



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: May 31, 2023 Effective Date: September 16, 2025
Revision Date: September 16, 2025 Expiration Date: May 30, 2028
Revision Type: Modification

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: 09-00015

Federal Tax Id - Plant Code: 23-1028370-3

Owner Information

Name: ROHM & HAAS CO
Mailing Address: 200 ROUTE 413
BRISTOL, PA 19007-3606

Plant Information

Plant: ROHM & HAAS CO/BRISTOL
Location: 09 Bucks County 09001 Bristol Township
SIC Code: 2821 Manufacturing - Plastics Materials And Resins

Operator

Name: ROHM & HAAS CHEM LLC [If different from owner]
Mailing Address: 200 ROUTE 413
BRISTOL, PA 19007-3606

Responsible Official

Name: WEIPENG NG
Title: SR SITE MFG DIR
Phone: (215) 785 - 7039 Email: wwng@dow.com

Permit Contact Person

Name: BRANDON SHIMP
Title: ENVIRONMENTAL MANAGER
Phone: (215) 781 - 4737 Email: bshimp@dow.com

[Signature] _____
JILLIAN A. GALLAGHER, SOUTHEAST REGION AIR PROGRAM MANAGER



SECTION A. Table of Contents

Section A. Facility/Source Identification

Table of Contents
Site Inventory List

Section B. General Title V Requirements

- #001 Definitions
- #002 Prohibition of Air Pollution
- #003 Property Rights
- #004 Permit Expiration
- #005 Permit Renewal
- #006 Transfer of Ownership or Operational Control
- #007 Inspection and Entry
- #008 Compliance Requirements
- #009 Need to Halt or Reduce Activity Not a Defense
- #010 Duty to Provide Information
- #011 Reopening and Revising the Title V Permit for Cause
- #012 Reopening a Title V Permit for Cause by EPA
- #013 Operating Permit Application Review by the EPA
- #014 Significant Operating Permit Modifications
- #015 Minor Operating Permit Modifications
- #016 Administrative Operating Permit Amendments
- #017 Severability Clause
- #018 Fee Payment
- #019 Authorization for De Minimis Emission Increases
- #020 Reactivation of Sources
- #021 Circumvention
- #022 Submissions
- #023 Sampling, Testing and Monitoring Procedures
- #024 Recordkeeping Requirements
- #025 Reporting Requirements
- #026 Compliance Certification
- #027 Operational Flexibility
- #028 Risk Management
- #029 Approved Economic Incentives and Emission Trading Programs
- #030 Permit Shield
- #031 Reporting
- #032 Report Format

Section C. Site Level Title V Requirements

- C-I: Restrictions
- C-II: Testing Requirements
- C-III: Monitoring Requirements
- C-IV: Recordkeeping Requirements
- C-V: Reporting Requirements
- C-VI: Work Practice Standards
- C-VII: Additional Requirements
- C-VIII: Compliance Certification
- C-IX: Compliance Schedule

Section D. Source Level Title V Requirements

- D-I: Restrictions
- D-II: Testing Requirements
- D-III: Monitoring Requirements
- D-IV: Recordkeeping Requirements
- D-V: Reporting Requirements



SECTION A. Table of Contents

D-VI: Work Practice Standards
D-VII: Additional Requirements

Note: These same sub-sections are repeated for each source!

Section E. Source Group Restrictions

E-I: Restrictions
E-II: Testing Requirements
E-III: Monitoring Requirements
E-IV: Recordkeeping Requirements
E-V: Reporting Requirements
E-VI: Work Practice Standards
E-VII: Additional Requirements

Section F. Alternative Operating Scenario(s)

F-I: Restrictions
F-II: Testing Requirements
F-III: Monitoring Requirements
F-IV: Recordkeeping Requirements
F-V: Reporting Requirements
F-VI: Work Practice Standards
F-VII: Additional Requirements

Section G. Emission Restriction Summary

Section H. Miscellaneous

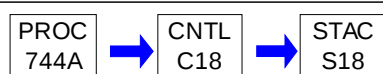
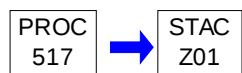
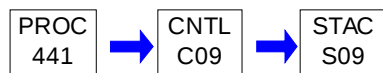
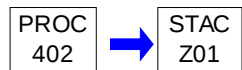
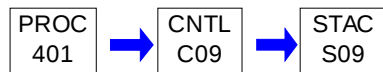
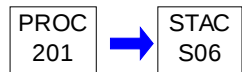
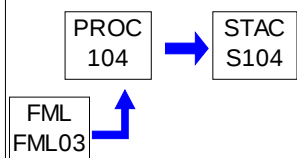
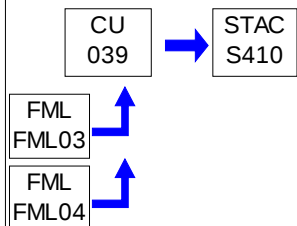
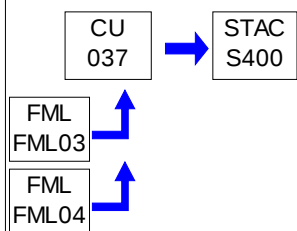
**SECTION A. Site Inventory List**

Source ID	Source Name	Capacity/Throughput		Fuel/Material
037	BOILER 400 (CROYDON)	33.500	MMBTU/HR	
		239.300	Gal/HR	#2 Oil
		33.500	MCF/HR	Natural Gas
039	BOILER 410 (CROYDON)	33.500	MMBTU/HR	
		239.300	Gal/HR	#2 Oil
		33.500	MCF/HR	Natural Gas
104	BURN-OFF OVEN (CROYDON)	0.200	MMBTU/HR	
		N/A		NATURAL GAS
106	EXEMPT EXISTING DIESEL ENGINES (PRE-2006)			
107	EXEMPT EXISTING NATURAL GAS ENGINE (PRE-2006)			
108	REMOTE RESERVOIR PARTS WASHERS			
109	EXEMPT NEW DIESEL ENGINE (POST-2006)			
201	RHEOLOGY MODIFIERS (PQR/II/SCT) BRISTOL	10.000	Tons/HR	POLYURETHANE
401	CRU PROCESS (CROYDON)	30.500	Tons/HR	ACRYLIC
402	CRU VENTILATION (CROYDON)			
441	CRUX PROCESS (CROYDON)	6.300	Tons/HR	ACRYLIC EMULSION
442	CRUX VENTILATION (CROYDON)			
517	BLDG 30 PROCESS EMISSIONS	N/A		FUGITIVE VOC EMISSIONS
518	POLYMERS AREAS SOURCES			
743A	WASTEWATER TREATMENT PLANT	125.000	Th Gal/HR	WASTE WATER
744A	RAW MATERIAL STORAGE TANKS (BRISTOL)	N/A		VOC EMISSIONS FROM T
744B	VOL STORAGE TANKS (BRISTOL AND CROYDON)	N/A		FUGITIVE VOCS
744C	STORAGE TANKS FUGITIVES (BRISTOL AND CROYDON)	N/A		FUGITIVE EMISSIONS
C03A	WWTP CARBON ADSORPTION SYSTEM	90,000.000	Gal/HR	WASTEWATER
C09	CATALYTIC OXIDIZER	N/A		VOC
C18	REGENERATIVE THERMAL OXIDIZER	N/A		VOC
FML03	NATURAL GAS PIPELINE			
FML04	NO. 2 FUEL OIL			
S06	PQR/PQR/II STACK			
S09	CATALYTIC OXIDIZER STACK			
S104	BURN-OFF OVEN STACK			
S18	REGENERATIVE THERMAL OXIDIZER STACK			
S20	WWTP CARBON ADSORPTION SYSTEM STACK			
S400	BOILER 400 STACK			
S410	BOILER 410 STACK			
Z01	FUGITIVES EMISSIONS			

PERMIT MAPS



PERMIT MAPS



**PERMIT MAPS**

PROC
744B → STAC
Z01

PROC
744C → STAC
Z01

CNTL
C03A → STAC
S20

CNTL
C09 → STAC
S09

CNTL
C18 → STAC
S18

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,

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

**SECTION B. General Title V Requirements**

the Department.

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

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

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

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

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

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

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

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

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

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

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

(1) Enforcement action

(2) Permit termination, revocation and reissuance or modification

(3) Denial of a permit renewal application

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

R3_Air_Apps_and_Notices@epa.gov

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

(2) One ton of NO_x from a single source during the term of the permit and 5 tons of NO_x at the facility during the term of the permit.

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**SECTION B. General Title V Requirements**

(5) The results of the analyses.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

- (1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:
 - (i) Three years after the date on which a regulated substance is first listed under § 68.130; or,
 - (ii) The date on which a regulated substance is first present above a threshold quantity in a process.

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

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

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

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

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

**SECTION B. General Title V Requirements**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



SECTION C. Site Level Requirements

I. RESTRICTIONS.

Emission Restriction(s).

001 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

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

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

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

002 [25 Pa. Code §123.2]

Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a)(1) - (9) (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.

004 [25 Pa. Code §123.41]

Limitations

No person may permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

- (a) Equal to or greater than 20% for a period or periods aggregating more than three (3) minutes in any one (1) hour.
- (b) Equal to or greater than 60% at any time.

005 [25 Pa. Code §123.42]

Exceptions

The opacity limitations do not apply to a visible emission in either of the following instances:

- (a) When the presence of uncombined water is the only reason for failure of the emission to meet the limitations.
- (b) When the emission results from the operation of equipment used solely to train and test persons in observing the opacity of visible emissions.
- (c) When the emission results from sources specified in 25 Pa. Code § 123.1(a)(1) - (9) (relating to the prohibition of certain fugitive emissions).

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

The permittee shall limit facility-wide Hazardous Air Pollutant (HAP) emissions as follows:

- (a) less than 25 tons per year any combination HAPs, based on a 12-month rolling sum, and
- (b) less than 10 tons per year any individual HAP, based on a 12-month rolling sum.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.111 and 25 Pa. Code § 129.115(d)(2).]

The permittee shall limit facility-wide NO_x emissions to less than 50 tons per year, based on a 12-month rolling sum.

008 [25 Pa. Code §129.14]**Open burning operations**

No person may permit the open burning of material in the Southeast Air Basin except where the open burning operations result from:

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

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

The following condition applies to any source test conducted at the facility:

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

Southeast Region
RA-EPSEstacktesting@pa.gov

Central Office
RA-EPstacktesting@pa.gov

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

(1) Test Date(s)

(i) For protocols, provide the proposed date on which testing will commence or "TBD"

**SECTION C. Site Level Requirements**

(ii) For reports, provide the first and last day of testing

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

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

(4) Testing Requirements (all that apply):

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

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

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) If at any time the Department has cause to believe that air contaminant emissions from any source may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139, the most current version of the DEP Source Testing Manual, and the EPA Clean Air Act National Stack Testing Guidance, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

III. MONITORING REQUIREMENTS.

011 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be 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.

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall monitor the facility once per operating day for the following:

- (1) Odors which may be objectionable (as per 25 Pa. Code § 123.31).
- (2) Visible Emissions (as per 25 Pa. Code §§ 123.41 and 123.42).
- (3) Fugitive Particulate Matter (as per 25 Pa. Code § 123.1 and 123.2).

(b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:

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

**SECTION C. Site Level Requirements**

(c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.

(d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to monthly.

(e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification, complaints, monitoring results, and/or Department findings.

[Note: The visible emissions monitoring required under this condition is intended to constitute an observation of visible emissions, not the quantification of visible emissions by the methods described in 25 Pa. Code § 123.43.]

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-94 and 127.512(h).]

(a) The permittee shall maintain records to demonstrate compliance with 25 Pa. Code §§ 129.91-129.94.

(b) The records shall provide sufficient data and calculations to clearly demonstrate that the requirements of 25 Pa. Code §§ 129.91-94 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 maintained on site, in a format approved by the Department and shall be made available upon request.

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

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

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

(a) date, time, and location of the incident(s);

(b) the cause of the event; and

(c) the corrective action taken, if necessary, to abate the situation and prevent future occurrences.

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

(a) On a quarterly basis, the permittee shall calculate the production throughputs (in tons per 12-month rolling sum) from the VOC/HAP emitting sources at the facility.

(b) Emulsion Area (CRU/CRUX): On a quarterly basis, the permittee shall compare the actual production throughputs to the Production Action Level, which is 306,000 tons of production per 12-month rolling sum for the Emulsion Area.

(c) If production throughputs are shown to be above the established action levels for the individual processes, the permittee shall begin calculating and recording HAP emissions on a monthly and 12-month rolling basis, to assure compliance with the HAP emission limit of ten (10) tons per year (tpy) of an individual HAP and 25 tpy for an aggregate of HAPs. The monthly calculations will be on a compound-by-compound basis as approved by the Department.

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

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

**SECTION C. Site Level Requirements**

- (a) De minimis increases without notification to the Department.
- (b) De minimis increases with notification to the Department, via letter.
- (c) Increases resulting from a Request for Determination (RFD) to the Department.
- (d) Increases resulting from the issuance of a plan approval and subsequent operating permit.

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

The permittee shall maintain records/calculations of the total NO_x emissions at the facility on a monthly basis, including a 12-month rolling sum.

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

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

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

(c) The report shall describe the following:

- (1) Name, permit or authorization number, and location of the facility;
- (2) Nature and cause of the malfunction, emergency or incident;
- (3) Date and time when the malfunction, emergency or incident was first observed;
- (4) Expected duration of excess emissions;
- (5) Estimated rate of emissions; and
- (6) Corrective actions or preventative measures taken.

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

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

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

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

(h) For catalytic and thermal oxidizers within the facility, a "cold stack" will not be considered a reportable event if the unit can be restarted within five (5) minutes. If the control unit cannot be started within five (5) minutes, but the process has entered a process shutdown mode, the event will not be considered a reportable event. If the control unit cannot be started within five (5) minutes and the process has not entered a shutdown mode, this will be a reportable event to the

**SECTION C. Site Level Requirements**

Department.

