for VOC.

(b) Six excursions occur in a six-month reporting period.

(c) The Department determines after review of all reported information that the permittee has not responded acceptably to an excursion.

(2) In general, the QIP plan should be developed within 60 days and the permittee shall provide a copy of the QIP to the Department. Furthermore, the permittee shall notify the Department if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(3) The permittee shall record actions taken to implement a QIP during a reporting period and all related actions including, but not limited to inspections, repairs and maintenance performed on the monitoring equipment.

(4) In accordance with 40 CFR §64.8, the QIP shall include procedures for evaluating the control performance problems. Based on the results of the evaluation procedures, the permittee shall modify the QIP, and provide a copy to the Department, to include procedures for conducting more frequent or improved monitoring in conjunction with one or more of the following:

(a) Improved preventive maintenance practices

(b) Process operation changes

(c) Appropriate improvements to control methods

(d) Other steps appropriate to correct performance.

(5) Following implementation of a QIP, the Department will require reasonable revisions to the QIP if the plan has failed to either:

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- (a) Address the cause of the control device performance problem.
- (b) Provide adequate procedures for correcting control device performance problems in as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
  
- (6) Implementation of a QIP, shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under any federal, state, or local laws or any other applicable requirements under the Clean Air Act.

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

**SECTION E. Source Group Restrictions.**

Group Name: DIESEL FIRE PUMPS

Group Description: Requirements for emergency diesel fire pumps (§ 63 Subpart ZZZZ, NOx Limit)

Sources included in this group

ID	Name
108	CREEKSIDE DIESEL FIRE PUMP
109	NORTHSIDE DIESEL FIRE PUMP

**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.14]****Exemptions.**

The permittee shall maintain the emission of NOx less than 100lbs/hr, 1000 lbs/day, 2.75 tons per ozone season and 6.6 tons per year on a 12-month rolling basis for all exempt engines at the site.

**Operation Hours Restriction(s).****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

To demonstrate compliance with NOx limits in Condition #001, each source is limited to operate as follows:

- (a) Not more than 330 hours of operation in the ozone season (May through September).
- (b) Not more than 800 hours of operation in any 12-month rolling period.

[Sources 108 & 109 have maximum hourly emission rate of 16.2 lbs/hr & maximum daily emission rate of 388.8 lbs/day, combined, assuring compliance with NOx limits of 100 lbs/hr & 1000 lbs/day.]

**# 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?**

- (a) [See VI. Work Practice Requirements for this source group]
- (b) - (d) [Not applicable]
- (e) [See VI. Work Practice Requirements for this source group]
- (f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. 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 paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
  - (1) [Omitted. Streamlined out by the 800-hour limit.]
  - (2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
    - (i) 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 owner or operator may petition the Administrator for approval of additional hours to be used for maintenance



**SECTION E. Source Group Restrictions.**

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 RICE beyond 100 hours per calendar year.

(ii) - (iii) [Vacated]

(3) [Not applicable]

(4) Emergency stationary RICE located at area 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 (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, 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 an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) - (ii) [Not applicable]

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

**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.****# 004 [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) - (d): Not applicable.

(d) You must keep the records required in Table 6 of this subpart to show continuous compliance with each emission or operating limitation that applies to you.

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) [Not applicable.]

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator 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. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

**SECTION E. Source Group Restrictions.**

(1) [Not applicable.]

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 78 FR 6706, Jan. 30, 2013]

**# 005 [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) Your 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), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) You 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).

[69 FR 33506, June 15, 2004, as amended at 75 FR 9678, Mar. 3, 2010]

**V. REPORTING REQUIREMENTS.**

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

**VI. WORK PRACTICE REQUIREMENTS.****# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 2d]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Requirements for Existing Stationary RICE Located at Area Sources of HAP Emissions**

As stated in §§63.6603 and 63.6640, you must comply with the following requirements for existing stationary RICE located at area sources of HAP emissions:

FOR EACH:

(4) Emergency stationary CI RICE and black start stationary CI RICE.

YOU MUST MEET THE FOLLOWING REQUIREMENT, EXCEPT DURING PERIODS OF STARTUP...

(a) Change oil and filter every 500 hours of operation or annually, whichever comes first; [footnote (1)]

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

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

DURING PERIODS OF STARTUP YOU MUST...

Minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

FOOTNOTES:

**SECTION E. Source Group Restrictions.**

(1) Sources have the option to utilize an oil analysis program as described in § 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.

(2) If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management 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 management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[78 FR 6709, Jan. 30, 2013]

**# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63 Subpart ZZZZ Table 6]**

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

**Table 6 to Subpart ZZZZ of Part 63.-- Continuous Compliance With Emission Limitations and Operating Limitations**

As stated in §63.6640, you must continuously comply with the emissions and operating limitations as required by the following:

FOR EACH...

- (9) existing emergency and black start stationary RICE located at an area source of HAP

COMPLYING WITH THE REQUIREMENT TO...

- (a) Work or Management practices.

YOU MUST DEMONSTRATE CONTINUOUS COMPLIANCE BY...

(i) Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

(ii) Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

**# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6603]**

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

**What emission limitations, operating limitations, and other requirements must I meet if I own or operate an existing stationary RICE located at an area source of HAP emissions?**

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

(b) - (f) [Not applicable]

**# 009 [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) - (d) [Not applicable]

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

**SECTION E. Source Group Restrictions.**

(1) - (2) [Not applicable]

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4) - (10) [Not applicable]

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) [Not applicable]

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the 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 Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) [Not applicable]

[69 FR 33506, June 15, 2004, as amended at 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51589, Aug. 20, 2010; 76 FR 12866, Mar. 9, 2011; 78 FR 6703, Jan. 30, 2013]

**# 010 [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?**

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

(e) You must also report each instance in which you did not meet the requirements in Table 8 to this subpart that apply to you.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3606, Jan. 18, 2008; 75 FR 9676, Mar. 3, 2010; 75 FR 51591, Aug. 20, 2010; 78 FR 6704, Jan. 30, 2013]

**VII. ADDITIONAL REQUIREMENTS.****# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6580]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What is the purpose of subpart ZZZZ?**

**SECTION E. Source Group Restrictions.**

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations and operating limitations.

[73 FR 3603, Jan. 18, 2008]

**# 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6585]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Am I subject to this subpart?**

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand.

(a) A stationary RICE is any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

(b) Not applicable.

(c) An area source of HAP emissions is a source that is not a major source.

(d) If you are an owner or operator of an area source subject to this subpart, your status as an entity subject to a standard or other requirements under this subpart does not subject you to the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart as applicable.

(e) - (f): Not applicable.

[69 FR 33506, June 15, 2004, as amended at 73 FR 3603, Jan. 18, 2008; 78 FR 6700, Jan. 30, 2013]

**# 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?**

This subpart applies to each affected source.

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

(1) Existing stationary RICE.

(i) - (ii) : Not applicable.

(iii) For stationary RICE located at an area source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before June 12, 2006.

(iv) : Not applicable.

(2): Not applicable.

(3): Not applicable.

(b) -(c): Not applicable.

**SECTION E. Source Group Restrictions.****# 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?**

(a) Affected sources.

(1) If you have an existing stationary RICE, excluding existing non-emergency CI stationary RICE, with a site rating of more than 500 brake HP located at a major source of HAP emissions, you must comply with the applicable emission limitations, operating limitations and other requirements no later than June 15, 2007. If you have an existing non-emergency CI stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions, an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. If you have an existing stationary SI RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions, or an existing stationary SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

(2) - (7): Not applicable.

(b) - (c): Not applicable.

**# 015 [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) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

(b) At all times you 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 this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[75 FR 9675, Mar. 3, 2010, as amended at 78 FR 6702, Jan. 30, 2013]

**# 016 [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?**

Table 8 to this subpart shows which parts of the General Provisions in §§ 63.1 through 63.15 apply to you.

[75 FR 9678, Mar. 3, 2010]

**# 017 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6670]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****Who implements and enforces this subpart?**

(a) This subpart is implemented and enforced by the U.S. EPA, or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the U.S. EPA) has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out whether this subpart is delegated to your State, local, or tribal agency.

**SECTION E. Source Group Restrictions.**

(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are retained by the Administrator of the U.S. EPA and are not transferred to the State, local, or tribal agency.

(c) The authorities that will not be delegated to State, local, or tribal agencies are:

- (1) Approval of alternatives to the non-opacity emission limitations and operating limitations in § 63.6600 under § 63.6(g).
- (2) Approval of major alternatives to test methods under § 63.7(e)(2)(ii) and (f) and as defined in § 63.90.
- (3) Approval of major alternatives to monitoring under § 63.8(f) and as defined in § 63.90.
- (4) Approval of major alternatives to recordkeeping and reporting under § 63.10(f) and as defined in § 63.90.
- (5) Approval of a performance test which was conducted prior to the effective date of the rule, as specified in § 63.6610(b).

**# 018 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6675]**

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

**What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in this section as follows:

Alaska Railbelt Grid means the service areas of the six regulated public utilities that extend from Fairbanks to Anchorage and the Kenai Peninsula. These utilities are Golden Valley Electric Association; Chugach Electric Association; Matanuska Electric Association; Homer Electric Association; Anchorage Municipal Light & Power; and the City of Seward Electric System.

Area source means any stationary source of HAP that is not a major source as defined in part 63.

Associated equipment as used in this subpart and as referred to in section 112(n)(4) of the CAA, means equipment associated with an oil or natural gas exploration or production well, and includes all equipment from the well bore to the point of custody transfer, except glycol dehydration units, storage vessels with potential for flash emissions, combustion turbines, and stationary RICE.

Backup power for renewable energy means an engine that provides backup power to a facility that generates electricity from renewable energy resources, as that term is defined in Alaska Statute 42.45.045(l)(5) (incorporated by reference, see § 63.14).

Black start engine means an engine whose only purpose is to start up a combustion turbine.

CAA means the Clean Air Act (42 U.S.C. 7401 et seq., as amended by Public Law 101-549, 104 Stat. 2399).