(i) For a scrubber failure, malfunction, or operation outside existing parameters, such events will not in themselves be considered reportable events. If processes are not emitting at the time, such events will not be reportable.

Note: Paragraphs (h) and (i) refer only to the reporting of malfunctions to the Department. The permittee is not required to include the non-reportable "cold stack" events as part of the accumulated excursion data required in Section D, Source C09, Condition #017 or Section D, Source C18, Condition #015.

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

The permittee shall submit to the Department on a semi-annual basis, the production throughput evaluation for the facility for the preceding six (6) months. The reporting period ends one (1) month before this report is due. This report may be submitted at the same time as the semi-annual certification report and the annual AIMS emission calculations report.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 127.511(c)(1)–(2) and 127.513(5)(i)–(v).]

The permittee shall submit the following reports:

(a) An annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V Permit as required under 25 Pa. Code § 127.513. The annual certificate of compliance shall be submitted to DEP electronically, and to EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov. The subject line shall read: "TVOP No. 09-00015, Rohm & Haas Company/Bristol."

(b) A semi-annual deviation report to DEP by October 1 of each year, for the period covering January 1–June 30, of the same year. [Note: The annual certificate of compliance in (a), above, fulfills the obligation for the second deviation reporting period (i.e., July 1–December 31, of the previous year).]

021 [25 Pa. Code §135.21]**Emission statements**

The permittee shall submit by March 1, of each year, an annual emission statement for NO_x and VOC emissions for the preceding calendar year. Additionally, a description of the method used to calculate the emissions shall be included. The statement shall contain a certification by a company official or plant manager that the information contained in the statement is true and accurate.

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

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

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

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

The permittee may not modify any air contaminant system identified in this permit prior to obtaining Department approval except those modifications authorized by Condition #019(g), of Section B of this permit.

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

The permittee shall ensure that all sources are operated and maintained in accordance with manufacturer's specifications and good engineering and air pollution control practices to control and minimize malodor, fugitive particulate emissions and visible emissions.

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

The permittee shall immediately, upon discovery, implement measures which may include the application for the installation of air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in Section A of this permit is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to, 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act as stated in this permit.

VII. ADDITIONAL REQUIREMENTS.

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

VIII. COMPLIANCE CERTIFICATION.

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

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

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

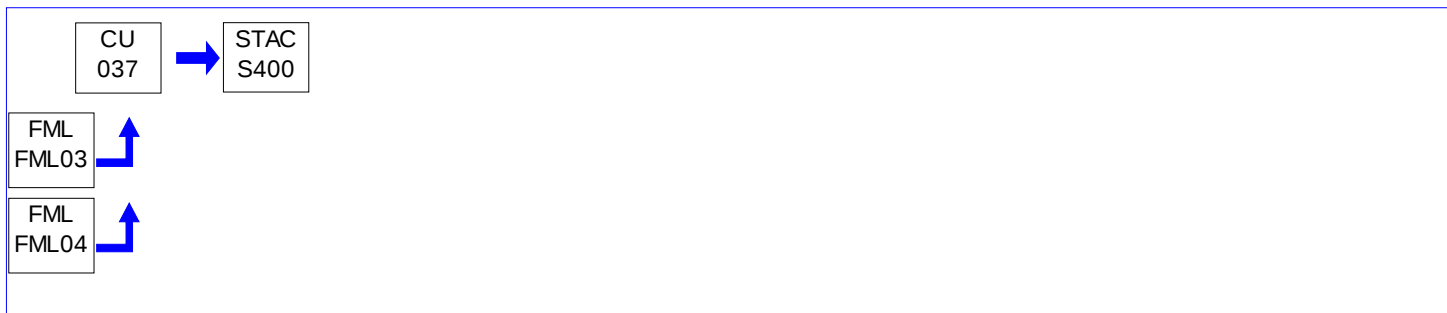
**SECTION D. Source Level Requirements**

Source ID: 037

Source Name: BOILER 400 (CROYDON)

Source Capacity/Throughput:	33.500	MMBTU/HR	
	239.300	Gal/HR	#2 Oil
	33.500	MCF/HR	Natural Gas

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

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

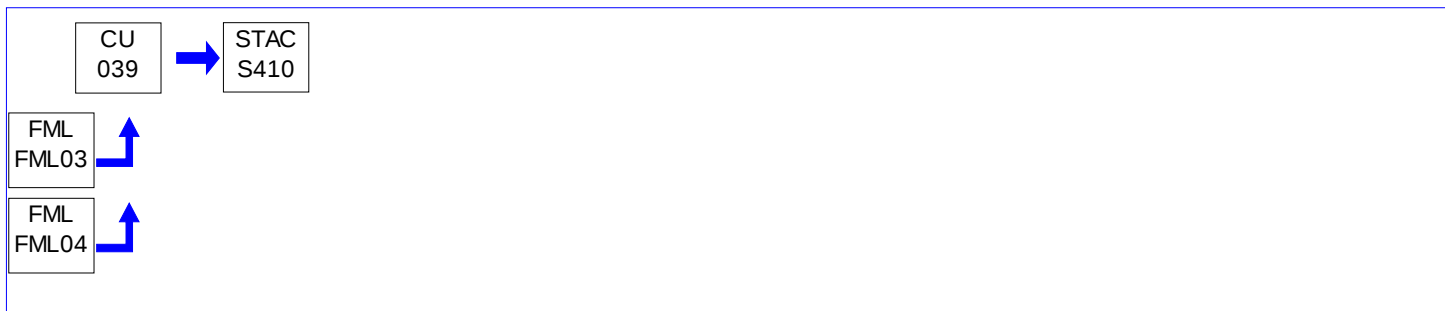
**SECTION D. Source Level Requirements**

Source ID: 039

Source Name: BOILER 410 (CROYDON)

Source Capacity/Throughput:	33.500	MMBTU/HR	
	239.300	Gal/HR	#2 Oil
	33.500	MCF/HR	Natural Gas

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

**I. RESTRICTIONS.**

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

**SECTION D. Source Level Requirements**

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

**SECTION D. Source Level Requirements**

Source ID: 104

Source Name: BURN-OFF OVEN (CROYDON)

Source Capacity/Throughput:

0.200 MMBTU/HR

N/A

NATURAL GAS

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

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

[Compliance with this condition is met by using natural gas as specified herein.]

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

The operation of the Burn-Off Oven (Source 104) shall not at anytime result in the emission of filterable particulate matter emissions, as measured by Method 5 of 40 CFR 60, Appendix A (or an equivalent method approved by the Department), in excess of 0.02 grains per dry standard cubic foot.

[Compliance with this streamlined condition also ensures compliance with 25 Pa. Code §§ 127.12(a)(5) and 123.13(c)(1)(i).]

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor the temperature of the secondary combustion chamber continuously when operating.

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

The permittee shall maintain records of the temperature of the secondary combustion chamber continuously when operating.

V. REPORTING REQUIREMENTS.

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

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

The Burn-Off Oven (Source 104) secondary chamber shall:

- (a) be maintained at an minimum temperature of 1400° F during periods of operation. This minimum temperature of 1400° F must be established prior to the commencement of parts burn off in the burn off chamber
- (b) have a minimum gas retention time of at least 0.5 seconds.

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

The Burn-Off Oven (Source 104) shall be:

- (a) operated in such as 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 specification.

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: 106

Source Name: EXEMPT EXISTING DIESEL ENGINES (PRE-2006)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 5
GROUP 5A

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

The permittee shall ensure that emission into the outdoor atmosphere of particulate matter from the unit occurs in such a manner that the concentration of particulate matter in the effluent gas does not exceed 0.04 gr/dscf, according to 25 Pa. Code § 123.13(c)(1)(i).

[The method of compliance for this permit condition is using proper fuels as approved herein.]

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 SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

[Compliance with this condition may be demonstrated by verifying that the sulfur content of the diesel fuel oil is equal to or less than 0.05% by weight.]

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

The permittee shall burn diesel fuel oil only in each emergency engine.

II. TESTING REQUIREMENTS.**# 004 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to tests for the analysis of commercial fuel oil:

- (1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).
 - (2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F.
 - (3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).
 - (4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).
- (b) The testing requirements in subpart (a) above, shall be waived in the event that a delivery receipt from the supplier, showing the percentage sulfur in the fuel, is obtained each time a fuel oil delivery is made.

III. MONITORING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****IV. RECORDKEEPING REQUIREMENTS.**

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 005 [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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall perform the following work practice standards on this stationary RICE, according to 40 CFR § 63.6603(a) and Table 2d (Item 4) of Subpart ZZZZ:

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first,
- (b) Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. The permittee has the option to utilize an oil analysis program as described in 40 CFR § 63.6625(i) in order to extend the specified oil change requirement in (a) above.

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

Source ID 106 contains two (2) exempt emergency units, each powered by a stationary internal combustion engine as follows:

- (a) Building 54 (Bristol) Emergency Generator for Sewer Lift/Chemical Pumping Station 1 (PS-1) rated at 166 BHP
- (b) Building 101 (Bristol) Clarke Fire Pump rated at 316 BHP powered by a Detroit Diesel engine build date 1988.

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

**SECTION D. Source Level Requirements**

Source ID: 107

Source Name: EXEMPT EXISTING NATURAL GAS ENGINE (PRE-2006)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 5
GROUP 5A

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

The permittee shall ensure that emission into the outdoor atmosphere of particulate matter from the emergency generator occurs in such a manner that the concentration of particulate matter in the effluent gas does not exceed 0.04 gr/dscf, according to 25 Pa. Code § 123.13(c)(1)(i).

[The method of compliance for this permit condition is using natural gas fuel as approved herein.]

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 SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

[The method of compliance for this permit condition is natural gas fuel as approved herein.]

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

The permittee shall burn natural gas only in the emergency generator.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 004 [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

**SECTION D. Source Level Requirements****stationary RICE located at an area source of HAP emissions?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall perform the following work practice standards on this emergency generator, according to 40 CFR § 63.6603(a) and Table 2d (Item 5) of Subpart ZZZZ:

- (a) Change oil and filter every 500 hours of operation or annually, whichever comes first,
- (b) Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
- (c) Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The permittee has the option to utilize an oil analysis program as described in 40 CFR § 63.6625(j) in order to extend the specified oil change requirement in (a) above.

VII. ADDITIONAL REQUIREMENTS.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source ID 107 is a 42 BHP spark ignition stationary RICE powering a Cummins emergency generator for Croydon LPG Emergency Lighting.

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

**SECTION D. Source Level Requirements**

Source ID: 108

Source Name: REMOTE RESERVOIR PARTS WASHERS

Source Capacity/Throughput:

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.**# 001 [25 Pa. Code §129.63]****Degreasing operations**

The permittee shall perform the following recordkeeping for the parts washers:

(a) The permittee shall maintain records and provide to the Department, on request, the information specified below, pursuant to 25 Pa. Code § 129.63(a)(6):

- (1) The name and address of the solvent supplier.
- (2) The type of solvent including the product or vendor identification number.
- (3) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

(b) An invoice, bill of sale, certificate that corresponds to a number of sales, Safety Data Sheet (SDS), or other appropriate documentation acceptable to the Department may be used to comply with this condition.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 002 [25 Pa. Code §129.63]****Degreasing operations**

The permittee shall perform the following work practice standards for the parts washers:

(a) The remote reservoir cold cleaning machines shall have a permanent, conspicuous label summarizing the operating requirements contained in this permit for this source, pursuant to 25 Pa. Code § 129.63(a)(2)(i).

(b) The remote reservoir cold cleaning machines shall 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, pursuant to 25 Pa. Code § 129.63(a)(2)(ii).

003 [25 Pa. Code §129.63]**Degreasing operations**

The permittee should perform the following discretionary good operating practices, pursuant to 25 Pa. Code § 129.63(a)(2)(i)(A)-(C):

**SECTION D. Source Level Requirements**

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

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

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

004 [25 Pa. Code §129.63]**Degreasing operations**

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, pursuant to 25 Pa. Code § 129.63(a)(4).

005 [25 Pa. Code §129.63]**Degreasing operations**

The permittee shall operate the cold cleaning machines in accordance with the following procedures, pursuant to 25 Pa. Code § 129.63(a)(3):

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

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

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

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

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

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

This source contains the following remote reservoir cold cleaning machines:

- (1) Safety Kleen located in the Bristol Maintenance Machine Shop
- (2) Safety Kleen located in the Croydon Machine Shop (RFD No. 7932)

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

**SECTION D. Source Level Requirements**

Source ID: 109

Source Name: EXEMPT NEW DIESEL ENGINE (POST-2006)

Source Capacity/Throughput:

Conditions for this source occur in the following groups: GROUP 5

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

The permittee shall ensure that emission into the outdoor atmosphere of particulate matter from the emergency generator occurs in such a manner that the concentration of particulate matter in the effluent gas does not exceed 0.04 gr/dscf, according to 25 Pa. Code § 123.13(c)(1)(i).

[The method of compliance for this permit condition is using proper fuels as approved herein.]

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 SO₂, in the effluent gas exceeds 500 parts per million, by volume, dry basis.

[Compliance with this condition is streamlined in 40 CFR § 60.4207(b) and § 80.510(b), by using diesel fuel oil with a sulfur content of 15ppm maximum.]

Fuel Restriction(s).**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4207]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to**

[Additional authority for this permit condition is also derived from 40 CFR §§ 60.4207(b) and 1090.305.]

The permittee shall ensure that diesel fuel is the only fuel consumed by this engine. The diesel fuel shall comply with the following per-gallon standards:

(a) Sulfur content: 15 ppm maximum.

(b) Cetane index or aromatic content, as follows:

- (1) A minimum cetane index of 40; or
- (2) A maximum aromatic content of 35 volume percent.