Commercial emergency stationary RICE means an emergency stationary RICE used in commercial establishments such as office buildings, hotels, stores, telecommunications facilities, restaurants, financial institutions such as banks, doctor's offices, and sports and performing arts facilities.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Custody transfer means the transfer of hydrocarbon liquids or natural gas: After processing and/or treatment in the producing operations, or from storage vessels or automatic transfer facilities or other such equipment, including product loading racks, to pipelines or any other forms of transportation. For the purposes of this subpart, the point at which such liquids or natural gas enters a natural gas processing plant is a point of custody transfer.

Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

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- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation or operating limitation;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation or operating limitation in this subpart during malfunction, regardless of whether or not such failure is permitted by this subpart.
- (4) Fails to satisfy the general duty to minimize emissions established by § 63.6(e)(1)(i).

Diesel engine means any stationary RICE in which a high boiling point liquid fuel injected into the combustion chamber ignites when the air charge has been compressed to a temperature sufficiently high for auto-ignition. This process is also known as compression ignition.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is fuel oil number 2. Diesel fuel also includes any non-distillate fuel with comparable physical and chemical properties ( e.g. biodiesel) that is suitable for use in compression ignition engines.

Digester gas means any gaseous by-product of wastewater treatment typically formed through the anaerobic decomposition of organic waste materials and composed principally of methane and CO<sub>2</sub>.

Dual-fuel engine means any stationary RICE in which a liquid fuel (typically diesel fuel) is used for compression ignition and gaseous fuel (typically natural gas) is used as the primary fuel.

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary RICE must comply with the requirements specified in § 63.6640(f) in order to be considered emergency stationary RICE. If the engine does not comply with the requirements specified in § 63.6640(f), then it is not considered to be an emergency stationary RICE under this subpart.

- (1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
- (2) The stationary RICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 63.6640(f).
- (3) The stationary RICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 63.6640(f)(2)(ii) or (iii) and § 63.6640(f)(4)(i) or (ii).

Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation.

Four-stroke engine means any type of engine which completes the power cycle in two crankshaft revolutions, with intake and compression strokes in the first revolution and power and exhaust strokes in the second revolution.

Gaseous fuel means a material used for combustion which is in the gaseous state at standard atmospheric temperature and pressure conditions.

Gasoline means any fuel sold in any State for use in motor vehicles and motor vehicle engines, or nonroad or stationary engines, and commonly or commercially known or sold as gasoline.

Glycol dehydration unit means a device in which a liquid glycol (including, but not limited to, ethylene glycol, diethylene glycol, or triethylene glycol) absorbent directly contacts a natural gas stream and absorbs water in a contact tower or absorption column (absorber). The glycol contacts and absorbs water vapor and other gas stream constituents from the



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natural gas and becomes "rich" glycol. This glycol is then regenerated in the glycol dehydration unit reboiler. The "lean" glycol is then recycled.

Hazardous air pollutants (HAP) means any air pollutants listed in or pursuant to section 112(b) of the CAA.

Institutional emergency stationary RICE means an emergency stationary RICE used in institutional establishments such as medical centers, nursing homes, research centers, institutions of higher education, correctional facilities, elementary and secondary schools, libraries, religious establishments, police stations, and fire stations.

ISO standard day conditions means 288 degrees Kelvin (15 degrees Celsius), 60 percent relative humidity and 101.3 kilopascals pressure.

Landfill gas means a gaseous by-product of the land application of municipal refuse typically formed through the anaerobic decomposition of waste materials and composed principally of methane and CO<sub>2</sub>.

Lean burn engine means any two-stroke or four-stroke spark ignited engine that does not meet the definition of a rich burn engine.

Limited use stationary RICE means any stationary RICE that operates less than 100 hours per year.

Liquefied petroleum gas means any liquefied hydrocarbon gas obtained as a by-product in petroleum refining of natural gas production.

Liquid fuel means any fuel in liquid form at standard temperature and pressure, including but not limited to diesel, residual/crude oil, kerosene/naphtha (jet fuel), and gasoline.

Major Source, as used in this subpart, shall have the same meaning as in § 63.2, except that:

- (1) Emissions from any oil or gas exploration or production well (with its associated equipment (as defined in this section)) and emissions from any pipeline compressor station or pump station shall not be aggregated with emissions from other similar units, to determine whether such emission points or stations are major sources, even when emission points are in a contiguous area or under common control;
- (2) For oil and gas production facilities, emissions from processes, operations, or equipment that are not part of the same oil and gas production facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated;
- (3) For production field facilities, only HAP emissions from glycol dehydration units, storage vessel with the potential for flash emissions, combustion turbines and reciprocating internal combustion engines shall be aggregated for a major source determination; and
- (4) Emissions from processes, operations, and equipment that are not part of the same natural gas transmission and storage facility, as defined in § 63.1271 of subpart HHH of this part, shall not be aggregated.

Malfunction means 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 which causes, or has the potential to cause, the emission limitations in an applicable standard to be exceeded. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

Natural gas means a naturally occurring mixture of hydrocarbon and non-hydrocarbon gases found in geologic formations beneath the Earth's surface, of which the principal constituent is methane. Natural gas may be field or pipeline quality.

Non-selective catalytic reduction (NSCR) means an add-on catalytic nitrogen oxides (NOX) control device for rich burn engines that, in a two-step reaction, promotes the conversion of excess oxygen, NOX, CO, and volatile organic compounds (VOC) into CO<sub>2</sub>, nitrogen, and water.

Oil and gas production facility as used in this subpart means any grouping of equipment where hydrocarbon liquids are processed, upgraded (i.e., remove impurities or other constituents to meet contract specifications), or stored prior to the

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point of custody transfer; or where natural gas is processed, upgraded, or stored prior to entering the natural gas transmission and storage source category. For purposes of a major source determination, facility (including a building, structure, or installation) means oil and natural gas production and processing equipment that is located within the boundaries of an individual surface site as defined in this section. Equipment that is part of a facility will typically be located within close proximity to other equipment located at the same facility. Pieces of production equipment or groupings of equipment located on different oil and gas leases, mineral fee tracts, lease tracts, subsurface or surface unit areas, surface fee tracts, surface lease tracts, or separate surface sites, whether or not connected by a road, waterway, power line or pipeline, shall not be considered part of the same facility. Examples of facilities in the oil and natural gas production source category include, but are not limited to, well sites, satellite tank batteries, central tank batteries, a compressor station that transports natural gas to a natural gas processing plant, and natural gas processing plants.

Oxidation catalyst means an add-on catalytic control device that controls CO and VOC by oxidation.

Peaking unit or engine means any standby engine intended for use during periods of high demand that are not emergencies.

Percent load means the fractional power of an engine compared to its maximum manufacturer's design capacity at engine site conditions. Percent load may range between 0 percent to above 100 percent.

Potential to emit means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the stationary source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation or the effect it would have on emissions is federally enforceable. For oil and natural gas production facilities subject to subpart HH of this part, the potential to emit provisions in § 63.760(a) may be used. For natural gas transmission and storage facilities subject to subpart HHH of this part, the maximum annual facility gas throughput for storage facilities may be determined according to § 63.1270(a)(1) and the maximum annual throughput for transmission facilities may be determined according to § 63.1270(a)(2).

Production field facility means those oil and gas production facilities located prior to the point of custody transfer.

Production well means any hole drilled in the earth from which crude oil, condensate, or field natural gas is extracted.

Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C<sub>3</sub>H<sub>8</sub>.

Remote stationary RICE means stationary RICE meeting any of the following criteria:

(1) Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.

(2) Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (2)(i) and (ii) of this definition.

(i) A pipeline segment with 10 or fewer buildings intended for human occupancy and no buildings with four or more stories within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.

(ii) The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12-month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.

(iii) For purposes of this paragraph (2), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 meters) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the

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storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

(3) Stationary RICE that are not located on gas pipelines and that have 5 or fewer buildings intended for human occupancy and no buildings with four or more stories within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

Residential emergency stationary RICE means an emergency stationary RICE used in residential establishments such as homes or apartment buildings.

Responsible official means responsible official as defined in 40 CFR 70.2.

Rich burn engine means any four-stroke spark ignited engine where the manufacturer's recommended operating air/fuel ratio divided by the stoichiometric air/fuel ratio at full load conditions is less than or equal to 1.1. Engines originally manufactured as rich burn engines, but modified prior to December 19, 2002 with passive emission control technology for NOX (such as pre-combustion chambers) will be considered lean burn engines. Also, existing engines where there are no manufacturer's recommendations regarding air/fuel ratio will be considered a rich burn engine if the excess oxygen content of the exhaust at full load conditions is less than or equal to 2 percent.

Site-rated HP means the maximum manufacturer's design capacity at engine site conditions.

Spark ignition means relating to either: A gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary reciprocating internal combustion engine (RICE) means any reciprocating internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work and which is not mobile. Stationary RICE differ from mobile RICE in that a stationary RICE is not a non-road engine as defined at 40 CFR 1068.30, and is not used to propel a motor vehicle or a vehicle used solely for competition.

Stationary RICE test cell/stand means an engine test cell/stand, as defined in subpart P of this part, that tests stationary RICE.

Stoichiometric means the theoretical air-to-fuel ratio required for complete combustion.

Storage vessel with the potential for flash emissions means any storage vessel that contains a hydrocarbon liquid with a stock tank gas-to-oil ratio equal to or greater than 0.31 cubic meters per liter and an American Petroleum Institute gravity equal to or greater than 40 degrees and an actual annual average hydrocarbon liquid throughput equal to or greater than 79,500 liters per day. Flash emissions occur when dissolved hydrocarbons in the fluid evolve from solution when the fluid pressure is reduced.

Subpart means 40 CFR part 63, subpart ZZZZ.

Surface site means any combination of one or more graded pad sites, gravel pad sites, foundations, platforms, or the immediate physical location upon which equipment is physically affixed.

Two-stroke engine means a type of engine which completes the power cycle in single crankshaft revolution by combining the intake and compression operations into one stroke and the power and exhaust operations into a second stroke. This system requires auxiliary scavenging and inherently runs lean of stoichiometric.

[69 FR 33506, June 15, 2004, as amended at 71 FR 20467, Apr. 20, 2006; 73 FR 3607, Jan. 18, 2008; 75 FR 9679, Mar. 3, 2010; 75 FR 51592, Aug. 20, 2010; 76 FR 12867, Mar. 9, 2011; 78 FR 6706, Jan. 30, 2013]



**SECTION E. Source Group Restrictions.**

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

**SECTION E. Source Group Restrictions.**

Group Name: GAS-FIRED BOILER

Group Description: Requirements if Source 035 is considered a gas-fired boiler under § 63 Subpart JJJJJ

**Sources included in this group**

ID	Name
035	GAS/OIL BOILER #5

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

To maintain its exemption from § 40 CFR 63 Subpart JJJJJJ as a gas-fired boiler pursuant to § 63.11195(e), use of liquid fuels in this source is subject to the following restrictions.

- (1) There is no time limit on the use of liquid fuels in this source in period of gas curtailment or gas supply interruptions.
- (2) For purposes of periodic testing, maintenance, and operator training on liquid fuel, this source may be operated using liquid fuels for a maximum of 48 hours per calendar year.
- (3) Liquid fuels can be used during startups of this source.

[For definitions for 'gas-fired boiler', 'period of gas curtailment or gas supply interruptions' and 'startup' pursuant to § 40 CFR 63 Subpart JJJJJJ, see VII. Additional Requirements for this source group.]

**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.**

To demonstrate compliance with the operation hours restriction to maintain this boiler's 'gas-fired' status, the permittee must keep records of the hours of periodic testing, maintenance, and operator training involving liquid fuel.

**V. REPORTING REQUIREMENTS.****# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my notification, reporting, and recordkeeping requirements?**

(a) - (h) [Not Applicable]

(g) If you have switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within this subpart, in the boiler becoming subject to this subpart, or in the boiler switching out of this subpart due to a fuel change that results in the boiler meeting the definition of gas-fired boiler, as defined in §63.11237, or you have taken a permit limit that resulted in you becoming subject to this subpart or no longer being subject to this subpart, you must provide notice of the date upon which you switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:

- (1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched

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fuels, were physically changed, or took a permit limit, and the date of the notice.

(2) The date upon which the fuel switch, physical change, or permit limit occurred.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7511, Feb. 1, 2013; 81 FR 63127, Sept. 14, 2016]

**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.**

GAS-FIRED BOILER includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

PERIOD OF GAS CURTAILMENT OR SUPPLY INTERRUPTION means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

STARTUP means:

(1) Either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy (such as steam or hot water) from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or

(2) [Not Applicable. For boilers equipped with control devices.]

[From § 40 CFR § 63.11237, as amended at 78 FR 7513, Feb. 1, 2013; 81 FR 61328, Sept. 14, 2016]

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

**SECTION E. Source Group Restrictions.**

Group Name: OIL-FIRED BOILER

Group Description: Requirements if Source 035 is considered an oil-fired boiler under § 63 Subpart JJJJJ

**Sources included in this group**

ID	Name
035	GAS/OIL BOILER #5

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

**IV. RECORDKEEPING REQUIREMENTS.****# 001 [25 Pa. Code §127.514]****General operating permits at Title V facilities.**

Combustion Units for Which Construction Commenced After June 9, 1989 and Subject to Federal New Source Performance Standards.

This combustion unit shall also comply with this Condition, subparagraphs a. through e. of this Permit and the emission limitations of the New Source Performance Standards prescribed in 40 CFR Part 60, Subpart Dc.

(a) [See Section D. Source Level Requirements for Source 035]

(b) The permittee shall comply with the recordkeeping and certification requirements in accordance with 40 CFR §§60.46c(e), 60.42c(h) and 60.48c(f)(1). Reports shall be submitted on a semi-annual basis unless no excess emissions occurred. If there are no excess emissions, the permittee shall semi-annually report that no excess emissions occurred during the semi-annual reporting period (this does not apply to gas-fired units).

(c) The permittee shall maintain daily fuel consumption records in accordance with 40 CFR §60.48c(g) (this applies to both gas and oil-fired units). Records shall be kept for the fuel firing rates of the combustion unit on a monthly basis in order to determine sulfur dioxide (SO<sub>2</sub>) emissions in accordance with 40 CFR §60.48c(d) (this applies to oil-fired units only).

(d) - (e) [See V. Reporting Requirements for this source group.]

[From: General permit GP-1/ GP-61-00011, condition # 16]

**V. REPORTING REQUIREMENTS.****# 002 [25 Pa. Code §127.514]****General operating permits at Title V facilities.**

Combustion Units for Which Construction Commenced After June 9, 1989 and Subject to Federal New Source Performance Standards.

This combustion unit shall also comply with this Condition, subparagraphs a. through e. of this Permit and the emission limitations of the New Source Performance Standards prescribed in 40 CFR Part 60, Subpart Dc.

(d) Semi-annual reports shall be submitted by the permittee in accordance with 40 CFR §§60.48c(d), 60.48c(e)(11) and 60.48c(j). The initial semi-annual report shall be postmarked by the 30th day of the sixth month following the completion of the initial performance test. Each subsequent report shall be postmarked by the 30th day following the end of the reporting

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period (this does not apply to gas-fired units).

(e) Pursuant to 40 CFR §60.4, the permittee shall submit copies of all 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:

Section Chief  
U.S. Environmental Protection Agency Region III  
Enforcement and Compliance Assurance Division  
Air Section (3ED21)  
1650 Arch Street  
Philadelphia PA 19103-2029

[From: General permit GP-1/ GP-61-00011, condition # 16]

**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11225]**

**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

**What are my notification, reporting, and recordkeeping requirements?**

(a) You must submit the notifications specified in paragraphs (a)(1) through (5) of this section to the administrator.

(1) You must submit all of the notifications in §§63.7(b); 63.8(e) and (f); and 63.9(b) through (e), (g), and (h) that apply to you by the dates specified in those sections except as specified in paragraphs (a)(2) and (4) of this section.

(2) An Initial Notification must be submitted no later than January 20, 2014 or within 120 days after the source becomes subject to the standard.

(3) [Not applicable]

(4) You must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in §63.11196 unless you own or operate a new boiler subject only to a requirement to conduct a biennial or 5-year tune-up or you must conduct a performance stack test. If you own or operate a new boiler subject to a requirement to conduct a tune-up, you are not required to prepare and submit a Notification of Compliance Status for the tune-up. If you must conduct a performance stack test, you must submit the Notification of Compliance Status within 60 days of completing the performance stack test. You must submit the Notification of Compliance Status in accordance with paragraphs (a)(4)(i) and (vi) of this section. The Notification of Compliance Status must include the information and certification(s) of compliance in paragraphs (a)(4)(i) through (v) of this section, as applicable, and signed by a responsible official.

(i) You must submit the information required in §63.9(h)(2), except the information listed in §63.9(h)(2)(i)(B), (D), (E), and (F). If you conduct any performance tests or CMS performance evaluations, you must submit that data as specified in paragraph (e) of this section. If you conduct any opacity or visible emission observations, or other monitoring procedures or methods, you must submit that data to the Administrator at the appropriate address listed in §63.13.

(ii) "This facility complies with the requirements in §63.11214 to conduct an initial tune-up of the boiler."

(iii) This facility has had an energy assessment performed according to §63.11214 (c).

(iv)- (vi) [Not applicable]

(5) [Not applicable]

(b) You must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in paragraphs (b)(1) through (4) of this section. You must submit the report by March 15 if you had any instance described by paragraph (b)(3) of this section. For boilers that are subject only to the energy assessment requirement and/or a requirement to conduct a biennial or 5-year tune-up according to §63.11223(a) and not subject to emission limits or operating limits, you may prepare only a biennial or 5-year compliance report as specified in paragraphs (b)(1) and (2) of this section.



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(1) Company name and address.

(2) Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of this subpart. Your notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) "This facility complies with the requirements in §63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler."

(ii) For units that do not qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit."

(iii) "This facility complies with the requirement in §§63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(3) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken.

(4) [Not applicable]

(c) You must maintain the records specified in paragraphs (c)(1) through (7) of this section.

(1) As required in §63.10(b)(2)(xiv), you must keep a copy of each notification and report that you submitted to comply with this subpart and all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted.

(2) You must keep records to document conformance with the work practices, emission reduction measures, and management practices required by §63.11214 and §63.11223 as specified in paragraphs (c)(2)(i) through (vi) of this section.

(i) Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned.

(ii) For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to §241.3(b)(1) of this chapter, you must keep a record which documents how the secondary material meets each of the legitimacy criteria under §241.3(d)(1). If you combust a fuel that has been processed from a discarded non-hazardous secondary material pursuant to §241.3(b)(4) of this chapter, you must keep records as to how the operations that produced the fuel satisfies the definition of processing in §241.2 and each of the legitimacy criteria in §241.3(d)(1) of this chapter. If the fuel received a non-waste determination pursuant to the petition process submitted under §241.3(c) of this chapter, you must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary materials as fuel per §241.4, you must keep records documenting that the material is a listed non-waste under §241.4(a).

(iii) For each boiler required to conduct an energy assessment you must keep a copy of the energy assessment report.

(iv) - (vi) [Not applicable]

(3) - (4) [Not applicable]

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in §63.11205(a), including corrective actions to restore the malfunctioning boiler, air pollution control, or monitoring equipment to its normal or usual manner of operation.

(6) - (7) [Not applicable]

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(d) Your records must be in a form suitable and readily available for expeditious review. You must keep each record for 5 years following the date of each recorded action. You must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. You may keep the records off site for the remaining 3 years.

(e) - (f) [Not applicable]

(g) If you have switched fuels or made a physical change to the boiler and the fuel switch or change resulted in the applicability of a different subcategory within this subpart, in the boiler becoming subject to this subpart, or in the boiler switching out of this subpart due to a fuel change that results in the boiler meeting the definition of gas-fired boiler, as defined in §63.11237, or you have taken a permit limit that resulted in you becoming subject to this subpart or no longer being subject to this subpart, you must provide notice of the date upon which you switched fuels, made the physical change, or took a permit limit within 30 days of the change. The notification must identify:

(1) The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice.