[Compliance with this streamlined condition assures compliance with 25 Pa. Code § 123.21(b).]

Operation Hours Restriction(s).**# 004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122 and 40 CFR § 60.4211(f).]

The permittee shall operate the emergency stationary ICE according to the requirements in paragraphs (a) and (b) of this condition. In order for the engine to be considered an emergency stationary ICE under 40 CFR Part 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in paragraphs (a) and (b) of this condition, is prohibited. If the permittee does not operate the engine according to the requirements in paragraphs (a) and (b) of this condition, the engine will not be considered an emergency engine under Subpart IIII and must meet all requirements for non-emergency engines.

**SECTION D. Source Level Requirements**

(a) The permittee may operate the emergency stationary ICE for any combination of the purposes of maintenance checks and readiness testing for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (b) of this condition counts as part of the 100 hours per calendar year allowed by this paragraph (a). Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(b) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in paragraph (a) of this condition.

II. TESTING REQUIREMENTS.**# 005 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to tests for the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F.

(3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15).

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The testing requirements in subpart (a) above, shall be waived in the event that a delivery receipt from the supplier, showing the percentage sulfur in the fuel, is obtained each time a fuel oil delivery is made.

III. MONITORING REQUIREMENTS.**# 006 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4209]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?**

[Additional authority for this permit condition is also derived from 40 CFR § 60.4209(a)]

The permittee shall monitor the hours of operation of the engine through the use of a non-resettable hour meter.

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

The permittee shall maintain records of the following information, for each shipment of diesel fuel recieved, obtained either by laboratory analysis or from the fuel supplier's certification:

(a) Sulfur content,

(b) Cetane index or aromatic content.

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

**SECTION D. Source Level Requirements**

The permittee shall record the hours of operation for the engine on a monthly basis, including 12-month rolling sums and the reason for operation.

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

The permittee shall keep records on site to demonstrate compliance that this engine is EPA certified (i.e. certificate of conformity or Tier certification, etc.) and in compliance with the emission standards as required by 40 CFR § 60.4202(b).

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 010 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4202]****Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122, 40 CFR § 60.4202(a)(2), and 40 CFR § 60.4205(b) and 40 CFR Part 1039 Appendix I.]

The permittee shall certify this emergency stationary CI internal combustion engine to the Tier 3 emission standards specified in 40 CFR Part 1039, Appendix I for all pollutants as follows (for engines with a rated power between 130 and 560 kW):

- (a) NO_x + NMHC: 4.0 g/kW-hr
- (b) CO: 3.5 g/kW-hr
- (c) PM: 0.20 g/kW-hr

[Compliance with (a) assures compliance with the particulate matter standard of 0.04 gr/dscf as per 25 Pa. Code § 123.13(c)(1)(i).]

011 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4211]**Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines****What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 122 and 40 CFR § 60.4211.]

- (a) The permittee shall install and configure the engine in accordance with the manufacturer specifications.
- (b) The permittee shall operate and maintain the engine in accordance with one of the following:
 - (1) The manufacturers' written instructions and/or specifications, or
 - (2) Permittee-developed procedures that are approved by the manufacturer. Only those settings that are permitted to be changed by the manufacturer may be changed.

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

This engine is subject to the Standards of Performance for New Stationary Sources Subpart IIII and shall comply with all applicable requirements of this Subpart. In accordance with 40 C.F.R. § 60.4, copies of all requests, reports, applications, submittals, and other communications are required to be submitted to both the EPA and the Department.

NSPS reports may be submitted electronically to EPA's Central Data Exchange: <https://cdx.epa.gov>

**SECTION D. Source Level Requirements**

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source ID 109 is a Tier 3, 173-hp diesel engine powering a Cummins emergency generator (refer to RFD No. 9240), supporting emergency power and light at the Croydon Plant.

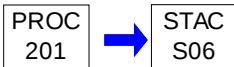
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 201

Source Name: RHEOLOGY MODIFIERS (PQR II/SCT) BRISTOL

Source Capacity/Throughput: 10.000 Tons/HR POLYURETHANE

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

VOC emissions from the PQR II/SCT Process Vents shall not exceed 2,000 lbs per 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following parameters for the Rheology Modifiers (PQR II/SCT) (Source 201) on a monthly basis:

- (a) The material throughput,
- (b) The hours of operation when operating,
- (c) VOC emission calculations for the source on a monthly and twelve (12) month rolling basis, based on material usage.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following parameters for the Rheology Modifiers (PQR II/SCT) (Source 201) on a monthly basis:

- (a) The material throughput;
- (b) The hours of operation when operating;
- (c) VOC emissions from the source on a monthly and twelve (12) month rolling basis.

V. REPORTING REQUIREMENTS.

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

**SECTION D. Source Level Requirements****VI. WORK PRACTICE REQUIREMENTS.**

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

VII. ADDITIONAL REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95 and § 127.512(h).]

To ensure compliance with the RACT (Reasonably Available Control Technology) determinations, the permittee shall ensure that good operating procedures shall be followed for the PQR and SCT Process Vents.

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

**SECTION D. Source Level Requirements**

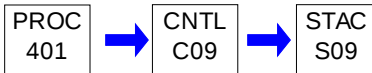
Source ID: 401

Source Name: CRU PROCESS (CROYDON)

Source Capacity/Throughput:

30.500 Tons/HR

ACRYLIC

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

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

The total, aggregate emissions from the CRU and CRUX units (Sources 401 and 441) shall not exceed the limitations specified below:

- (a) NO_x: 0.6 lb/hr, 2.6 tpy
- (b) CO: 0.196 lb/hr, 0.86 tpy
- (c) VOC: 0.56 lb/hr, 1.3 tpy

The annual emission limits listed above shall be determined as 12-month rolling sums.

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor the following parameters for this source:

- (a) The material throughput per batch;
- (b) The hours of operation when operating;
- (c) The NO_x, CO, and VOC emission calculations for the source on a monthly and twelve (12) month rolling sum, based on material usage.

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

The permittee shall maintain records of the following parameters for this source:

- (a) The material throughput per batch;
- (b) The hours of operation when operating;
- (c) The NO_x, CO, and VOC emissions from the source on a monthly and twelve (12) month rolling sum.

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

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

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

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

The CRU and CRUX Processes (Sources 401 and 441) reactor train emissions of volatile organic compounds (VOC) shall be controlled by the Catalytic Oxidizer (Source C09).

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

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

(a) The Catalytic Oxidizer (Source C09) shall be operated whenever the CRU or CRUX Process equipment is operating.

(b) The permittee shall maintain and operate the Catalytic Oxidizer (Source C09) according to the manufacturer's specification and good air pollution control practices.

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

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

In the event of a Catalytic Oxidizer (Source C09) malfunction, the CRU and CRUX Processes shall be promptly and safely shut down in order to minimize emissions to the environment.

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

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

The equipment listed below is associated with the CRU Process (Source 401) (aka Acrylic Emulsion Manufacturing Facility area), which includes the CRU-1 and CRU-2 Processes and Emulsion Area B:

- (a) CRU-1 Polymerization Reactor (12,000 gallon cap.)
- (b) CRU-2 Polymerization Reactor (12,000 gallon cap.)
- (c) CRU-1 Monomer Emulsion Tank (12,000 gallon cap.)
- (d) CRU-2 Monomer Emulsion Tank (12,000 gallon cap.)
- (e) Additive Tank No. 1 (2,400 gallon cap.)
- (f) Additive Tank No. 2 (3,000 gallon cap.)
- (g) Four Drain Tanks
- (h) One (1) Wastewater Tank

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

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

There is no restriction in operating hours for the batch operation of acrylic emulsions.

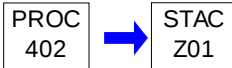
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 402

Source Name: CRU VENTILATION (CROYDON)

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h).

VOC emissions from the CRU Ventilation Stack (Source 402) shall not exceed 7,000 lbs per 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following parameters for the CRUX Ventilation (Source 402):

- (i) The material throughput per batch;
- (ii) The hours of operation when operating;
- (iii) VOC emission calculations for the source on a monthly and twelve (12) month rolling sum, based on material usage.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following parameters for the CRU Ventilation (Source 402):

- (i) The material throughput per batch;
- (ii) The hours of operation when operating;
- (iii) The VOC emissions from the source on a monthly and twelve (12) month rolling sum.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

The permittee shall maintain the following records to ensure compliance with Leak Detection and Repair (LDAR) Program requirements for CRU Ventilation (Source 402):

- (a) Records of all repairs including the date of repair(s), type(s) and reason(s) for the repair(s) made.
- (b) Changes in the base number of components due to major equipment changes (i.e., removals or additions of entirely new processes).

**SECTION D. Source Level Requirements**

(c) Any need to have extensions of repairs date(s) beyond fifteen (15) days.

(d) Leak rate methodology and calculations.

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 §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

(a) Leak Detection and Repair (LDAR) Program (Applicability). The permittee shall implement a Leak Detection and Repair (LDAR) Program for the following:

(i) Any storage tank or process storing or transferring fluids that have at least 10% by weight VOCs with a vapor pressure of 0.044 psia at 68°F.

(b) The LDAR Program shall be implemented at least monthly and operated and maintained in accordance with industry practices and manufacturer's specifications.

(c) The following sources are exempted from the LDAR requirements:

(i) Any processes that operate under vacuum conditions,

(ii) Any processes that perform full LDAR programs as required by other regulations,

(iii) Any storage tanks that meet or must meet the visual inspection and recordkeeping of Spill Prevention, Containment and Countermeasure (SPCC) and the Oil Pollution Act of 1990 (OPA).

VII. ADDITIONAL REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Definition of the term "Leak": Any visible leakage from a seal including spraying, misting, clouding, ice formation and polymer formation on the monomer handling lines.

Note: Polymer formation does not include final product polymer formation around final product handling areas.

Note: Residual material located in the vicinity of routinely used sample ports does not constitute a leak, unless the sample port is actively leaking.

(b) Definition of the term "Repair": Equipment that is adjusted, or otherwise altered in order to eliminate a leak as indicated by cessation of any visible leakage from the seal including spraying, misting, clouding, ice formation and polymer on monomer handling lines.

Note: If a repair is identified, the repair must be made within fifteen (15) days unless a complete shutdown or parts delivery is required.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95 and § 127.512(h).]

**SECTION D. Source Level Requirements**

The permittee shall ensure that the following RACT (Reasonably Available Control Technology) determinations shall be implemented for the CRU and CRUX Ventilation: Operation of the drain tanks with good operating practices and a visual leak detection and repair (LDAR) program for the building fugitives are considered RACT.

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

**SECTION D. Source Level Requirements**

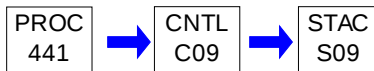
Source ID: 441

Source Name: CRUX PROCESS (CROYDON)

Source Capacity/Throughput:

6.300 Tons/HR

ACRYLIC EMULSION

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

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

The total, aggregate emissions from the CRU and CRUX units (Sources 401 and 441) shall not exceed the limitations specified below:

- (a) NO_x: 0.6 lb/hr, 2.6 tpy
- (b) CO: 0.196 lb/hr, 0.86 tpy
- (c) VOC: 0.56 lb/hr, 1.3 tpy

The annual emission limits listed above shall be determined as 12-month rolling sums.

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor the following parameters for this source:

- (a) The material throughput per batch;
- (b) The hours of operation when operating;
- (c) The NO_x, CO, and VOC emission calculations for the source on a monthly and twelve (12) month rolling sum, based on material usage.

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

The permittee shall maintain records of the following parameters for this source:

- (a) The material throughput per batch;
- (b) The hours of operation when operating;
- (c) The NO_x, CO, and VOC emissions from the source on a monthly and twelve (12) month rolling sum.

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

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

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

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

(a) The Catalytic Oxidizer (Source C09) shall be operated whenever the CRU or CRUX Process equipment are operating.

(b) The permittee shall maintain and operate the Catalytic Oxidizer (Source C09) according to the manufacturer's specification and good air pollution control practices.

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

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

In the event of a Catalytic Oxidizer (Source C09) malfunction, the CRU and CRUX Processes shall be promptly and safely shut down in order to minimize emissions to the environment.

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

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

The CRU and CRUX Processes (Source 401 and 441) reactor train emissions of volatile organic compounds (VOC) shall be controlled by the Catalytic Oxidizer (Source ID: C09).

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

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

There is no restriction in operating hours for the experimental acrylic emulsions unit.

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

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

The following equipment is associated with the Experimental Acrylic Emulsions Unit (e.g., CRUX Process/Emulsions Area) (Source 441):

- (1) Two (2) Reactors (3,000 and 500 gallons)
- (2) Two (2) Monomer Emulsion Tanks (3,000 and 500 gallons)
- (3) Two (2) Drain Tanks (4,200 gallons each), One (1) Drain Tank (1,200 gallons)
- (4) Four (4) Additives Tanks (204, 730, 250 and 132 gallons)
- (5) Three (3) Blend Tanks (4,500, 1,500 and 150 gallons)
- (6) Two (2) Biocide Tanks (50 and 5 gallons)
- (7) One (1) Wastewater Tank (2,000 gallons)
- (8) One (1) Activator Tank (120 gallons)
- (9) One (1) Weigh Tank (60 gallons)

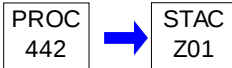
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 442

Source Name: CRUX VENTILATION (CROYDON)

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

VOC emissions from the CRUX Ventilation (Source 442) shall not exceed 2,400 lbs per 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following parameters for the CRUX Ventilation (Source 442):

- (i) The material throughput per batch;
- (ii) The hours of operation when operating;
- (iii) The VOC emission calculations for the source on a monthly and twelve (12) month rolling sum, based on material usage.