(2) The date upon which the fuel switch, physical change, or permit limit occurred.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7511, Feb. 1, 2013].

**VI. WORK PRACTICE REQUIREMENTS.****# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11223]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****How do I demonstrate continuous compliance with the work practice and management practice standards?**

(a) For affected sources subject to the work practice standard or the management practices of a tune-up, you must conduct a performance tune-up according to paragraph (b) of this section and keep records as required in §63.11225(c) to demonstrate continuous compliance. You must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.

(b) Except as specified in paragraphs (c) through (f) of this section, you must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of this section. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.

(1) 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, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection.

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

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection.

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

(5) 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.

(6) Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs

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(b)(6)(i) through (iii) of this section.

(i) 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.

(ii) A description of any corrective actions taken as a part of the tune-up of the boiler.

(iii) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, 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 use by each unit.

(7) If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup.

(c) - (g) [Not applicable]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7509, Feb. 1, 2013]

**VII. ADDITIONAL REQUIREMENTS.**

**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11193]**

**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

**Am I subject to this subpart?**

You are subject to this subpart if you own or operate an industrial, commercial, or institutional boiler as defined in § 63.11237 that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in § 63.2, except as specified in § 63.11195.

**# 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11194]**

**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

**What is the affected source of this subpart?**

(a) This subpart applies to each new, reconstructed, or existing affected source as defined in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection of all existing industrial, commercial, and institutional boilers within a subcategory, as listed in §63.11200 and defined in §63.11237, located at an area source.

(2) [Not applicable]

(b) An affected source is an existing source if you commenced construction or reconstruction of the affected source on or before June 4, 2010.

(c) - (d) [Not applicable]

(e) An existing dual-fuel fired boiler meeting the definition of gas-fired boiler, as defined in §63.11237, that meets the applicability requirements of this subpart after June 4, 2010 due to a fuel switch from gaseous fuel to solid fossil fuel, biomass, or liquid fuel is considered to be an existing source under this subpart as long as the boiler was designed to accommodate the alternate fuel.

(f) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or part 71 as a result of this subpart. You may, however, be required to obtain a title V permit due to another reason or reasons. See 40 CFR 70.3(a) and (b) or 71.3(a) and (b). Notwithstanding the exemption from title V permitting for area sources under this subpart, you must continue to comply with the provisions of this subpart.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

**# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11196]**

**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

**SECTION E. Source Group Restrictions.****What are my compliance dates?**

(a) If you own or operate an existing affected boiler, you must achieve compliance with the applicable provisions in this subpart as specified in paragraphs (a)(1) through (3) of this section.

(1) If the existing affected boiler is subject to a work practice or management practice standard of a tuneup, you must achieve compliance with the work practice or management standard no later than March 21, 2012.

(2) [Not applicable]

(3) If the existing affected boiler is subject to the energy assessment requirement, you must achieve compliance with the energy assessment requirement no later than March 21, 2014.

(b) - (d) [Not applicable]

**# 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11200]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are the subcategories of boilers?**

The subcategories of boilers, as defined in §63.11237 are:

(a) - (b) [Not applicable]

(c) Oil.

(d) - (g) [Not applicable]

[78 FR 7506, Feb. 1, 2013]

**# 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11201]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What standards must I meet?**

(a) [Not applicable]

(b) You must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to this subpart that applies to your boiler. An energy assessment completed on or after January 1, 2008 that meets or is amended to meet the energy assessment requirements in Table 2 to this subpart satisfies the energy assessment requirement. A facility that operates under an energy management program established through energy management systems compatible with ISO 50001, that includes the affected units, also satisfies the energy assessment requirement.

Table 2 to Subpart JJJJJJ of Part 63

IF YOUR BOILER IS IN THIS SUBCATEGORY...

(4) Existing oil-fired boilers with heat input capacity greater than 5 MMBtu/hr that do not meet the definition of seasonal boiler or limited-use boiler, or use an oxygen trim system that maintains an optimum air-to-fuel ratio

YOU MUST MEET THE FOLLOWING...

Conduct an initial tune-up as specified in §63.11214, and conduct a tune-up of the boiler biennially as specified in §63.11223.

IF YOUR BOILER IS IN THIS SUBCATEGORY...

(16) Existing coal-fired, biomass-fired, or oil-fired boilers (units with heat input capacity of 10 MMBtu/hr and greater), not including limited-use boilers.

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## YOU MUST MEET THE FOLLOWING...

Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table satisfies the energy assessment requirement. Energy assessor approval and qualification requirements are waived in instances where past or amended energy assessments are used to meet the energy assessment requirements. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items (1) to (4) appropriate for the on-site technical hours listed in §63.11237:

- (1) A visual inspection of the boiler system,
  - (2) An evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints,
  - (3) An inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator,
  - (4) A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage,
  - (5) A list of major energy conservation measures that are within the facility's control,
  - (6) A list of the energy savings potential of the energy conservation measures identified, and
  - (7) A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
- (c) You must comply with each operating limit specified in Table 3 to this subpart that applies to your boiler.
- (d) These standards apply at all times the affected boiler is operating, except during periods of startup and shutdown as defined in §63.11237, during which time you must comply only with Table 2 to this subpart.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7506, Feb. 1, 2013]

**# 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11205]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my general requirements for complying with this subpart?**

(a) At all times you 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 this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator 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.

(b) - (c) [Not applicable]

**# 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11210]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What are my initial compliance requirements and by what date must I conduct them?**

(a) - (b) [Not applicable]

(c) For existing affected boilers that have applicable work practice standards, management practices, or emission reduction measures, you must demonstrate initial compliance no later than the compliance date that is specified in

**SECTION E. Source Group Restrictions.**

§63.11196 and according to the applicable provisions in §63.7(a)(2), except as provided in paragraph (j) of this section.

(d) - (h) [Not applicable]

(i) For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within subpart JJJJJJ or the boiler becoming subject to subpart JJJJJJ, you must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to §63.11225(g).

(j) - (k) [Not applicable]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7507, Feb. 1, 2013; 81 FR 63125, Sept. 14, 2016]

**# 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11214]**

**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

**How do I demonstrate initial compliance with the work practice standard, emission reduction measures, and management practice?**

(a) [Not applicable]

(b) If you own or operate an existing or new biomass-fired boiler or an existing or new oil-fired boiler, you must conduct a performance tune-up according to §63.11210(c) or (g), as applicable, and §63.11223(b). If you own or operate an existing biomass-fired boiler or existing oil-fired boiler, you must submit a signed statement in the Notification of Compliance Status report that indicates that you conducted an initial tune-up of the boiler.

(c) If you own or operate an existing affected boiler with a heat input capacity of 10 million Btu per hour or greater, you must submit a signed certification in the Notification of Compliance Status report that an energy assessment of the boiler and its energy use systems was completed according to Table 2 to this subpart and that the assessment is an accurate depiction of your facility at the time of the assessment or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

(d) [Not applicable]

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7508, Feb. 1, 2013; 81 FR 63126, Sept. 14, 2016]

**# 013 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11235]**

**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

**What parts of the General Provisions apply to me?**

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

**# 014 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11236]**

**SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources**

**Who implements and enforces this subpart?**

(a) This subpart can be implemented and enforced by EPA or a delegated authority such as your state, local, or tribal agency. If the EPA Administrator has delegated authority to your state, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of this subpart is delegated to your state, local, or tribal agency.

(b) In delegating implementation and enforcement authority of this subpart to a state, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (c) of this section are retained by the EPA Administrator and are not transferred to the state, local, or tribal agency.

(c) The authorities that cannot be delegated to state, local, or tribal agencies are specified in paragraphs (c)(1) through (5) of this section.

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- (1) Approval of an alternative non-opacity emission standard and work practice standards in §63.11223(a).
- (2) Approval of alternative opacity emission standard under §63.6(h)(9).
- (3) Approval of major change to test methods under §63.7(e)(2)(ii) and (f). A "major change to test method" is defined in §63.90.
- (4) Approval of a major change to monitoring under §63.8(f). A "major change to monitoring" is defined in §63.90.
- (5) Approval of major change to recordkeeping and reporting under §63.10(f). A "major change to recordkeeping/reporting" is defined in §63.90.

**# 015 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.11237]****SUBPART JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources****What definitions apply to this subpart?**

Terms used in this subpart are defined in the Clean Air Act, in §63.2 (the General Provisions), and in this section as follows:

10-day rolling average means the arithmetic mean of all valid hours of data from 10 successive operating days, except for periods of startup and shutdown and periods when the unit is not operating.

30-day rolling average means the arithmetic mean of all valid hours of data from 30 successive operating days, except for periods of startup and shutdown and periods when the unit is not operating.

Annual capacity factor means the ratio between the actual heat input to a boiler from the fuels burned during a calendar year and the potential heat input to the boiler had it been operated for 8,760 hours during a year at the maximum steady state design heat input capacity.

Annual heat input means the heat input for the 12 months preceding the compliance demonstration.

Bag leak detection system means a group of instruments that are capable of monitoring particulate matter loadings in the exhaust of a fabric filter (i.e., baghouse) in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on electrodynamic, triboelectric, light scattering, light transmittance, or other principle to monitor relative particulate matter loadings.

Biodiesel means a mono-alkyl ester derived from biomass and conforming to ASTM D6751-11b, Standard Specification for Biodiesel Fuel Blend Stock (B100) for Middle Distillate Fuels (incorporated by reference, see §63.14).

Biomass means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition of biomass is not intended to suggest that these materials are or are not solid waste.

Biomass subcategory includes any boiler that burns any biomass and is not in the coal subcategory.

Boiler means an enclosed device using controlled flame combustion in which water is heated to recover thermal energy in the form of steam and/or hot water. Controlled flame combustion refers to a steady-state, or near steady-state, process wherein fuel and/or oxidizer feed rates are controlled. A device combusting solid waste, as defined in §241.3 of this chapter, is not a boiler unless the device is exempt from the definition of a solid waste incineration unit as provided in section 129(g)(1) of the Clean Air Act. Waste heat boilers, process heaters, and autoclaves are excluded from the definition of Boiler.