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain records of the following parameters for the CRUX Ventilation (Source 442):

- (i) The material throughput per batch;
- (ii) The hours of operation when operating;
- (iii) The VOC emissions from the source on a monthly and twelve (12) month rolling sum.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

Maintain the following records to ensure compliance with the following Leak Detection and Repair (LDAR) Program requirements for CRUX Ventilation (Source 442).

- (i) Record of all repairs made including the date of repair(s), type(s) and reason(s) for the repair(s) made,
- (ii) Changes in the base number of components due to major equipment changes (i.e., removals or additions of entirely

**SECTION D. Source Level Requirements**

new processes),

(iii) Any need to have extensions of repair date beyond fifteen (15) days.

(iv) Leak rate methodology and calculations.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

(a) The permittee shall implement a Leak Detection and Repair (LDAR) Program for the following sources associated with CRUX Ventilation (Source ID: 442):

(i) Any storage tank or process storing or transferring fluids that have at least 10% by weight VOCs with a vapor pressure of 0.044 psia at 68°F.

(b) The LDAR Program shall be implemented at least monthly and operated and maintained in accordance with industry practices and manufacturer's specifications.

(c) The following sources are exempted from the LDAR requirements:

(i) Any processes that operate under vacuum conditions,

(ii) Any processes that perform full LDAR programs as required by other regulations,

(iii) Any storage tanks that meet or must meet the visual inspection and recordkeeping of Spill Prevention, Containment and Countermeasure (SPCC) and the Oil Pollution Act of 1990 (OPA).

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95 and § 127.512(h).]

The following RACT (Reasonably Available Control Technology) determinations shall be implemented for the CRU and CRUX Ventilation: Operation of the drain tanks with good operating practices and a visual leak detection and repair (LDAR) program for the building fugitives are considered RACT.

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

(a) Definition of the term "Leak": Any visible leakage from a seal including spraying, misting, clouding, ice formation and polymer formation on the monomer handling lines.

Note: Polymer formation does not include final product polymer formation around final product handling areas.

Note: Residual material located in the vicinity of routinely used sample ports does not constitute a leak, unless the sample port is actively leaking.

**SECTION D. Source Level Requirements**

(b) Definition of the term "Repair": Equipment that is adjusted, or otherwise altered in order to eliminate a leak as indicated by cessation of any visible leakage from the seal including spraying, misting, clouding, ice formation and polymer on monomer handling lines.

Note: If a repair is identified, the repair must be made within fifteen (15) days unless a complete shutdown or parts delivery is required.

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

**SECTION D. Source Level Requirements**

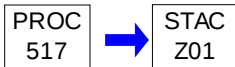
Source ID: 517

Source Name: BLDG 30 PROCESS EMISSIONS

Source Capacity/Throughput:

N/A

FUGITIVE VOC EMISSIONS

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

VOC emissions from Bldg. 30 Processes (Source 517) shall not exceed 18,867 lbs per 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate VOC emissions for the Bldg. 30 Process Emissions (Source 517) on a monthly and 12-month rolling basis.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor, on a monthly basis, all fugitive emissions sources that are piping, pumps, valves or other equipment associated with the storage and delivery of raw materials to the process.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain monthly records of the VOC emissions for the Bldg. 30 Process Emissions (Source 517), including 12-month rolling sums.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

The permittee shall comply with the Leak Detection and Repair (LDAR) Program requirements for Bldg. 30 Fugitive Emissions (Source ID: 517) by maintaining records of the following:

- (a) Records of all repairs made including the date of repairs(s), type(s) and reason(s) for the repair(s) made,
- (b) Changes in the base number of components due to major equipment changes (i.e., removals or additions of entirely new processes),
- (c) Any need to have extensions of repair date beyond fifteen (15) days,
- (d) Leak rate methodology and calculations.

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

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

VI. WORK PRACTICE REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

(a) Leak Detection and Repair (LDAR) Program (Applicability). The permittee shall implement a visual Leak Detection and Repair (LDAR) Program for the Bldg. 30 Process Emissions (Source ID: 517):

(i) Any storage tank or process storing or transferring fluids that have at least 10% by weight VOCs with a vapor pressure of 0.044 psia at 68°F.

(b) The LDAR Program shall be implemented at least monthly and operated and maintained in accordance with industry practices and manufacturer's specifications.

(c) The following sources are exempted from the LDAR requirements:

(i) Any processes that operate under vacuum conditions,

(ii) Any processes that perform full LDAR programs as required by other regulations,

(iii) Any storage tanks that meet or must meet the visual inspection and recordkeeping of Spill Prevention, Containment and Countermeasure (SPCC) and the Oil Pollution Act of 1990 (OPA).

VII. ADDITIONAL REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The following equipment is associated with Bldg. 30 Process Emissions (Source 517): Spot Vent Systems 151 and 3525.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) Definition of the term "Leak": Any visible leakage from a seal including spraying, misting, clouding, ice formation and polymer formation on the monomer handling lines.

Note: Polymer formation does not include final product polymer formation around final product handling areas.

Note: Residual material located in the vicinity of routinely used sample ports does not constitute a leak, unless the sample port is actively leaking.

(b) Definition of the term "Repair": Equipment that is adjusted, or otherwise altered in order to eliminate a leak as indicated by cessation of any visible leakage from the seal including spraying, misting, clouding, ice formation and polymer on monomer handling lines.

Note: If a repair is identified, the repair must be made fifteen (15) days unless a complete shutdown or parts delivery is required.

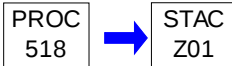
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: 518

Source Name: POLYMERS AREAS SOURCES

Source Capacity/Throughput:

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

VOC emissions from the Quality Control Lab shall not exceed 300 lbs per twelve (12) month rolling sum.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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.

002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from the quality control lab shall be included as part of the facility-wide source report required Section C.

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95 RACT I and 127.512(h).]

The permittee shall implement good operating procedures, consistent with environmental regulations, in the quality control laboratory and in the shipping department.

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

**SECTION D. Source Level Requirements**

Source ID: 743A

Source Name: WASTEWATER TREATMENT PLANT

Source Capacity/Throughput: 125.000 Th Gal/HR WASTE WATER

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The VOC emissions from the wastewater treatment plant (WWTP) shall not exceed 5,000 lbs per 12-month rolling sum.

II. TESTING REQUIREMENTS.

002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.145]

Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater**Process wastewater provisions--test methods and procedures to determine compliance.**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.145(f) and (g).]

(a) This paragraph applies to the use of performance tests that are conducted for open or closed aerobic biological treatment processes to demonstrate compliance with the mass removal provisions for Table 8 and/or Table 9 compounds. The compliance options are specified in 40 CFR § 63.138(f). The permittee shall comply with the requirements specified as follows:

(1) Concentration in wastewater stream. The concentration of Table 8 and/or Table 9 compounds shall be determined as provided in this paragraph. Concentration measurements to determine RMR shall be taken at the point of determination or downstream of the point of determination with adjustment for concentration change made according to 40 CFR § 63.144(b)(6). Concentration measurements to determine AMR shall be taken at the inlet and outlet to the treatment process and as provided in 40 CFR § 63.145(a)(7) for a series of treatment processes. Wastewater samples shall be collected using sampling procedures which minimize loss of organic compounds during sample collection and analysis and maintain sample integrity per 40 CFR § 63.144(b)(5)(ii). The method shall be an analytical method for wastewater which has that compound as a target analyte. Samples may be grab samples or composite samples. Samples shall be taken at approximately equally spaced time intervals over a 1-hour period. Each 1-hour period constitutes a run, and the performance test shall consist of a minimum of 3 runs. Concentration measurements based on Method 305 shall be adjusted by dividing each concentration by the compound-specific Fm factor listed in Table 34 of 40 CFR Part 63 Subpart G. Concentration measurements based on methods other than Method 305 shall not adjust by the compound-specific Fm factor listed in Table 34 of 40 CFR Part 63 Subpart G.

(2) Flow rate. Flow rate measurements to determine RMR shall be taken at the point of determination or downstream of the point of determination with adjustment for flow rate change made according to 40 CFR § 63.144(c)(4). Flow rate measurements to determine AMR shall be taken at the inlet and outlet to the treatment process and as provided in 40 CFR § 63.145(a)(7) for a series of treatment processes. Flow rate shall be determined using inlet and outlet flow measurement devices. Where the outlet flow is not greater than the inlet flow, a flow measurement device shall be used, and may be used at either the inlet or outlet. Flow rate measurements shall be taken at the same time as the concentration measurements.

(3) Calculation of RMR for open or closed aerobic biological treatment processes. The required mass removal of Table 8 and/or Table 9 compounds for each Group 1 wastewater stream shall be calculated using Equation No. WW11 listed in 40 CFR § 63.145(f)(3).

(4) The required mass removal is calculated by adding together the required mass removal for each Group 1 wastewater

**SECTION D. Source Level Requirements**

stream to be combined for treatment.

(5) Actual mass removal calculation procedure for open or closed aerobic biological treatment processes. The actual mass removal (AMR) shall be calculated using Equation No. WW12 as specified in 40 CFR § 63.145(f)(5)(i) when the performance test is performed across the open or closed aerobic biological treatment process only. If compliance is being demonstrated in accordance with § 63.145(a)(7)(i), the AMR for the series shall be calculated using Equation No. WW13 in 40 CFR § 63.145(f)(5)(ii). (This equation is for situations where treatment is performed in a series of treatment processes connected by hard-piping.) If compliance is being demonstrated in accordance with 40 CFR § 63.145(a)(7)(ii), the AMR for the biological treatment process shall be calculated using Equation No. WW12 in 40 CFR § 63.145(f)(5)(i). The AMR for the biological treatment process used in a series of treatment processes calculated using Equation No. WW12 shall be added to the AMR determined for each of the other individual treatment processes in the series of treatment processes.

(i) Calculate AMR for the open or closed aerobic biological treatment process using Equation No. WW12 of 40 CFR § 63.145(f)(5)(i).

(ii) Calculate AMR across a series of treatment units where the last treatment unit is an open or closed aerobic biological treatment process using Equation No. WW13 of 40 CFR § 63.145(f)(5)(ii).

(6) Compare RMR to AMR. Compare the RMR calculated in Equation No. WW11 to the AMR calculated in either Equation WW12 or WW13, as applicable. Compliance is demonstrated if the AMR is greater than or equal to the RMR.

(b) This paragraph applies to performance tests that are conducted for open or closed aerobic biological treatment processes to demonstrate compliance with the 95-percent mass removal provisions for Table 8 and/or Table 9 compounds. The compliance option is specified in 40 CFR § 63.138(g). The RMR for this option is 95-percent mass removal. The owner or operator shall comply with the requirements as follows:

(1) The permittee shall comply with the requirements specified in paragraphs (a)(1), (a)(2), and (a)(5) of this condition to determine AMR. References to Group 1 wastewater streams shall be deemed Group 1 and Group 2 wastewater streams for the purposes of this paragraph.

(2) Compare RMR to AMR. Compliance is demonstrated if the AMR is greater than or equal to RMR.

003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.145]

Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater Process wastewater provisions--test methods and procedures to determine compliance.

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.145(h).]

Site-specific fraction biodegraded (Fbio): The compounds listed in Table 9 of 40 CFR Part 63 Subpart G are divided into two sets for the purpose of determining whether Fbio must be determined, and if Fbio must be determined, which procedures may be used to determine compound-specific kinetic parameters. These sets are designated as lists 1 and 2 in Table 36 of 40 CFR Part 63 Subpart G.

(a) Performance test exemption: If a biological treatment process meets the requirements specified in paragraph (a)(1) and (a)(2) of this condition, the permittee is not required to determine Fbio and is exempt from the applicable performance test requirements specified in 40 CFR § 63.138.

(1) The biological treatment process meets the definition of "enhanced biological treatment process" in 40 CFR § 63.111.

(2) At least 99 percent by weight of all compounds on Table 36 of 40 CFR Part 63 Subpart G that are present in the aggregate of all wastewater streams using the biological treatment process to comply with 40 CFR § 63.138 are compounds on list 1 of Table 36 of 40 CFR Part 63 Subpart G.

(b) Fbio determination: If a biological treatment process does not meet the requirement specified in paragraph (a)(1) of this condition, the permittee shall determine Fbio for the biological treatment process using the procedures in Appendix C to Part 63, and paragraph (b)(2) of this condition. If a biological treatment process meets the requirements of paragraph (a)(1) of this condition but does not meet the requirement specified in paragraph (a)(2) of this condition, the permittee shall

**SECTION D. Source Level Requirements**

determine Fbio for the biological treatment process using the procedures in Appendix C to Part 63, and paragraph (b)(1) of this condition.

(1) Enhanced biological treatment processes: If the biological treatment process meets the definition of "enhanced biological treatment process" in 40 CFR § 63.111 and the wastewater streams include one or more compounds on list 2 of Table 36 of 40 CFR Part 63 Subpart G that do not meet the criteria in paragraph (a)(2) of this paragraph, the permittee shall determine fbio for the list 2 compounds using any of the procedures specified in Appendix C of 40 CFR part 63. (The symbol "fbio" represents the site specific fraction of an individual Table 8 or Table 9 compound that is biodegraded.) The permittee shall calculate fbio for the list 1 compounds using the defaults for first order biodegradation rate constants (K1) in Table 37 of 40 CFR Part 63 Subpart G and follow the procedure explained in form III of Appendix C, 40 CFR Part 63, or any of the procedures specified in Appendix C, 40 CFR Part 63.

(2) Biological treatment processes that are not enhanced biological treatment processes: For biological treatment processes that do not meet the definition for "enhanced biological treatment process" in 40 CFR § 63.111, the permittee shall determine the fbio for the list 1 and 2 compounds using any of the procedures in Appendix C to 40 CFR Part 63, except procedure 3 (inlet and outlet concentration measurements). (The symbol "fbio" represents the site specific fraction of an individual Table 8 or Table 9 compound that is biodegraded.)

III. MONITORING REQUIREMENTS.**# 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.151]**

Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
Initial notification and implementation plan.