Boiler system means the boiler and associated components, such as, feedwater systems, combustion air systems, fuel systems (including burners), blowdown systems, combustion control systems, steam systems, and condensate return systems, directly connected to and serving the energy use systems.

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Calendar year means the period between January 1 and December 31, inclusive, for a given year.

Coal means all solid fuels classifiable as anthracite, bituminous, sub-bituminous, or lignite by the American Society for Testing and Materials in ASTM D388 (incorporated by reference, see §63.14), coal refuse, and petroleum coke. For the purposes of this subpart, this definition of "coal" includes synthetic fuels derived from coal including, but not limited to, solvent-refined coal, coal-oil mixtures, and coal-water mixtures. Coal derived gases are excluded from this definition.

Coal subcategory includes any boiler that burns any solid fossil fuel and no more than 15 percent biomass on an annual heat input basis.

Commercial boiler means a boiler used in commercial establishments such as hotels, restaurants, and laundries to provide electricity, steam, and/or hot water.

Common stack means the exhaust of emissions from two or more affected units through a single flue. Affected units with a common stack may each have separate air pollution control systems located before the common stack, or may have a single air pollution control system located after the exhausts come together in a single flue.

Daily block average means the arithmetic mean of all valid emission concentrations or parameter levels recorded when a unit is operating measured over the 24-hour period from 12 a.m. (midnight) to 12 a.m. (midnight), except for periods of startup and shutdown and periods when the unit is not operating.

Deviation (1) Means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(i) Fails to meet any applicable requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or

(ii) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit.

(2) A deviation is not always a violation.

Distillate oil means fuel oils that contain 0.05 weight percent nitrogen or less and comply with the specifications for fuel oil numbers 1 and 2, as defined by the American Society of Testing and Materials in ASTM D396 (incorporated by reference, see §63.14) or diesel fuel oil numbers 1 and 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see §63.14), kerosene, and biodiesel as defined by the American Society of Testing and Materials in ASTM D6751-11b (incorporated by reference, see §63.14).

Dry scrubber means an add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gas in the exhaust stream forming a dry powder material. Sorbent injection systems used as control devices in fluidized bed boilers are included in this definition. A dry scrubber is a dry control system.

Electric boiler means a boiler in which electric heating serves as the source of heat. Electric boilers that burn gaseous or liquid fuel during periods of electrical power curtailment or failure are included in this definition.

Electric utility steam generating unit (EGU) means a fossil fuel-fired combustion unit of more than 25 megawatts that serves a generator that produces electricity for sale. A fossil fuel-fired unit that cogenerates steam and electricity and supplies more than one-third of its potential electric output capacity and more than 25 megawatts electrical output to any utility power distribution system for sale is considered an electric utility steam generating unit. To be "capable of combusting" fossil fuels, an EGU would need to have these fuels allowed in their operating permits and have the appropriate fuel handling facilities on-site or otherwise available (e.g., coal handling equipment, including coal storage area, belts and conveyers, pulverizers, etc.; oil storage facilities). In addition, fossil fuel-fired EGU means any EGU that fired fossil fuel for more than 10.0 percent of the average annual heat input in any 3 consecutive calendar years or for more than 15.0 percent of the annual heat input during any one calendar year after April 16, 2015.

Electrostatic precipitator (ESP) means an add-on air pollution control device used to capture particulate matter by charging



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the particles using an electrostatic field, collecting the particles using a grounded collecting surface, and transporting the particles into a hopper. An electrostatic precipitator is usually a dry control system.

Energy assessment means the following for the emission units covered by this subpart:

(1) The energy assessment for facilities with affected boilers with less than 0.3 trillion Btu per year (TBtu/year) heat input capacity will be 8 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 50 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing an 8-hour energy assessment.

(2) The energy assessment for facilities with affected boilers with 0.3 to 1.0 TBtu/year heat input capacity will be 24 on-site technical labor hours in length maximum, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 33 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities, within the limit of performing a 24-hour energy assessment.

(3) The energy assessment for facilities with affected boilers with greater than 1.0 TBtu/year heat input capacity will be up to 24 on-site technical labor hours in length for the first TBtu/year plus 8 on-site technical labor hours for every additional 1.0 TBtu/year not to exceed 160 on-site technical hours, but may be longer at the discretion of the owner or operator of the affected source. The boiler system(s) and any on-site energy use system(s) accounting for at least 20 percent of the affected boiler(s) energy (e.g., steam, hot water, or electricity) production, as applicable, will be evaluated to identify energy savings opportunities.

(4) The on-site energy use system(s) serving as the basis for the percent of affected boiler(s) energy production, as applicable, in paragraphs (1), (2), and (3) of this definition may be segmented by production area or energy use area as most logical and applicable to the specific facility being assessed (e.g., product X manufacturing area; product Y drying area; Building Z).

Energy management program means a program that includes a set of practices and procedures designed to manage energy use that are demonstrated by the facility's energy policies, a facility energy manager and other staffing responsibilities, energy performance measurement and tracking methods, an energy saving goal, action plans, operating procedures, internal reporting requirements, and periodic review intervals used at the facility. Facilities may establish their program through energy management systems compatible with ISO 50001.

Energy use system (1) Includes the following systems located on the site of the affected boiler that use energy provided by the boiler:

(i) Process heating; compressed air systems; machine drive (motors, pumps, fans); process cooling; facility heating, ventilation, and air conditioning systems; hot water systems; building envelop; and lighting; or

(ii) Other systems that use steam, hot water, process heat, or electricity, provided by the affected boiler.

(2) Energy use systems are only those systems using energy clearly produced by affected boilers.

Equivalent means the following only as this term is used in Table 5 to this subpart:

(1) An equivalent sample collection procedure means a published voluntary consensus standard or practice (VCS) or

EPA method that includes collection of a minimum of three composite fuel samples, with each composite consisting of a minimum of three increments collected at approximately equal intervals over the test period.

(2) An equivalent sample compositing procedure means a published VCS or EPA method to systematically mix and obtain a representative subsample (part) of the composite sample.

(3) An equivalent sample preparation procedure means a published VCS or EPA method that: Clearly states that the standard, practice or method is appropriate for the pollutant and the fuel matrix; or is cited as an appropriate sample

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preparation standard, practice or method for the pollutant in the chosen VCS or EPA determinative or analytical method.

(4) An equivalent procedure for determining heat content means a published VCS or EPA method to obtain gross calorific (or higher heating) value.

(5) An equivalent procedure for determining fuel moisture content means a published VCS or EPA method to obtain moisture content. If the sample analysis plan calls for determining mercury using an aliquot of the dried sample, then the drying temperature must be modified to prevent vaporizing this metal. On the other hand, if metals analysis is done on an "as received" basis, a separate aliquot can be dried to determine moisture content and the mercury concentration mathematically adjusted to a dry basis.

(6) An equivalent mercury determinative or analytical procedure means a published VCS or EPA method that clearly states that the standard, practice, or method is appropriate for mercury and the fuel matrix and has a published detection limit equal or lower than the methods listed in Table 5 to this subpart for the same purpose.

Fabric filter means an add-on air pollution control device used to capture particulate matter by filtering gas streams through filter media, also known as a baghouse. A fabric filter is a dry control system.

Federally enforceable means all limitations and conditions that are enforceable by the EPA Administrator, including, but not limited to, the requirements of 40 CFR parts 60, 61, 63, and 65, requirements within any applicable state implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 40 CFR 51.24.

Fluidized bed boiler means a boiler utilizing a fluidized bed combustion process that is not a pulverized coal boiler.

Fluidized bed combustion means a process where a fuel is burned in a bed of granulated particles, which are maintained in a mobile suspension by the forward flow of air and combustion products.

Fossil fuel means natural gas, oil, coal, and any form of solid, liquid, or gaseous fuel derived from such material.

Fuel type means each category of fuels that share a common name or classification. Examples include, but are not limited to, bituminous coal, sub-bituminous coal, lignite, anthracite, biomass, distillate oil, residual oil. Individual fuel types received from different suppliers are not considered new fuel types.

Gaseous fuels includes, but is not limited to, natural gas, process gas, landfill gas, coal derived gas, refinery gas, hydrogen, and biogas.

Gas-fired boiler includes any boiler that burns gaseous fuels not combined with any solid fuels and burns liquid fuel only during periods of gas curtailment, gas supply interruption, startups, or for periodic testing, maintenance, or operator training on liquid fuel. Periodic testing, maintenance, or operator training on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Heat input means heat derived from combustion of fuel in a boiler and does not include the heat input from preheated combustion air, recirculated flue gases, returned condensate, or exhaust gases from other sources such as gas turbines, internal combustion engines, kilns.

Hot water heater means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous, liquid, or biomass fuel and hot water is withdrawn for use external to the vessel. Hot water boilers (i.e., not generating steam) combusting gaseous, liquid, or biomass fuel with a heat input capacity of less than 1.6 million Btu per hour are included in this definition. The 120 U.S. gallon capacity threshold to be considered a hot water heater is independent of the 1.6 million Btu per hour heat input capacity threshold for hot water boilers. Hot water heater also means a tankless unit that provides on-demand hot water.

Hourly average means the arithmetic average of at least four CMS data values representing the four 15-minute periods in an hour, or at least two 15-minute data values during an hour when CMS calibration, quality assurance, or maintenance activities are being performed.

Industrial boiler means a boiler used in manufacturing, processing, mining, and refining or any other industry to provide

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steam, hot water, and/or electricity.

Institutional boiler means a boiler used in institutional establishments such as, but not limited to, medical centers, nursing homes, research centers, institutions of higher education, elementary and secondary schools, libraries, religious establishments, and governmental buildings to provide electricity, steam, and/or hot water.

Limited-use boiler means any boiler that burns any amount of solid or liquid fuels and has a federally enforceable annual capacity factor of no more than 10 percent.