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.151(f).]

The permittee shall monitor the concentration of mixed liquor suspended solids (MLSS) in the biological reactor of the WWTP three times each week to produce a bi-weekly average to determine compliance with the 95% RMR reduction requirement of 40 CFR § 63.138(g).

IV. RECORDKEEPING REQUIREMENTS.**# 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.151]**

Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
Initial notification and implementation plan.

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.151(f).]

The permittee shall maintain records of all monitoring data related to the concentration of mixed liquor suspended solids (MLSS) in the biological reactor of the WWTP producing a bi-weekly average to determine compliance with the 95% RMR reduction requirement of 40 CFR § 63.138(g).

V. REPORTING REQUIREMENTS.**# 006 [25 Pa. Code §127.441]**

Operating permit terms and conditions.

The VOC emissions from the wastewater treatment plant (WWTP) will be included as part of the facility-wide source report required in Section C.

VI. WORK PRACTICE REQUIREMENTS.**# 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.132]**

Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
Process wastewater provisions--general.

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.132(g)(2), (3),

**SECTION D. Source Level Requirements**

and (4).]

(a) The owner or operator of the wastewater stream may not transfer the wastewater stream or residual unless the transferee has submitted to the EPA a written certification that the transferee will manage and treat any Group 1 wastewater stream or residual removed from a Group 1 wastewater stream received from a source subject to the requirements of 40 CFR Part 63 Subpart G in accordance with the requirements of either 40 CFR §§ 63.133 through 63.147, or § 63.102(b) of subpart F, or subpart D of this part if alternative emission limitations have been granted the transferor in accordance with those provisions. The certifying entity may revoke the written certification by sending a written statement to the EPA and the owner or operator giving at least 90 days notice that the certifying entity is rescinding acceptance of responsibility for compliance with the regulatory provisions listed in this paragraph. Upon expiration of the notice period, the owner or operator may not transfer the wastewater stream or residual to the treatment operation.

(b) By providing this written certification to the EPA, the certifying entity accepts responsibility for compliance with the regulatory provisions listed above in paragraph (a) with respect to any shipment of wastewater or residual covered by the written certification. Failure to abide by any of those provisions with respect to such shipments may result in enforcement action by the EPA against the certifying entity in accordance with the enforcement provisions applicable to violations of these provisions by owners or operators of sources.

(c) Written certifications and revocation statements, to the EPA from the transferees of wastewater or residuals shall be signed by the responsible official of the certifying entity, provide the name and address of the certifying entity, and be sent to the appropriate EPA Regional Office at the addresses listed in 40 CFR Section 63.13. Such written certifications are not transferable by the treater.

008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.133]

Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
Process wastewater provisions--wastewater tanks.

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.133(a)(1) and (2).]

(a) The permittee shall operate and maintain a fixed roof except that if the wastewater tank is used for heating wastewater, or treating by means of an exothermic reaction or the contents of the tank is sparged, the permittee shall comply with the requirements specified in paragraph (b) of this condition.

(b) The permittee shall operate and maintain one of the emission control techniques listed in paragraphs (b)(1) through (b)(4) of this condition:

(1) A fixed roof and a closed vent system that routes the organic hazardous air pollutants vented from the wastewater tank to a control device.

(2) A fixed roof and an internal floating roof that meets the requirements specified in § 63.119(b) of Subpart G.

(3) An external floating roof that meets the requirements specified in §§ 63.119(c), 63.120(b)(5), and 63.120(b)(6) of Subpart G.

(4) An equivalent means of emission limitation. Determination of equivalence to the reduction in emissions achieved by the requirements of this condition will be evaluated according to § 63.102(b) of Subpart F. The determination will be based on the application to the Administrator which shall include the information specified in either paragraph (i) or (ii) of this condition:

(i) Actual emissions tests that use full-size or scale-model wastewater tanks that accurately collect and measure all organic hazardous air pollutants emissions from a given control technique, and that accurately simulate wind and account for other emission variables such as temperature and barometric pressure, or

(ii) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.

**SECTION D. Source Level Requirements****# 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.133]****Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater****Process wastewater provisions--wastewater tanks.**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.133(f).]

The permittee shall inspect each wastewater tank initially, and semi-annually thereafter, for improper work practices in accordance with 40 CFR § 63.143. For wastewater tanks, improper work practice includes, but is not limited to, leaving open any access door or other opening when such door or opening is not in use.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.133]**Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater****Process wastewater provisions--wastewater tanks.**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.133(g).]

The permittee shall inspect each wastewater tank for control equipment failures for wastewater tanks which include, but are not limited to, the conditions specified as follows:

- (a) The floating roof is not resting on either the surface of the liquid or on the leg supports.
- (b) There is stored liquid on the floating roof.
- (c) A rim seal is detached from the floating roof.
- (d) There are holes, tears, cracks or gaps in the rim seal or seal fabric of the floating roof.
- (e) There are visible gaps between the seal of an internal floating roof and the wall of the wastewater tank.
- (f) There are gaps between the metallic shoe seal or the liquid mounted primary seal of an external floating roof and the wall of the wastewater tank that exceed 212 square centimeters per meter of tank diameter or the width of any portion of any gap between the primary seal and the tank wall exceeds 3.81 centimeters.
- (g) There are gaps between the secondary seal of an external floating roof and the wall of the wastewater tank that exceed 21.2 square centimeters per meter of tank diameter or the width of any portion of any gap between the secondary seal and the tank wall exceeds 1.27 centimeters.
- (h) Where a metallic shoe seal is used on an external floating roof, one end of the metallic shoe does not extend into the stored liquid or one end of the metallic shoe does not extend a minimum vertical distance of 61 centimeters above the surface of the stored liquid.
- (i) A gasket, joint, lid, cover, or door has a crack or gap, or is broken.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.138]**Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater****Process wastewater provisions--treatment processes.**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.138(g).]

(a) The permittee shall achieve a required mass removal of at least 95 percent for all Table 9 compounds if using biological treatment for any wastewater stream that is Group 1 for Table 9 compounds. All Group 1 and Group 2 wastewater streams entering a biological treatment unit that are from chemical manufacturing process units subject to 40 CFR Part 63 Subpart F shall be included in the demonstration of the 95-percent mass removal.

(b) The permittee shall comply with the following requirements:

(1) Except as provided in paragraph (4) of this condition, the permittee shall ensure that all Group 1 and Group 2 wastewater streams from chemical manufacturing process units subject to 40 CFR Part 63 Subpart G entering a biological treatment unit are treated to destroy at least 95-percent total mass of all Table 8 and/or Table 9 compounds.

(2) For open biological treatment processes, compliance shall be determined using the procedures specified in 40 CFR § 63.145(g). For closed aerobic biological treatment processes compliance shall be determined using the procedures specified in 40 CFR § 63.145 (e) or (g). For closed anaerobic biological treatment processes compliance shall be

**SECTION D. Source Level Requirements**

determined using the procedures specified in 40 CFR § 63.145(e).

(3) For each treatment process or waste management unit that receives, manages, or treats wastewater streams, from the point of determination of each Group 1 or Group 2 wastewater stream to the biological treatment unit, the owner or operator shall comply with 40 CFR §§ 63.133 through § 63.137 for control of air emissions. The term Group 1, whether used alone or in combination with other terms, in 40 CFR § 63.133 through § 63.137 shall mean both Group 1 and Group 2.

(4) If a wastewater stream is in compliance with the requirements in 40 CFR § 63.138(b)(1), (c)(1), (d), (e), (f), or (h) before entering the biological treatment unit, the hazardous air pollutants mass of that wastewater is not required to be included in the total mass flow rate entering the biological treatment unit for the purpose of demonstrating compliance.

VII. ADDITIONAL REQUIREMENTS.

012 [25 Pa. Code §127.411]

Content of applications.

The Wastewater Treatment Plant is located between Bristol and Croydon. It treats water from Bristol, Croydon, and Trinseo.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from the existing wastewater treatment plant (WWTP) units as listed below will be controlled by the Carbon Adsorption System (Source C03A) as approved:

- (1) Three (3) equalization Tanks (T-1, T-2, and T-3).
- (2) Special Events Tank (T-4).
- (3) Splitter Box (SB-1)

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

**SECTION D. Source Level Requirements**

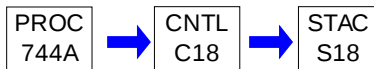
Source ID: 744A

Source Name: RAW MATERIAL STORAGE TANKS (BRISTOL)

Source Capacity/Throughput:

N/A

VOC EMISSIONS FROM TANKS

**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.**

Monitor the material throughput per batch for the Raw Material Storage Tanks (Source 744A).

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

(a) To ensure compliance with the Leak Detection and Repair (LDAR) Program requirements for storage tanks, the permittee shall maintain records of the following:

- (i) Record of all repairs made including date of repair(s), type(s) and reason(s) for the repair(s) made;
- (ii) Changes in the base number of components due to major equipment changes (i.e., removals or additions of entirely new processes);
- (iii) Any need to have extensions of repair date(s) beyond fifteen (15) days;
- (iv) Leak rate methodology and calculations.

(b) The permittee shall maintain these records on site, in a format approved by the Department and shall make them available upon request.

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

(a) Maintain records of the material throughput per batch for the Raw Material Storage Tanks (Source 744A).

(b) Maintain records of VOC emissions from the Raw Material Storage Tanks (Source 744A). Batch production records shall be used in conjunction with the permittee's SARACALC methodology to determine the monthly VOC emissions from these sources.

004 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

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

**SECTION D. Source Level Requirements**

(a) The MMA Storage Tank #405 storage tank associated with the Raw Materials Storage Tanks (Source ID: 744A) is subject to the provisions of 40 CFR § 60.116b.

(b) The permittee shall keep copies of all records required by this regulation, except for the record required by paragraph (c), for at least two (2) years. The record required by paragraph (c) will be kept for the life of the source.

(c) The owner or operator of each storage vessels as specified in 40 CFR § 60.110b(a) shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of the storage vessel.

(d) Except as provided in paragraphs (f) and (g), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 cubic meters (m³) storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kilopascals (kPa) or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

(e) Except as provided in paragraph (g), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the EPA Administrator within thirty (30) days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

(f) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

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

(2) For liquids other than crude oil or refined petroleum, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference-see 40 CFR § 60.17); or

(iii) Measured by an appropriate method approved by the EPA Administrator; or

(iv) Calculated by an appropriate method approved by the EPA Administrator.

(g) The permittee of each vessel equipped with a closed vent system and control device meeting the specification of 40 CFR § 60.112b or with emissions reductions equipment as specified in 40 CFR § 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (d) and (e).

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 §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

(a) Leak Detection and Repair (LDAR) Program (Applicability). The permittee shall implement a visual Detection and Repair

**SECTION D. Source Level Requirements**

(LDAR) Program for Raw Material Storage Tanks (Source ID: 744A):

(i) Any storage tank or process storing or transferring fluids that have at least 10% by weight VOCs with a vapor pressure of 0.044 psia at 68°F.

(b) The LDAR Program shall be implemented at least monthly and operated and maintained in accordance with industry practices and manufacturer's specifications.

(c) The following sources are exempted from the LDAR requirements:

(i) Any processes that operate under vacuum conditions,

(ii) Any processes that perform full LDAR programs as required by other regulations,

(iii) Any storage tanks that meet or must meet the visual inspection and recordkeeping of Spill Prevention, Containment and Countermeasure (SPCC) and the Oil Pollution Act of 1990 (OPA).

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 PA. Code § 127.512(h).]

MMA Tank #405 shall not be operated unless the Regenerative Thermal Oxidizer (Source C18) is properly operating in accordance with the parameters of this Title V Operating Permit.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The permittee shall ensure compliance with the following requirements for the Raw Material Storage Tanks (Source 744A):

(a) Good operating practices with no additional control is considered RACT.

(b) RACT shall be compliance with 25 Pa. Code §§ 129.56 and 129.57.

(c) These above- ground fixed-roof storage tanks include Methyl Methacrylate (MMA) Tank 405 and the HDI Tank (Hexamethylene-1,6 Diisocyanate).

008 [25 Pa. Code §129.57]

Storage tanks less than or equal to 40,000 gallons capacity containing VOCs

(a) The provisions of this regulation apply to above ground stationary storage tanks with a capacity equal to or greater than 2,000 gallons but less than or equal 40,000 gallons, which contain volatile organic compounds with vapor pressure greater than 1.5 psia (10.5 kilopascals) under actual storage conditions. Storage tanks subject to this regulation shall have pressure relief valves which are maintained in good operating condition and which are set to release at no less than 0.7 psig (4.8 kilopascals) of pressure or 0.3 psig (2.1 kilopascals) of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department.

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

(c) Petroleum liquid storage vessels which are used to store produced crude oil and condensate prior to prior to lease custody transfer shall be exempt from the requirements of this regulation.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 009 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 95.]

Definition: Leak - Any visible leakage from a seal including spraying, misting, clouding, ice formation, and polymer formation on the monomer handling lines.

Note: Polymer formation does not include final product polymer formation around final product handling areas.

Note: Residual material located in the vicinity of routinely used sample ports does not constitute a leak, unless the sample port is actively leaking.

Definition: Repair - Equipment that is adjusted, or otherwise altered in order to eliminate a leak as indicated by cessation of any visible leakage from the seal including spraying, misting, clouding, ice formation and polymer on monomer handling lines.

Note: If a repair is identified, the repair must be made within fifteen (15) days unless a complete shutdown or parts delivery is required.

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

**SECTION D. Source Level Requirements**

Source ID: 744B

Source Name: VOL STORAGE TANKS (BRISTOL AND CROYDON)

Source Capacity/Throughput:

N/A

FUGITIVE VOCS

PROC
744BSTAC
Z01**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

VOC emissions from the volatile organic liquids (VOL) Storage Tanks (Source 744B) shall not exceed the following:

- (a) Storage Tank Vents (Polymers Area): 7,249 lbs as a twelve (12) month rolling sum.
- (b) Tank Farm (Raw Material) (Emulsion Area): 4,500 lbs as a twelve (12) month rolling sum.
- (c) Storage Tank and Tank Truck Farm Loading (Finished Product): 458 lbs as a twelve (12) month rolling sum.