Liquid fuel includes, but is not limited to, distillate oil, residual oil, any form of liquid fuel derived from petroleum, used oil meeting the specification in 40 CFR 279.11, liquid biofuels, biodiesel, and vegetable oil.

Load fraction means the actual heat input of a boiler divided by heat input during the performance test that established the minimum sorbent injection rate or minimum activated carbon injection rate, expressed as a fraction (e.g., for 50 percent load the load fraction is 0.5). For boilers that co-fire natural gas with a solid or liquid fuel, the load fraction is determined by the actual heat input of the solid or liquid fuel divided by heat input of the solid or liquid fuel fired during the performance test (e.g., if the performance test was conducted at 100 percent solid fuel firing, for 100 percent load firing 50 percent solid fuel and 50 percent natural gas, the load fraction is 0.5).

Minimum activated carbon injection rate means load fraction multiplied by the lowest hourly average activated carbon injection rate measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

Minimum oxygen level means the lowest hourly average oxygen level measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable carbon monoxide emission limit.

Minimum scrubber liquid flow rate means the lowest hourly average scrubber liquid flow rate (e.g., to the particulate matter scrubber) measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

Minimum scrubber pressure drop means the lowest hourly average scrubber pressure drop measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limit.

Minimum sorbent injection rate means:

- (1) The load fraction multiplied by the lowest hourly average sorbent injection rate for each sorbent measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limits; or
- (2) For fluidized bed combustion, the lowest average ratio of sorbent to sulfur measured during the most recent performance test.

Minimum total secondary electric power means the lowest hourly average total secondary electric power determined from the values of secondary voltage and secondary current to the electrostatic precipitator measured according to Table 6 to this subpart during the most recent performance stack test demonstrating compliance with the applicable emission limits.

Natural gas means:

- (1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or
- (2) Liquefied petroleum gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see §63.14); or
- (3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions (i.e., a temperature of 288 Kelvin, a relative humidity of 60 percent, and a pressure of 101.3 kilopascals). Additionally, natural gas must either be composed of at least

**SECTION E. Source Group Restrictions.**

70 percent methane by volume or have a gross calorific value between 35 and 41 megajoules (MJ) per dry standard cubic meter (950 and 1,100 Btu per dry standard cubic foot); or

(4) Propane or propane-derived synthetic natural gas. Propane means a colorless gas derived from petroleum and natural gas, with the molecular structure C<sub>3</sub>H<sub>8</sub>.

Oil subcategory includes any boiler that burns any liquid fuel and is not in either the biomass or coal subcategories. Gas-fired boilers that burn liquid fuel only during periods of gas curtailment, gas supply interruptions, startups, or for periodic testing are not included in this definition. Periodic testing on liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

Opacity means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

Operating day means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the boiler unit. It is not necessary for fuel to be combusted for the entire 24-hour period.

Oxygen analyzer system means all equipment required to determine the oxygen content of a gas stream and used to monitor oxygen in the boiler flue gas, boiler firebox, or other appropriate intermediate location. This definition includes oxygen trim systems.

Oxygen trim system means a system of monitors that is used to maintain excess air at the desired level in a combustion device over its operating load range. A typical system consists of a flue gas oxygen and/or carbon monoxide monitor that automatically provides a feedback signal to the combustion air controller or draft controller.

Particulate matter (PM) means any finely divided solid or liquid material, other than uncombined water, as measured by the test methods specified under this subpart, or an approved alternative method.

Performance testing means the collection of data resulting from the execution of a test method used (either by stack testing or fuel analysis) to demonstrate compliance with a relevant emission standard.

Period of gas curtailment or supply interruption means a period of time during which the supply of gaseous fuel to an affected boiler is restricted or halted for reasons beyond the control of the facility. The act of entering into a contractual agreement with a supplier of natural gas established for curtailment purposes does not constitute a reason that is under the control of a facility for the purposes of this definition. An increase in the cost or unit price of natural gas due to normal market fluctuations not during periods of supplier delivery restriction does not constitute a period of natural gas curtailment or supply interruption. On-site gaseous fuel system emergencies or equipment failures qualify as periods of supply interruption when the emergency or failure is beyond the control of the facility.

Process heater means an enclosed device using controlled flame, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to a heat transfer material (e.g., glycol or a mixture of glycol and water) for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not come into direct contact with process materials. Process heaters include units that heat water/water mixtures for pool heating, sidewalk heating, cooling tower water heating, power washing, or oil heating.

Qualified energy assessor means:

(1) Someone who has demonstrated capabilities to evaluate energy savings opportunities for steam generation and major energy using systems, including, but not limited to:

(i) Boiler combustion management.

(ii) Boiler thermal energy recovery, including

(A) Conventional feed water economizer,

(B) Conventional combustion air preheater, and

**SECTION E. Source Group Restrictions.**

(C) Condensing economizer.

(iii) Boiler blowdown thermal energy recovery.

(iv) Primary energy resource selection, including

(A) Fuel (primary energy source) switching, and

(B) Applied steam energy versus direct-fired energy versus electricity.

(v) Insulation issues.

(vi) Steam trap and steam leak management.

(vii) Condensate recovery.

(viii) Steam end-use management.

(2) Capabilities and knowledge includes, but is not limited to:

(i) Background, experience, and recognized abilities to perform the assessment activities, data analysis, and report preparation.

(ii) Familiarity with operating and maintenance practices for steam or process heating systems.

(iii) Additional potential steam system improvement opportunities including improving steam turbine operations and reducing steam demand.

(iv) Additional process heating system opportunities including effective utilization of waste heat and use of proper process heating methods.

(v) Boiler-steam turbine cogeneration systems.

(vi) Industry specific steam end-use systems.

Regulated gas stream means an offgas stream that is routed to a boiler for the purpose of achieving compliance with a standard under another subpart of this part or part 60, part 61, or part 65 of this chapter.

Residential boiler means a boiler used to provide heat and/or hot water and/or as part of a residential combined heat and power system. This definition includes boilers located at an institutional facility (e.g., university campus, military base, church grounds) or commercial/industrial facility (e.g., farm) used primarily to provide heat and/or hot water for:

(1) A dwelling containing four or fewer families, or

(2) A single unit residence dwelling that has since been converted or subdivided into condominiums or apartments.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society of Testing and Materials in ASTM D396-10 (incorporated by reference, see §63.14(b)).

Responsible official means responsible official as defined in §70.2.

Seasonal boiler means a boiler that undergoes a shutdown for a period of at least 7 consecutive months (or 210 consecutive days) each 12-month period due to seasonal conditions, except for periodic testing. Periodic testing shall not exceed a combined total of 15 days during the 7-month shutdown. This definition only applies to boilers that would otherwise be included in the biomass subcategory or the oil subcategory.

**SECTION E. Source Group Restrictions.**

Shutdown means the period in which cessation of operation of a boiler is initiated for any purpose. Shutdown begins when the boiler no longer supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, or when no fuel is being fed to the boiler, whichever is earlier. Shutdown ends when the boiler no longer supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, and no fuel is being combusted in the boiler.

Solid fossil fuel includes, but is not limited to, coal, coke, petroleum coke, and tire-derived fuel.

Solid fuel means any solid fossil fuel or biomass or bio-based solid fuel.

Startup means:

(1) Either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy (such as steam or hot water) from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or

(2) The period in which operation of a boiler is initiated for any purpose. Startup begins with either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating, cooling or process purposes or producing electricity, or the firing of fuel in a boiler for any purpose after a shutdown event. Startup ends 4 hours after when the boiler supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, whichever is earlier.

Temporary boiler means any gaseous or liquid fuel boiler that is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A boiler is not a temporary boiler if any one of the following conditions exists:

(1) The equipment is attached to a foundation.

(2) The boiler or a replacement remains at a location within the facility and performs the same or similar function for more than 12 consecutive months, unless the regulatory agency approves an extension. An extension may be granted by the regulating agency upon petition by the owner or operator of a unit specifying the basis for such a request. Any temporary boiler that replaces a temporary boiler at a location within the facility and performs the same or similar function will be included in calculating the consecutive time period unless there is a gap in operation of 12 months or more.

(3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.

(4) The equipment is moved from one location to another within the facility but continues to perform the same or similar function and serve the same electricity, steam, and/or hot water system in an attempt to circumvent the residence time requirements of this definition.

Tune-up means adjustments made to a boiler in accordance with the procedures outlined in §63.11223(b).

Ultra-low-sulfur liquid fuel means a distillate oil that has less than or equal to 15 parts per million (ppm) sulfur.

Useful thermal energy means energy (i.e., steam or hot water) that meets the minimum operating temperature, flow, and/or pressure required by any energy use system that uses energy provided by the affected boiler.

Vegetable oil means oils extracted from vegetation.

Voluntary Consensus Standards (VCS) mean technical standards (e.g., materials specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus bodies. EPA/Office of Air Quality Planning and Standards, by precedent, has only used VCS that are written in English. Examples of VCS bodies are: American Society of Testing and Materials (ASTM, 100 Barr Harbor Drive, P.O. Box CB700, West Conshohocken, Pennsylvania 19428-B2959, (800) 262-1373, <http://www.astm.org>), American Society of Mechanical Engineers (ASME, Three Park Avenue, New York, NY 10016-5990, (800) 843-2763, <http://www.asme.org>), International Standards Organization

**SECTION E. Source Group Restrictions.**

(ISO 1, ch. de la Voie-Creuse, Case postale 56, CH-1211 Geneva 20, Switzerland, +41 22 749 01 11, <http://www.iso.org/iso/home.htm>), Standards Australia (AS Level 10, The Exchange Centre, 20 Bridge Street, Sydney, GPO Box 476, Sydney NSW 2001, +61 2 9237 6171 <http://www.standards.org.au>), British Standards Institution (BSI, 389 Chiswick High Road, London, W4 4AL, United Kingdom, +44 (0)20 8996 9001, <http://www.bsigroup.com>), Canadian Standards Association (CSA, 5060 Spectrum Way, Suite 100, Mississauga, Ontario L4W 5N6, Canada, 800-463-6727, <http://www.csa.ca>), European Committee for Standardization (CEN CENELEC Management Centre Avenue Marnix 17 B-1000 Brussels, Belgium +32 2 550 08 11, <http://www.cen.eu/cen>), and German Engineering Standards (VDI Guidelines Department, P.O. Box 10 11 39 40002, Duesseldorf, Germany, +49 211 6214-230, <http://www.vdi.eu>). The types of standards that are not considered VCS are standards developed by: the United States, e.g., California Air Resources Board (CARB) and Texas Commission on Environmental Quality (TCEQ); industry groups, such as American Petroleum Institute (API), Gas Processors Association (GPA), and Gas Research Institute (GRI); and other branches of the U.S. Government, e.g., Department of Defense (DOD) and Department of Transportation (DOT). This does not preclude EPA from using standards developed by groups that are not VCS bodies within their rule. When this occurs, EPA has done searches and reviews for VCS equivalent to these non-EPA methods.

Waste heat boiler means a device that recovers normally unused energy (i.e., hot exhaust gas) and converts it to usable heat. Waste heat boilers are also referred to as heat recovery steam generators. Waste heat boilers are heat exchangers generating steam from incoming hot exhaust gas from an industrial (e.g., thermal oxidizer, kiln, furnace) or power (e.g., combustion turbine, engine) equipment. Duct burners are sometimes used to increase the temperature of the incoming hot exhaust gas.

Wet scrubber means any add-on air pollution control device that mixes an aqueous stream or slurry with the exhaust gases from a boiler to control emissions of particulate matter or to absorb and neutralize acid gases, such as hydrogen chloride. A wet scrubber creates an aqueous stream or slurry as a byproduct of the emissions control process.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, which is promulgated pursuant to section 112(h) of the Clean Air Act.

[76 FR 15591, Mar. 21, 2011, as amended at 78 FR 7513, Feb. 1, 2013; 81 FR 63128, Sept. 14, 2016]

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

**SECTION E. Source Group Restrictions.**

Group Name: STORAGE TANKS - ALKYLATE

Group Description: Requirements for alkylate storage tanks

Sources included in this group

ID	Name
TK422	ALKYLATE STORAGE TANK
TK423	ALKYLATE STORAGE TANK
TK9875	ALKYLATE STORAGE TANK

**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 §129.51]****General**

(a) to (c) [Not Applicable]

(d) RECORDS. The owner or operator of a facility or source subject to the VOC emission limitations and control requirements in this chapter shall keep records to demonstrate compliance with the applicable limitation or control requirement. The records shall provide sufficient data and calculations to clearly demonstrate that the emission limitations or control requirements are met. Data or information required to determine compliance with an applicable limitation shall be recorded and maintained in a time frame consistent with the averaging period of the standard. The records shall be retained at least 5 years and shall be made available to the Department on request. An owner or operator claiming that a facility or source is exempt from the VOC control provisions of this chapter shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to the VOC emission limitations or control 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.****# 002 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

(a) The permittee shall perform a weekly preventive maintenance inspection of the flares.

(b) The permittee shall maintain the conservation vent, at all times that this source is in operation.

(c) The permittee shall operate the flares at all times that this source is in operation.

(d) The permittee shall maintain and operate this source, conservation vent, and the flares in accordance with the manufacturer's specifications or good operating practices.

**# 003 [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 any volatile organic compounds with a vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions unless such tank, reservoir or other container is a pressure tank capable of



**SECTION E. Source Group Restrictions.**

maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere or is designed and equipped with one of the following vapor loss control devices:

(1) [Not Applicable]

(2) Vapor recovery system. A vapor recovery system consisting of a vapor gathering system capable of collecting the volatile organic compound vapors and gases discharged and a vapor disposal system capable of processing such volatile organic vapors and gases so as to prevent their emission to the atmosphere. Tank gauging and sampling devices shall be gas tight except when gauging or sampling is taking place. The vapor recovery system shall be maintained in good working order and recover at least 80% of the vapors emitted by such tank.

(b) - (h) [Not Applicable]

[Compliance with the requirement in this streamlined permit condition will demonstrate compliance with the provisions found in BAQ-GPA/GP-2, General condition number 23 (c)]

**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: STORAGE TANKS - HEADS, POLYMER

Group Description: Requirements for heads storage tanks &amp; polymer storage tanks

Sources included in this group

ID	Name
T1220	HEADS STORAGE TANK
T2236	POLYMER STORAGE TANK
T2238	POLYMER STORAGE TANK

**I. RESTRICTIONS.**

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

**II. TESTING REQUIREMENTS.**

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

**III. MONITORING REQUIREMENTS.**

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

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

The permittee shall maintain a record of all preventive maintenance inspections of the control device. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, any routine maintenance performed.

**# 002 [25 Pa. Code §129.51]****General**

(a) - (c) [Not Applicable]

(d) RECORDS. The owner or operator of a facility or source subject to the VOC emission limitations and control requirements in this chapter shall keep records to demonstrate compliance with the applicable limitation or control requirement. The records shall provide sufficient data and calculations to clearly demonstrate that the emission limitations or control requirements are met. Data or information required to determine compliance with an applicable limitation shall be recorded and maintained in a time frame consistent with the averaging period of the standard. The records shall be retained at least 5 years and shall be made available to the Department on request. An owner or operator claiming that a facility or source is exempt from the VOC control provisions of this chapter shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to the VOC emission limitations or control requirements.

**V. REPORTING REQUIREMENTS.**

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

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

(a) The permittee shall maintain the conservation vent at all times that this source is in operation.

(b) The permittee shall maintain and operate this source and the control device in accordance with the manufacturer's specifications.

**# 004 [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

**SECTION E. Source Group Restrictions.**

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 .7 psig (4.8 kilopascals) of pressure or .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. Section 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.**

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: STORAGE TANKS - ISOBUTYLENE

Group Description: Requirements for isobutylene tanks

Sources included in this group

ID	Name
T5665	ISOBUTYLENE STORAGE TANK
TK121	ISOBUTYLENE STORAGE TANK

**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 §129.51]****General**

(a) - (c) [Not Applicable]

(d) RECORDS. The owner or operator of a facility or source subject to the VOC emission limitations and control requirements in this chapter shall keep records to demonstrate compliance with the applicable limitation or control requirement. The records shall provide sufficient data and calculations to clearly demonstrate that the emission limitations or control requirements are met. Data or information required to determine compliance with an applicable limitation shall be recorded and maintained in a time frame consistent with the averaging period of the standard. The records shall be retained at least 5 years and shall be made available to the Department on request. An owner or operator claiming that a facility or source is exempt from the VOC control provisions of this chapter shall maintain records that clearly demonstrate to the Department that the facility or source is not subject to the VOC emission limitations or control 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.****# 002 [25 Pa. Code §127.511]****Monitoring and related recordkeeping and reporting requirements.**

(a) The permittee shall perform a weekly preventive maintenance inspection of the flares.

(b) The permittee shall operate the flare at all times that this source is in operation.

(c) The permittee shall maintain and operate this source and the flares in accordance with manufacturer's specifications or good operating practices.

**# 003 [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 one of the following vapor loss control devices:

**SECTION E. Source Group Restrictions.**

(1) - (2) [Not Applicable]

(b) - (h) [Not Applicable]

**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 Descriptor		
035	GAS/OIL BOILER #5		
<b>Emission Limit</b>		<b>Pollutant</b>	
300.000	PPMV	@ 3% O2	CO
30.000	PPMV	@ 3% O2 when firing gas	NOX
90.000	PPMV	@ 3% O2, when firing No. 2 fuel oil	NOX
4.000	Lbs/MMBTU	of heat input	SOX
0.400	Lbs/MMBTU	of heat input	TSP
101	ECLIPSE FURNACE		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.126	Lbs/MMBTU		CO
19.370	Tons/Yr	Based on a 12-month rolling total	CO
0.064	Lbs/MMBTU		NOX
9.840	Tons/Yr	Based on a 12-month rolling total	NOX
0.140	Tons/Yr	Based on a 12-month rolling total	SOX
1.760	Tons/Yr	Based on a 12-month rolling total	TSP
102	KRYSTAL UNIT NORTH & SOUTH DRYERS		
<b>Emission Limit</b>		<b>Pollutant</b>	
500.000	PPMV	by volume, dry basis	SOX
0.040	gr/DRY FT3		TSP
107	314 & 340 DISTILLATION COLUMN VENTS		
<b>Emission Limit</b>		<b>Pollutant</b>	
500.000	PPMV	On a dry basis	SOX
0.040	gr/DRY FT3		TSP
108	CREEKSIDE DIESEL FIRE PUMP		
<b>Emission Limit</b>		<b>Pollutant</b>	
2.750	Tons/OZNESEAS	(Ozone Season, May through Sept.)	NOX
6.600	Tons/Yr	(based on 12 month rolling total)	NOX
100.000	Lbs/Hr		NOX
1,000.000	Lbs/Day		NOX
109	NORTHSIDE DIESEL FIRE PUMP		
<b>Emission Limit</b>		<b>Pollutant</b>	
2.750	Tons/OZNESEAS	(Ozone Season, May through Sept.)	NOX
6.600	Tons/Yr	(based on 12 month rolling total)	NOX
100.000	Lbs/Hr		NOX
1,000.000	Lbs/Day		NOX
110	BHT PACKAGING		
<b>Emission Limit</b>		<b>Pollutant</b>	
0.040	gr/DRY FT3		TSP

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
175	M-CRESOL DISTILLATION COLUMN & ASSOCIATED EQPT		
<b>Emission Limit</b>			
500.000	PPMV	On a dry basis	SOX
0.040	gr/DRY FT3		TSP
2225	VESSEL 2225		
<b>Emission Limit</b>			
500.000	PPMV	by volume, dry basis	SOX
0.040	gr/DRY FT3		TSP
3003	PELLETIZER UNIT		
<b>Emission Limit</b>			
500.000	PPMV	dry basis, by volume	SOX
0.040	gr/DRY FT3		TSP
PVAC	PNEUVAC PRODUCT/FINES CONVEYING SYSTEM		
<b>Emission Limit</b>			
500.000	PPMV	by volume, dry basis	SOX
0.040	gr/DRY FT3		TSP
FL	FLARE		
<b>Emission Limit</b>			
500.000	PPMV	On a dry basis	SOX
0.040	gr/DRY FT3		TSP
FL1	PRIMARY PROCESS FLARE		
<b>Emission Limit</b>			
500.000	PPMV	On a dry basis	SOX
0.040	gr/DRY FT3		TSP

**Site Emission Restriction Summary**

Emission Limit	Pollutant
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**SECTION H. Miscellaneous.**

(a) The Capacity/Hour numbers listed in Section A. Site Inventory List and provided in Section D of this permit for individual sources are for informational purposes only and are not to be considered enforceable limits. Enforceable emission limits are listed in the Restrictions sections in Section D for each source and Section E for each source groups. They are also summarized for informational purposes only in Section G of this permit.