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor the material throughput for each tank operating as part of Source 744B.

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

(a) The permittee shall maintain records of the material throughput for each tank contained in Source ID 744B.

(b) The permittee shall maintain records of VOC emissions from the VOL Storage Tanks. Production records shall be used in conjunction with the permittee's SARACALC methodology to determine the monthly VOC emissions from these sources.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

(a) To ensure compliance with the Leak Detection and Repair (LDAR) Program requirements for storage tanks, the permittee shall maintain records of the following:

- (i) Record of all repairs made including date of repair(s), type(s) and reason(s) for the repair(s) made;
- (ii) Changes in the base number of components due to major equipment changes (i.e., removals or additions of entirely new processes);
- (iii) Any need to have extensions of repair date(s) beyond fifteen (15) days;

**SECTION D. Source Level Requirements**

(iv) Leak rate methodology and calculations.

(b) The permittee shall maintain these records on site, in a format approved by the Department and shall make them available upon request.

005 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.116b]

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

Monitoring of operations.

(a) MMA Storage Tank #35 which is associated with the VOL Storage Tanks (Source ID: 744B) is subject to the provisions of 40 CFR § 60.116b.

(b) The permittee shall keep copies of all records required by this regulation, except for the record required by paragraph (c), for at least two (2) years. The record required by paragraph (c) will be kept for the life of the source.

(c) The owner or operator of each storage vessels as specified in 40 CFR § 60.110b(a) shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of the storage vessel.

(d) Except as provided in paragraphs (f) and (g), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 cubic meters (m³) storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kilopascals (kPa) or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.

(e) Except as provided in paragraph (g), the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m³ but less than 151 m³ storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the EPA Administrator within thirty (30) days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range.

(f) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.

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

(2) For liquids other than crude oil or refined petroleum, the vapor pressure:

(i) May be obtained from standard reference texts, or

(ii) Determined by ASTM D2879-83, 96, or 97 (incorporated by reference-see 40 CFR § 60.17); or

(iii) Measured by an appropriate method approved by the EPA Administrator; or

(iv) Calculated by an appropriate method approved by the EPA Administrator.

(g) The permittee of each vessel equipped with a closed vent system and control device meeting the specification of 40 CFR § 60.112b or with emissions reductions equipment as specified in 40 CFR § 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (d) and (e).

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

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

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

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

The permittee shall be in compliance with the following Reasonably Available Control Technology (RACT) requirements for the VOL Storage Tanks (Source 744B):

(i) VOL Storage Tanks (Source 744B): Good operating practices with no additional control is considered RACT. In addition, for the storage tanks which meet the applicability requirements, RACT shall be compliance with 25 Pa. Code §§ 129.56 and 129.57. These above-ground fixed-roof storage tanks may contain raw materials including Methyl Methacrylate (MMA), Ethyl Acrylate (EA), Butyl Acrylate (BA), Styrene, Vinyl Acetate (VA), Acrylonitrile (AN), 2 Ethyl Hexyl Acrylate (2-EHA), and Butyl Lactate (BL).

(ii) Transfer Piping Fugitive Emissions: A visual leak detection and repair (LDAR) program for the transfer piping is considered RACT. The fugitive emission sources are piping, pumps and valves associated with storage and delivery equipment for raw materials.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

Applicability - Leak Detection and Repair (LDAR) Program. The permittee shall implement a Leak Detection and Repair (LDAR) Program for the VOL Storage Tanks (Source ID: 744B):

(a) Any storage tank or process storing or transferring fluids that have at least 10% by weight VOCs with a vapor pressure of 0.044 psia at 68°F.

(b) The LDAR Program shall be implemented at least monthly and operated and maintained in accordance with industry practices and manufacturer's specifications.

(c) The following sources are exempted from the LDAR requirements:

(i) Any processes that operate under vacuum conditions,

(ii) Any processes that perform full LDAR programs as required by other regulations,

(iii) Any storage tanks that meet or must meet the visual inspection and recordkeeping requirements for Spill Prevention Containment and Countermeasures (SPCC) and the Oil Pollution Act or 1990 (OPA).

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

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

Methyl Methacrylate (MMA) Tank #35 and CRU Styrene Tank #269 shall be equipped and operated with a closed-loop vapor recovery system (Source C05).

009 [25 Pa. Code §129.57]**Storage tanks less than or equal to 40,000 gallons capacity containing VOCs**

(a) This regulation applies to above ground stationary storage tanks with a capacity equal to or greater than 2,000 gallons but less than or equal 40,000 gallons, which contain volatile organic compounds with vapor pressure greater than 1.5 psia

**SECTION D. Source Level Requirements**

(10.5 kilopascals) under actual storage conditions. Storage tanks subject to this regulation shall have pressure relief valves which are maintained in good operating condition and which are set to release at no less than 0.7 psig (4.8 kilopascals) of pressure or 0.3 psig (2.1 kilopascals) of vacuum or the highest possible pressure and vacuum in accordance with state or local fire codes or the National Fire Prevention Association guidelines or other national consensus standards acceptable to the Department.

(b) The Acrylonitrile Storage Tank #257 is associated with the VOL Storage Tanks (Source ID: 744B) and is subject to the provisions of 25 Pa. Code § 129.57.

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

The following sources are associated with the Emulsions Area VOL Storage Tanks (Source 744B):

(a) Croydon Tanks:

MMA (Methyl Methacrylate)
EA (Ethyl Acrylate)
Styrene
BA (Butyl Acrylate)
AN (Acrylonitrile)
IBA (Isobutyl Acrylate)
GMAA (Glacial Methacrylic Acid)
Ammonia QM1458
Ammonia Wayfos
2-EHA (2-Ethylhexyl Acrylate)
No. 2 fuel oil

(b) Bristol Polymers Tanks:

Styrene
Butyl Carbitol

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 95.]

Definition: Leak - Any visible leakage from a seal including spraying, misting, clouding, ice formation, and polymer formation on the monomer handling lines.

Note: Polymer formation does not include final product polymer formation around final product handling areas.

Note: Residual material located in the vicinity of routinely used sample ports does not constitute a leak, unless the sample port is actively leaking.

Definition: Repair - Equipment that is adjusted, or otherwise altered in order to eliminate a leak as indicated by cessation of any visible leakage from the seal including spraying, misting, clouding, ice formation and polymer on monomer handling lines.

Note: If a repair is identified, the repair must be made within fifteen (15) days unless a complete shutdown or parts delivery is required.

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

**SECTION D. Source Level Requirements**

Source ID: 744C

Source Name: STORAGE TANKS FUGITIVES (BRISTOL AND CROYDON)

Source Capacity/Throughput:

N/A

FUGITIVE EMISSIONS

PROC
744CSTAC
Z01**I. RESTRICTIONS.****Emission Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

Fugitive VOC emissions from the Polymer and CRU storage tanks, including transfer piping fugitive emissions, shall not exceed 6,280 lbs per 12-month rolling sum.

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor, on a monthly basis, all fugitive VOC emissions sources that are piping, pumps, valves or other equipment associated with the storage and delivery of raw materials to the process.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

(a) To ensure compliance with the Leak Detection and Repair (LDAR) Program requirements for storage tanks, the permittee shall maintain records of the following:

- (i) Record of all repairs made including date of repair(s), type(s) and reason(s) for the repair(s) made;
- (ii) Changes in the base number of components due to major equipment changes (i.e., removals or additions of entirely new processes);
- (iii) Any need to have extensions of repair date(s) beyond fifteen (15) days;
- (iv) Leak rate methodology and calculations.

(b) The permittee shall maintain these records on site, in a format approved by the Department and shall make them available upon request.

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

The permittee shall maintain records of VOC emissions from the Storage Tanks fugitives. Batch production records shall be used in conjunction with the permittee's SARACALC methodology to determine the monthly VOC emissions from these sources.

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

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95.]

Applicability - Leak Detection and Repair (LDAR) Program. The permittee shall implement a Leak Detection and Repair (LDAR) Program for the Storage Tanks Fugitives (Source ID: 744C):

(a) Any storage tank or process storing or transferring fluids that have at least 10% by weight VOCs with a vapor pressure of 0.044 psia at 68°F.

(b) The LDAR Program shall be implemented at least monthly and operated and maintained in accordance with industry practices and manufacturer's specifications.

(c) The following sources are exempted from the LDAR requirements:

(i) Any processes that operate under vacuum conditions,

(ii) Any processes that perform full LDAR programs as required by other regulations,

(iii) Any storage tanks that meet or must meet the visual inspection and recordkeeping requirements for Spill Prevention Containment and Countermeasure (SPCC) and the Oil Pollution Act of 1990 (OPA).

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

[Additional authority for this permit condition is also derived from 25 Pa. Code §§ 129.91-95 and § 127.512(h).]

Permittee shall be in compliance with the following RACT (Reasonably Available Control Technology) determination for the Polymer and CRU storage tanks fugitive emissions, including transfer piping fugitive emissions: A visual leak detection and repair (LDAR) program for the transfer piping is considered RACT.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 129.91 - 95.]

Definition: Leak - Any visible leakage from a seal including spraying, misting, clouding, ice formation, and polymer formation on the monomer handling lines.

Note: Polymer formation does not include final product polymer formation around final product handling areas.

Note: Residual material located in the vicinity of routinely used sample ports does not constitute a leak, unless the sample port is actively leaking.

Definition: Repair - Equipment that is adjusted, or otherwise altered in order to eliminate a leak as indicated by cessation of any visible leakage from the seal including spraying, misting, clouding, ice formation and polymer on monomer handling lines.

Note: If a repair is identified, the repair must be made within fifteen (15) days unless a complete shutdown or parts delivery

**SECTION D. Source Level Requirements**

is required.

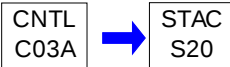
***** Permit Shield in Effect. *****

**SECTION D. Source Level Requirements**

Source ID: C03A

Source Name: WWTP CARBON ADSORPTION SYSTEM

Source Capacity/Throughput: 90,000.000 Gal/HR WASTEWATER

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

The total organic hazardous air pollutant (HAP) outlet concentration from the WWTP Carbon Adsorption System (Source C03A) shall be less than 20 parts per million, or the total organic HAP emissions vented to the control device shall be reduced by 95% by weight, whichever is less stringent.

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

The permittee shall perform testing as per Work Practice Standard Conditions #004 - 006 to verify compliance of the total organic HAP concentration on a monthly basis.

[This condition streamlines compliance with the requirement to monitor total organic HAP outlet concentration at an interval not greater than 20% of the design carbon replacement interval; design interval = 17 months.]

III. MONITORING REQUIREMENTS.**# 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.2450]****Subpart FFFF - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing****What are my general requirements for complying with this subpart?**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.2450(e)(7)(ii) and (iii)(B).]

(a) The permittee shall monitor the HAP or total organic compound (TOC) concentration through a sample port at the outlet of the first adsorber bed in series according to the schedule in paragraph (b). The permittee shall measure the concentration of HAP or TOC using either a portable analyzer, in accordance with Method 21 of 40 CFR part 60, appendix A-7, using methane, propane, isobutylene, or the primary HAP being controlled as the calibration gas or Method 25A of 40 CFR part 60, appendix A-7, using methane, propane, or the primary HAP being controlled as the calibration gas.

(b) Based on the adsorber bed life established according to 40 CFR § 63.2450(e)(7)(i) and the date the adsorbent was last replaced, conduct monitoring to detect breakthrough at least monthly if the adsorbent has more than 2 months of life remaining, at least weekly if the adsorbent has between 2 months and 2 weeks of life remaining, and at least daily if the adsorbent has 2 weeks or less of life remaining.

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

(a) The permittee shall maintain records of the initial, annual visual inspection, and annual Method 21 PID inspection results. The visual inspection data recorded will be "leak/no leak".

(b) The permittee shall maintain records of the monthly PID testing results.

**SECTION D. Source Level Requirements**

(c) All associated records will be maintained on site, with the results of the annual inspections.

005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.998]**Subpart SS - National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process****Recordkeeping requirements.**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.998(a)(2)(ii)(C)]

The permittee shall record the following information:

(a) Where a carbon adsorber is used as the control device, the total regeneration stream mass flow during each carbon-bed regeneration cycle during the period of the performance test, and temperature of the carbon-bed after each regeneration during the period of the performance test (and within 15 minutes of completion of any cooling cycle or cycles; or

(b) As an alternative to paragraph (a), the concentration level or reading indicated by an organics monitoring device at the outlet of the carbon adsorber averaged over the same time period as the performance test while the vent stream is normally routed and constituted.

(c) For a carbon adsorber used as a control device, the percent reduction of regulated material achieved by the control device or concentration of regulated material (parts per million by volume, by compound) at the outlet of the control device.

V. REPORTING REQUIREMENTS.

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

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

(a) For the vapor collection system:

(i) In accordance with 40 CFR 63.148(c), calibrate the detection instrument before each use as specified in Method 21 of 40 CFR Part 60, Appendix A.

(ii) In accordance with 40 CFR 63.139, conduct performance test to determine compliance with 95% removal efficiency or 20 ppmv whichever is less restrictive.

(iii) In accordance with 40 CFR 63.148(b) and (c), conduct an initial inspection and annual inspections of visible, audible or olfactory indication of leaks using Method 21 of 40 CFR Part 60, Appendix A

(iv) In accordance with 40 CFR 63.148(d), the leaks, as indicated by an instrument reading greater than 500 parts per million above background or by visual inspections, shall be repaired as soon as practicable.