(b) RACT-RELATED INFORMATION

(b.1) The expiration date shown on this permit is for State purposes. For Federal Enforcement purposes the RACT portion of this Operating permit shall remain in effect as part of the State Implementation Plan (SIP) until replaced pursuant to 40 CFR 51.4 and approved by the US Environmental Protection Agency (EPA). The operating permit shall become enforceable by the US EPA upon its approval of the above as a revision to the SIP.

[From RACT Approval # OP 61-00011, condition # 18]

(b.2) In addition to the included requirements, the facility also implemented the following RACT control measures:

SOURCE and CONTROL DEVICE

(i) KRYSTAL CHAMBER. Heptane emissions from the Krystal Chamber were reduced by the installation of a new manway over the present opening and by venting the existing open vent to a conservation vent. In addition, the circulating pump packing was replaced with a steam-quenched mechanical seal.

(ii) MIX & RECYCLE TANKS. Heptane emissions from the mix and recycle tanks were reduced by the installation of a new manway on the mix tank, by venting both tanks to a conservation vent, and by nitrogen blanketing both tanks.

(iii) OLIVER FILTER. Heptane emissions from the Oliver filter were reduced by the installation of new gaskets and by the rebuilding and regasketing of the Krystal discharge chute.

(iv) NORTH and SOUTH DRYERS. Heptane emissions from the North and South Dryers were reduced by the installation of new gaskets and boots. In addition, the emissions from the Dryers were ducted to a new baghouse, which replaced the existing scrubber. The baghouse exhaust is controlled by combustion in the Eclipse Furnace.

(v) PRODUCT DRAIN LINES. Heptane emissions from the product drain lines were reduced by the installation of site glasses and improved operating procedures.

(vi) KRYSTAL UNIT HEPTANE STILL. The existing Krystal Unit Heptane Still was modified in the following manner to enhance heptane recovery and reduce emissions from downstream sources: 1) Addition of reflux control; 2) Addition of preheat to the still feed with a pump around loop; 3) Addition of column pressure drop instrumentation and control; 4) Addition of column feed flow control dampening; and 5) Installation of new column, packing, and internals.

(vii) 314/340 DISTILLATION COLUMN. Vacuum system modifications to produce higher concentrations / lower flow of Isobutylene. Two condensers and a three-phase separator (for separation of Nitrogen, Water and liquid Isobutylene) were added to recover Isobutylene. The non-condensable gas stream is directed to the existing flare for combustion..

[From: RACT approval # OP 61-00011, condition #19]

(c) There are no applicable emission, testing, monitoring, recordkeeping, or reporting requirements for the following sources:

- (1) Krystal Unit BHT Sweco Screener (FDR-897)
- (2) Krystal Unit BHT Bucket Elevator (FDR-898)
- (3) Krystal Unit BHT Product Hopper (T-899)
- (4) Pelletizer BHT Bucket Conveyor #1 (FDR-3005)
- (5) Pelletizer BHT Bucket Conveyor #2 (FDR-3008)
- (6) Pelletizer BHT Bucket Conveyor #4 (FDR-3010)
- (7) Pelletizer BHT Screw Conveyor #3 (FDR-3004)
- (8) Pelletizer BHT Sweco Screener (FDR-3006)
- (9) 314 & 340 Batch Kettles
- (10) TK 2221 - DBMC Storage Tank
- (11) TK 23 and TK 24 - Final Product BHT Storage Tanks
- (12) Knock out tank (Scrubber)

**SECTION H. Miscellaneous.**

- (13) TK 335 - MBMC Storage Tank (out-of-service)
- (14) TK 665 - Crude BHT Storage Tank
- (15) Oliver Filter
- (16) Slop Recycle Tubs
- (17) Creek Side Diesel Storage Tank
- (18) Cresol Rail Car Unloading
- (19) Drum/Container Filling
- (20) Heptane Unloading
- (21) Isobutylene Rail Car Unloading
- (22) Truck Loading/Unloading
- (23) North Side Diesel Storage Tank
- (24) TK 76 - F47 Cuts Storage Tank
- (25) TK 5114 – m/p-Cresol Storage Tank
- (26) TK 222 - Distillation RV Knock-out & Recycle Slop Tank
- (27) TK 223 - Residue Storage Tank (out-of-service)
- (28) TK 240 - Wash Water Storage Tank
- (29) TK 424 - Caustic Storage Tank
- (30) TK 125, TK 126, TK 3500, and TK 3501 (m-Cresol Storage Tanks)
- (31) TK 5113 - p-Cresol Storage Tank
- (32) TK 655 - Heat Transfer Fluid Storage Tank
- (33) TK 9876 - DBMC Storage Tank
- (34) TK 9877 - Butylated Cresol Intermediate Storage Tank
- (35) TK 9878 - Butylated Cresol Intermediate Storage Tank
- (36) TK 9880 - Butylated Cresol Intermediate Storage Tank
- (37) TK 990 - Transformer Oil Storage Tank
- (38) Yellow Process Wastewater Sump
- (39) TK 120 - Wastewater Equalization Tank
- (40) Infilco Unit (Emergency Wastewater Holding Service)
- (41) API Oil/Water Separator
- (42) Wastewater Hold Tank
- (43) Tank Car Loading
- (44) Vessel 2220 (Dealkylation Reactor)
- (45) TK 225S - Dealkylation unit process vessel
- (46) TK 1422 - CC Oils Storage Tank
- (47) TK 1425 - Butylated Cresol Intermediate Storage Tank
- (48) TK 1426 - Butylated Cresol Intermediate Storage Tank
- (49) TK 175- Residue Storage Tank
- (50) Box 18 Wastewater Sump
- (51) Small Diesel Fuel Pan for Fire Training
- (52) TK 656 Heat Transfer Oil Vent Tank
- (53) IC Engines used for temporary activities
- (54) Routine Maintenance
- (55) Cooling Tower
- (56) Tank Painting
- (57) Unit maintenance Turnaround Activities
- (58) Process QC Laboratory
- (59) TK 1315 - Heptane Storage Tank
- (60) R-100 Process Vessel
- (61) R-200 Process Vessel
- (62) Portable welding and exhausts for repair
- (63) Natural gas fueled equipment as follows:
  - Office Furnace 1, 120,000 BTU
  - Office Furnace 2, 110,000 BTU
  - Office Furnace 3, 110,000 BTU
  - Office supplemental heat boiler, 67,000 BTU
  - Office hot water tank, 36,000 BTU
  - Storeroom east heater, 75,000 BTU
  - Storeroom west heater, 75,000 BTU
  - Breakroom heater, 125,000 BTU

**SECTION H. Miscellaneous.**

Maintenance shop west heater, 125,000 BTU  
Maintenance shop east heater, 125,000 BTU  
Creek diesel fire pump building heater, 125,000 BTU  
Storage building 3 east heater, 240,000 BTU  
Storage building 3 west heater, 240,000 BTU  
Total 1,573,000 BTU

(64) Maintenance shop welding fume exhausters

(65) Legacy wastewater treatment unit

(d) Exemption from § 63 Subparts F, G, H

As long as BHT (CAS No. 128370) or any other product which is not listed in Table 1 of 40 CFR Part 63, remains the product with the greatest annual design capacity, on a mass basis, the facility will not be subject to the requirements contained in 40 CFR Part 63, Subparts F, G, and H since BHT is not a listed chemical in Table 1 of 40 CFR Part 63, Subpart F.

(e) Source Information

(e.1) The Pelletizer Unit (Source 3003) includes the following sub-sources: Disc (FDR-3003); BHT Feed Tank (T-3001); BHT Product Porky Cooler (EX-3004); Recycle Surge Bin (V-3008); Recycle Feeder (FDR-3009); and the BHT Product Hopper (V-3010).

(e.2) The Krystal Unit Process Vessels (Source 125A) include the following sub-sources: Krystal Chamber (T-850); Recycle Tank (T-865); Mix Tank (T-866); Heptane Still (T-875); and the Heptane Wash Tank (T-877).

(e.3) Sources 108 & 109 NOx emission factors: 6.2 lbs/hr & 10.0 lbs/hr, respectively.

(f) Permit History (& other info on permit modification)

(f.1) This permit was amended on 06/30/05 to incorporate the conditions of plan approval # 61011B and RACT approval #OP 61-00011( issued April 18, 2005).

(f.2) The Department modified the temperature monitoring location for the Eclipse Heater from the combustion air preheater to the Eclipse Furnace breech (firebox exit). The locational change was due in part to the installation of LNB that lowered the air preheater temperature. The firebox exit temperature is a better indicator of VOC destruction than the incoming heated air temperature. The Department also administratively amended the conditions from Plan Approval 61-011C into the Operating Permit. This modification / administrative amendment was issued on June 7, 2007.

(f.3) The Department renewed the operating permit on 05/26/2009. As part of the renewal, the petrochem furnace and all related conditions were removed from the permit based on the discontinuation of this source on December 22, 2004.

(f.4) This permit was renewed on April 24, 2014.

(f.5) This permit was administratively amended on July 29, 2014 to incorporate the change of ownership from Merisol to Sasol Chemicals (USA) LLC.

(f.6) This permit was renewed on May 21, 2019.

(f.7) This permit was modified on February 18, 2020 to incorporate RACT II Case-by-Case requirements.



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

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