(b) For liquid streams, in accordance with 40 CFR 63.149, conduct visible inspections for visible, audible, or olfactory indications of leaks for liquid streams whose percent HAP composition is less than 5. In accordance with 40 CFR Part 63, Subpart H, conduct for visible, audible, or olfactory indications of leaks for liquid streams whose percent HAP composition is greater than 5.

(c) A PID reading greater than 500 ppm, using EPA Method 21, or a visible finding is considered a leak.

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

(a) The photoionization device (PID) will be calibrated annually using EPA Method 21 and manufacturer's specifications for

**SECTION D. Source Level Requirements**

proper operation and maintenance of the device.

(b) Knowledgeable operations personnel will perform the annual leak inspection.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

If the outlet concentration of the first parallel set of drums is 20 ppm or higher, the carbon of the first parallel set of drums shall be sent out for carbon refilling leaving the second parallel set of three (3) drums in operation for approximately a two (2) week period. During this time, the remaining three (3) drums will be required to meet the emission limit stated in Condition #001.

009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.139]

Subpart G--National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
Process wastewater provisions--control devices.

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.139]

The permittee shall operate and maintain the control device in accordance with the following requirements:

(a) Whenever organic hazardous air pollutants emissions are vented to the control device which is used to comply with the provisions of 40 CFR Part 63 Subpart G, such control device shall be operating.

(b) The control device shall be designed and operated to reduce the total organic compound emissions, less methane and ethane, or total organic hazardous air pollutants emissions vented to the control device by 95 percent by weight or greater or achieve an outlet total organic compound concentration, less methane and ethane, or total organic hazardous air pollutants concentration of 20 parts per million by volume.

(c) The permittee shall demonstrate that the control device achieves the appropriate conditions by using one or more of the methods specified as follows:

(1) Performance tests conducted using the test methods and procedures specified in 40 CFR § 63.145(i) for control devices other than flares; or

(2) A design evaluation that addresses the vent stream characteristics and control device operating parameters specified as follows:

(i) For a carbon adsorption system that regenerates the carbon bed directly on-site in the control device such as a fixed-bed adsorber, the design evaluation shall consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration level, adsorption cycle time, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total regeneration stream mass or volumetric flow over the period of each complete carbon bed regeneration cycle, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon.

(ii) For a carbon adsorption system that does not regenerate the carbon bed directly on-site in the control device such as a carbon canister, the design evaluation shall consider the vent stream composition, constituent concentrations, mass or volumetric flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.2450]

Subpart FFFF - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

What are my general requirements for complying with this subpart?

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR §

**SECTION D. Source Level Requirements**

63.2450(e)(7)(iii)(A).]

The permittee shall replace the first adsorber in series immediately when breakthrough, as defined in 40 CFR § 63.2550(i), is detected between the first and second adsorber. The original second adsorber (or a fresh canister) will become the new first adsorber and a fresh adsorber will become the second adsorber. For purposes of this paragraph, "immediately" means within 8 hours of the detection of a breakthrough for adsorbers of 55 gallons or less, and within 24 hours of the detection of a breakthrough for adsorbers greater than 55 gallons. The permittee shall monitor at the outlet of the first adsorber within 3 days of replacement to confirm it is performing properly.

011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.983]

Subpart SS - National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process

Closed vent systems.

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.983(b)]

Closed vent system inspection and monitoring requirements: The provisions of 40 CFR Part 63 Subpart SS apply to closed vent systems collecting regulated material from a regulated source. Inspection records shall be generated as specified in 40 CFR § 63.998(d)(1)(iii) and (iv).

(a) Except for any closed vent systems that are designated as unsafe or difficult to inspect as provided in paragraphs (b) and (c) of this condition, each closed vent system shall be inspected as specified in paragraph (a)(1) or (2) of this condition.

(1) If the closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (a)(1)(i) and (ii) of this condition.

- (i) Conduct an initial inspection according to the procedures in 40 CFR § 63.983(c) and
- (ii) Conduct annual inspections for visible, audible, or olfactory indications of leaks.

(2) If the closed vent system is constructed of ductwork, the owner or operator shall conduct an initial and annual inspection according to the procedures in 40 CFR § 63.983(c).

(b) Any parts of the closed vent system that are designated, as described in 40 CFR § 63.998(d)(1)(i), as unsafe to inspect are exempt from the inspection requirements of paragraph (a) of this condition if the conditions of paragraphs (b)(1) and (2) of this condition are met.

(1) The owner or operator determines that the equipment is unsafe-to-inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraph (a) of this condition; and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practical during safe-to-inspect times. Inspection is not required more than once annually.

(c) Any parts of the closed vent system that are designated, as described in 40 CFR § 63.998(d)(1)(i), as difficult-to-inspect are exempt from the inspection requirements of paragraph (a) of this condition if the provisions of paragraphs (c)(1) and (2) apply:

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters (7 feet) above a support surface; and

(2) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years.

(d) For each bypass line, the owner or operator shall comply with paragraph (d)(1) or (2):

(1) If a flow indicator is used, take a reading at least once every 15 minutes.

(2) If the bypass line valve is secured in the non-diverting position, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the nondiverting position, and the vent stream is not diverted

**SECTION D. Source Level Requirements**

through the bypass line.

012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.983]**Subpart SS - National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process****Closed vent systems.**

[Additional authority for this permit condition is also derived from 25 Pa. Code Chapter 124 and 40 CFR § 63.983(c)]

Closed vent system inspection procedures: The provisions of this condition apply to closed vent systems collecting regulated material from a regulated source.

(a) Each closed vent system subject to this paragraph shall be inspected according to the procedures specified in paragraphs (1) through (7) of this condition:

(1) Inspections shall be conducted in accordance with Method 21 of 40 CFR part 60, appendix A, except as specified in this condition.

(2) Except as provided in (a)(3) of this condition, the detection instrument shall meet the performance criteria of Method 21 of 40 CFR part 60, appendix A, except the instrument response factor criteria in section 3.1.2(a) of Method 21 must be for the representative composition of the process fluid and not of each individual VOC in the stream. For process streams that contain nitrogen, air, water, or other inerts that are not organic HAP or VOC, the representative stream response factor must be determined on an inert-free basis. The response factor may be determined at any concentration for which the monitoring for leaks will be conducted.

(3) If no instrument is available at the plant site that will meet the performance criteria of Method 21 specified in paragraph (a)(2) of this condition, the instrument readings may be adjusted by multiplying by the representative response factor of the process fluid, calculated on an inertfree basis as described in paragraph (a)(2) of this condition.

(4) The detection instrument shall be calibrated before use on each day of its use by the procedures specified in Method 21 of 40 CFR part 60, appendix A.

(5) Calibration gases shall be as specified in paragraphs (a)(5)(1) through (3) of this condition.

(1) Zero air (less than 10 parts per million hydrocarbon in air); and

(2) Mixtures of methane in air at a concentration less than 10,000 parts per million. A calibration gas other than methane in air may be used if the instrument does not respond to methane or if the instrument does not meet the performance criteria specified in paragraph (a)(2). In such cases, the calibration gas may be a mixture of one or more of the compounds to be measured in air.

(3) If the detection instrument's design allows for multiple calibration scales, then the lower scale shall be calibrated with a calibration gas that is no higher than 2,500 parts per million.

(6) An owner or operator may elect to adjust or not adjust instrument readings for background. If an owner or operator elects not to adjust readings for background, all such instrument readings shall be compared directly to 500 parts per million to determine whether there is a leak. If an owner or operator elects to adjust instrument readings for background, the owner or operator shall measure background concentration using the procedures in this section. The owner or operator shall subtract the background reading from the maximum concentration indicated by the instrument.

(7) If the owner or operator elects to adjust for background, the arithmetic difference between the maximum concentration indicated by the instrument and the background level shall be compared with 500 parts per million for determining whether there is a leak.

(b) The instrument probe shall be traversed around all potential leak interfaces as described in Method 21 of 40 CFR Part 60, Appendix A.

**SECTION D. Source Level Requirements**

(c) Except as provided in (d), inspections shall be performed when the equipment is in regulated material service, or in use with any other detectable gas or vapor.

(d) Inspections of the closed vent system collecting regulated material from a transfer rack shall be performed only while a tank truck or railcar is being loaded or is otherwise pressurized to normal operating conditions with regulated material or any other detectable gas or vapor.

VII. ADDITIONAL REQUIREMENTS.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

VOC emissions from the existing wastewater treatment plant (WWTP) units as listed below will be controlled by the Carbon Adsorption System (Source C03A) as approved:

- (1) Three(3) equalization tanks (T-1, T-2, and T-3).
- (2) Special Events Tank (T-4).
- (3) Splitter Box (SB-1).

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

**SECTION D. Source Level Requirements**

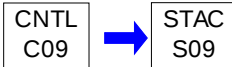
Source ID: C09

Source Name: CATALYTIC OXIDIZER

Source Capacity/Throughput:

N/A

VOC

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

The Catalytic Oxidizer (Source C09), which controls pollutant emissions from the CRU and CRUX Processes, shall achieve 98% destruction efficiency for VOC or an outlet concentration not exceeding 20 ppmv measured as propane.

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

(a) The permittee shall perform a stack test on the Catalytic Oxidizer (Source C09) using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. In accordance with 25 Pa. Code § 139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. Refer to PADEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and the PADEP Source Testing Manual.

(b) The stack test shall, at a minimum, test for VOCs, NO_x, and CO. Tests shall be conducted in accordance with the provisions of EPA Methods 3A, 7E, 10, and 25A, or other Department approved methodology and 25 Pa. Code Chapter 139. Tests shall also be conducted in accordance with the provisions of the current version of the DEP Source Testing Manual and the EPA Clean Air Act National Stack Testing Guidance.

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

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), an electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

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

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

The permittee shall monitor the following operational parameters for the Catalytic Oxidizer (Source C09):

(a) The inlet and outlet temperature continuously. The temperature monitoring shall be performed using a thermocouple or

**SECTION D. Source Level Requirements**

other Department approved method.

(b) Monitor the airflow or fan amperage on a daily basis and prior to routing a source's exhaust to the oxidizer, and before and after subsequent sources are put into service.

IV. RECORDKEEPING REQUIREMENTS.

004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

(a) 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.

(b) The permittee shall record all inspections, repair, and maintenance performed on the monitoring equipment.

(c) 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, probable causes and corrective actions taken for the incidents.

(d) All records shall be kept for a period of five (5) years and shall be made available to the Department upon request.

005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

(a) The permittee shall maintain records of the following operational parameters for the Catalytic Oxidizer (Source C09):

(i) Inlet and outlet temperature continuously;

(ii) The airflow or fan amperage prior to and after putting a source on line that exhausts to this catalytic oxidizer.

(b) Recordkeeping of the above operational parameters may be done with strip charts recorders, data acquisition systems, or manual log entries.

V. REPORTING REQUIREMENTS.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The permittee shall submit reports of all excursions and corrective actions taken, the dates, times, durations and probable causes, every six (6) months.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

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.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

**SECTION D. Source Level Requirements**

(a) The Catalytic Oxidizer (Source C09) shall be operated at a minimum temperature of 550°F measured at the inlet to the catalyst bed.

(b) The permittee shall adhere to the approved minimum temperature for the catalytic oxidizer so that operation at the minimum temperature shall provide reasonable assurance of compliance. A departure from the minimum temperature over any fifteen (15) minute period shall be defined as an excursion.

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

The permittee shall utilize approved QA/QC practices that are adequate to ensure continuing validity of data and proper performance of the control devices. The Compliance Assurance Monitoring (CAM) Plan in Attachment 2 of this operating permit provide details on the practices that will be implemented to assure validity of data and proper performance of this control device.

(a) The permittee shall install detectors or sensors at a Department approved location for obtaining data that is representative of the monitored indicator.

(b) The permittee shall develop verification procedures to confirm that the operational status of the monitoring devices is within the expected range.

(c) The permittee shall calibrate and check the accuracy of the monitoring equipment, according to the manufacturer's recommended procedures. (For example, the thermocouple shall be checked for accuracy (+/- 20°F) each calendar quarter.)

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

The permittee shall maintain all monitoring equipment and stock spare parts as necessary for routine onsite repairs.

011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

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

012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

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 one hundred-eighty (180) days after the issuance of the operating permit.

013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

(a) The permittee shall ensure that the flow into the Catalytic Oxidizer (Source C09) will not exceed its maximum capacity (7,500 scfm) when it is controlling emissions from any source.

(b) The permittee shall ensure that the Catalytic Oxidizer (Source C09) has reached its minimum operating temperature (550°F) prior to placing any affected source on line.

**SECTION D. Source Level Requirements****VII. ADDITIONAL REQUIREMENTS.****# 014 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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 the Department with a copy, 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 the control methods
- (d) Other steps appropriate to correct performance.

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

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

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

- (i) Address the cause of the control device performance problem.
- (ii) 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.

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

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

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

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.

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

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

(a) The permittee shall develop and implement a Quality Improvement Plan (QIP) as expeditiously as practicable if any of the following occur:

- (i) For properly and accurately collected data, accumulated excursions exceed two percent (2%) of the data for the minimum temperature (550°F) at the inlet to the catalyst bed.
- (ii) Six (6) excursions occur in a six (6) month reporting period.
- (iii) The Department determine after review of all reported information that the permittee has not responded appropriately to an excursion.

(b) The QIP plan should be developed within sixty (60) days and the permittee shall provide a copy of the QIP to the

**SECTION D. Source Level Requirements**

Department. Furthermore, the permittee shall notify the Department if the period for completing the improvements contained in the QIP exceeds one hundred-eighty (180) days from the date on which the need to implement the QIP was determined.

(c) 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.

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

**SECTION D. Source Level Requirements**

Source ID: C18

Source Name: REGENERATIVE THERMAL OXIDIZER

Source Capacity/Throughput:

N/A

VOC

Conditions for this source occur in the following groups: GROUP 4

CNTL
C18STAC
S18**I. RESTRICTIONS.****Control Device Efficiency Restriction(s).****# 001 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

The Regenerative Thermal Oxidizer (Source C18) shall have a minimum 98% efficiency for reduction of volatile organic compounds (VOC), including any hazardous air pollutants (HAP), or an outlet concentration not exceeding 20 parts per million (ppmv), measured as propane.

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

(a) The permittee shall perform a stack test on the Regenerative Thermal Oxidizer (Source C18) using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. In accordance with 25 Pa. Code § 139.11(1), performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When determining the VOC destruction efficiency of a thermal oxidizer, the source shall be operated within normal parametric ranges and the oxidizer shall be maintained at the minimum temperature that it will ever be operated. Refer to PADEP Source Testing Program website online for further information related to source testing including Source Testing FAQ and the PADEP Source Testing Manual.

(b) The stack test shall, at a minimum, test for VOCs, NO_x and CO. Tests shall be conducted in accordance with the provisions of Department approved methodology and 25 Pa. Code Chapter 139. Tests shall also be conducted in accordance with the provisions of the current version of the DEP Source Testing Manual and the EPA Clean Air Act National Stack Testing Guidance.

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

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), two copies of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

**SECTION D. Source Level Requirements****III. MONITORING REQUIREMENTS.****# 003 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

- (a) Continuously monitor the inlet, combustion chamber, and outlet temperatures of the Regenerative Thermal Oxidizer (Source C18), when operating. The temperature monitoring shall be performed using a Department approved method.
- (b) Monitor the airflow or fan amperage on a daily basis and prior to routing a source's exhaust to the oxidizer, and before and after subsequent sources are put into service.

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

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

- (a) 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.
- (b) The permittee shall record all inspections, repair, and maintenance performed on the monitoring equipment.
- (c) 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, probable causes and corrective actions taken for the incidents.
- (d) All records shall be kept for a period of five (5) years and shall be made available to the Department upon request.

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

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

- (a) The permittee shall maintain records the following operational parameters for the Regenerative Thermal Oxidizer (Source C18):
 - (i) Inlet, combustion chamber, and outlet temperatures of the RTO continuously, when operating;
 - (ii) The airflow or fan amperage on a daily basis, prior to and after putting a source on line that exhausts to this regenerative thermal oxidizer.
- (b) Recordkeeping for the above operational parameters may be done with strip charts recorders, data acquisition systems, or manual log entries.

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

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

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

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

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

The permittee shall report all monitoring downtime incidents other than downtime associated with zero and span or other

**SECTION D. Source Level Requirements**

daily calibration checks, if applicable, their dates, times and durations, probable causes and corrective actions taken, every six (6) months.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512(h) and 40 CFR §§ 64.3 and 64.6.]

(a) The Regenerative Thermal Oxidizer (Source C18) shall be operated at a minimum temperature of 1,450°F measured at the outlet of the combustion chamber. These temperatures may be modified by the Department based on the performance test conducted on the RTO.

(b) The permittee shall adhere to the minimum temperature for the Regenerative Thermal Oxidizer (Source C18) so that operation at this minimum temperature shall provide reasonable assurance of compliance. A departure from the minimum temperature over any fifteen (15) minute period shall be defined as an excursion.

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

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

The permittee shall utilize approved QA/QC practices that are adequate to ensure continuing validity of data and proper performance of the control devices. The Compliance Assurance Monitoring (CAM) Plan of this operating permit provide details on the practices that will be implemented to assure validity of data and proper performance of this control device.

(a) The permittee shall install detectors or sensors at a Department approved location for obtaining data that is representative of the monitored indicator.

(b) The permittee shall develop verification procedures to confirm that the operational status of the monitoring devices is within the expected range.

(c) The permittee shall calibrate and check the accuracy of the monitoring equipment, according to the manufacturer's recommended procedures. (For example, the thermocouple shall be checked for accuracy (+/- 20°F) each calendar quarter.)

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

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

The permittee shall maintain all monitoring equipment and stock spare parts as necessary for routine onsite repairs.

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

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

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

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

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

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 one hundred-eighty (180) days after the issuance of the permit.

**SECTION D. Source Level Requirements****# 013 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

[Additional authority for this permit condition is also derived from 40 CFR §§ 64.3 and 64.6.]

(a) The permittee shall ensure that the Regenerative Thermal Oxidizer (Source C18) has reached its minimum operating temperature prior to placing any affected source on line.

(b) The permittee shall ensure that the Regenerative Thermal Oxidizer (Source C18) will not exceed its maximum airflow capacity prior to routing the exhaust of any additional sources to it.

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

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

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 the Department with a copy, to include procedures for conducting more frequent, or improved, monitoring in conjunction with one or more of the following:

(i) Improved preventive maintenance practices.

(ii) Process operation changes.

(iii) Appropriate improvements to the control methods.

(iv) Other steps appropriate to correct performance.

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

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

(a) The permittee shall develop and implement a Quality Improvement Plan (QIP) as expeditiously as practicable if any of the following occur:

(i) For properly and accurately collected data, accumulated excursions exceed two percent (2%) of the data for the combustion chamber temperature of the Regenerative Thermal Oxidizer (Source C18).

(ii) Six (6) excursions occur in a six (6) month reporting period. The reporting period(s) are defined in Section C.

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

(b) The QIP plan should be developed within sixty (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 one hundred-eighty (180) days from the date on which the need to implement the QIP was determined.

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

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

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.

**SECTION D. Source Level Requirements****# 017 [25 Pa. Code §127.441]****Operating permit terms and conditions.**

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

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

(i) Address the cause of the control device performance problem.

(ii) 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.

(b) Implementation of a QIP, shall not excuse the permittee from compliance with any existing emission limitation or standard or any existing monitoring, testing, reporting or recordkeeping requirements 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: GROUP 1

Group Description: All Dual Fuel Boilers

Sources included in this group

ID	Name
037	BOILER 400 (CROYDON)
039	BOILER 410 (CROYDON)

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 filterable particulate matter, as measured by Method 5 of 40 CFR 60, Appendix A (or an equivalent method approved by the Department), from a combustion unit in excess of the rate of 0.4 pound per million BTU of heat input (lb/MMBtu), pursuant to 25 Pa. Code § 123.11(a)(1).

[Compliance with this condition is met by using natural gas or No. 2 fuel oil only, as specified herein.]

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

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

The permittee shall ensure that the operation of the two (2) dual-fuel boilers (Sources 037 and 039) shall not result in emissions exceeding the limitations specified below:

- (1) The combined NO_x emissions shall not exceed 27.6 tons as a twelve (12) month rolling sum.
- (2) The combined SO_x emissions shall not exceed 86.20 tons as a twelve (12) month rolling sum.
- (3) The combined VOC emissions shall not exceed 4.25 tons as a twelve (12) month rolling sum.
- (4) The combined CO emissions shall not exceed 62.88 tons as a twelve (12) month rolling sum.
- (5) The combined PM emissions shall not exceed 9.98 tons as a twelve (12) month rolling sum.

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

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

(a) The permittee shall ensure that the NO_x and CO emissions from this combustion unit shall be equal to or less than:

- (i) 30 ppm_{dv} NO_x at 3% O₂ when firing natural gas;
- (ii) 90 ppm_{dv} NO_x at 3% O₂ when firing No. 2 fuel oil; and
- (iii) 400 ppm_{dv} CO at 3% O₂.

(b) Per Section C Testing Conditions, the Department reserves the right to require source testing at any time to verify compliance with the emission limits in paragraph (a) of this Condition.

Fuel Restriction(s).**# 004 [25 Pa. Code §123.22]****Combustion units**

A person may not offer for sale, deliver for use, exchange in trade or permit the use of commercial fuel oil in a combustion unit in the Southeast Pennsylvania air basin if the commercial fuel oil contains sulfur in excess of 15 ppm (0.0015%) by weight sulfur content, in accordance with 25 Pa. Code § 123.22(e)(2) except as allowable in 25 Pa. Code § 123.22(e)(2)(ii)

**SECTION E. Source Group Restrictions.**

and (iii).

[Compliance with this condition assures compliance with the sulfur emission rate of 1.0 lb SO₂/MMBtu as found in 25 Pa. Code § 123.22(e)(1) for the inner zone while firing No. 2 fuel oil.]

[Compliance with this condition assures compliance with the sulfur emission rate of 0.5 lb/MMBtu heat input for oil and the sulfur content of fuel oil requirement of 0.5% sulfur by weight as found in 40 CFR § 60.42c(d).]

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

The permittee shall ensure that this combustion unit burns only natural gas and No. 2 fuel oil.

006 Elective Restriction

{Authority for this permit condition is derived from 25 Pa. Code § 127.35 and 40 CFR § 63.11194(d) and § 63.11195(e).}

(a) This boiler shall burn gaseous fuels not combined with any solid fuels, and liquid fuel only during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel. Periodic testing of liquid fuel shall not exceed a combined total of 48 hours during any calendar year.

(b) Fuel switching from natural gas to solid fossil fuel, biomass, or liquid fuel will result in the facility being subjected to 40 CFR § 63 Subpart JJJJJ: National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers located at Area Sources.

II. TESTING REQUIREMENTS.**# 007 [25 Pa. Code §139.16]****Sulfur in fuel oil.**

(a) The following are applicable to tests for the analysis of commercial fuel oil:

(1) The fuel oil sample for chemical analysis shall be collected in a manner that provides a representative sample. Upon the request of a Department official, the person responsible for the operation of the source shall collect the sample employing the procedures and equipment specified in 25 Pa. Code § 139.4(10) (relating to references).

(2) Test methods and procedures for the determination of viscosity shall be that specified in 25 Pa. Code § 139.4(11) (relating to references). The viscosity shall be determined at 100°F.

(3) Tests methods and procedures for the determination of sulfur shall be those specified in 25 Pa. Code § 139.4(12)--(15) and (20).

(4) Results shall be reported in accordance with the units specified in 25 Pa. Code § 123.22 (relating to combustion units).

(b) The testing requirements in subpart (a) above shall be waived in the event that a delivery receipt from the supplier, showing the percentage sulfur in the fuel, is obtained each time a fuel oil delivery is made.

[Compliance with this streamlined permit condition assures compliance with 40 CFR § 60.42c(h)(1), 40 CFR §§ 60.46c(e) and § 60.48c(f)(1), referring to sulfur dioxide standard, emission monitoring for sulfur dioxide, and testing fuel oil for sulfur content, respectively.]

III. MONITORING REQUIREMENTS.

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

**SECTION E. Source Group Restrictions.****IV. RECORDKEEPING REQUIREMENTS.****# 008 [25 Pa. Code §123.22]****Combustion units**

(a) The permittee shall maintain in electronic or paper format the record provided by the transferor for the shipment of commercial fuel oil as it changed hands to the permittee (ultimate consumer). This record must legibly and conspicuously contain the following information, in accordance with 25 Pa. Code § 123.22(g)(1) and (5):

- (1) The date of the sale or transfer.
- (2) The name and address of the transferor.
- (3) The name and address of the transferee.
- (4) The volume of commercial fuel oil being sold or transferred.
- (5) The identification of the sulfur content of the shipment of commercial fuel oil, determined using the sampling and testing methods specified in 25 Pa. Code § 123.22(f)(1), expressed as the following statement: For a shipment of No. 2 and lighter commercial fuel oil, "The sulfur content of this shipment is 500 ppm or below."
- (6) The location of the commercial fuel oil at the time of transfer.

(b) The permittee shall maintain the applicable records in electronic or paper format for 5 years in accordance with 25 Pa. Code § 123.22(g)(4)(i).

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

(a) In lieu of source testing, the permittee shall demonstrate compliance with pollutant emission limits by calculations using EPA AP-42 emission factors for natural gas and No. 2 fuel oil, or preliminary vendor information on the low-NO_x burners and the level of flue gas recirculation for NO_x reduction, or Best Available Technology (BAT) determinations (e.g., <30 ppmvd NO_x firing natural gas; and <90 ppmvd firing No. 2 fuel oil).

(b) The permittee shall maintain monthly and 12-month rolling sums of the following emissions for the aggregate of Source ID 037 and 039: NO_x, SO_x, VOC, CO, and PM (in tons per year).

V. REPORTING REQUIREMENTS.**# 010 [25 Pa. Code §123.22]****Combustion units**

The permittee shall provide an electronic or written copy of the commercial fuel oil shipment record to the Department upon request, in accordance with 25 Pa. Code § 123.22(g)(4)(ii).

011 Elective Restriction

[Authority for this permit condition is derived from 25 Pa. Code § 127.35 and 40 CFR § 63.11194(d) and § 63.11195(e).]

The permittee shall notify the Department and the USEPA of fuel switching from natural gas to liquid fuel other than liquid fuel consumption during periods of gas curtailment, gas supply emergencies, or periodic testing on liquid fuel.

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

This combustion unit utilizes low-NO_x burners and flue gas recirculation to control NO_x emissions.

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 1A

Group Description: All Boilers - Subpart Dc

Sources included in this group

ID	Name
037	BOILER 400 (CROYDON)
039	BOILER 410 (CROYDON)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

**# 001 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Reporting and recordkeeping requirements.**

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

The permittee shall monitor the amounts of each fuel combusted in this boiler during each month, pursuant to 40 CFR § 60.48c(g).

IV. RECORDKEEPING REQUIREMENTS.

**# 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Reporting and recordkeeping requirements.**

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

The permittee shall record and maintain records of the amounts of each fuel combusted in this boiler during each month, pursuant to 40 CFR § 60.48c(g).

V. REPORTING REQUIREMENTS.

**# 003 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.48c]
Subpart Dc - Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
Reporting and recordkeeping requirements.**

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

(a) The permittee shall submit fuel oil sulfur reports required in 40 CFR § 60.48c(d) to the Department and to the Environmental Protection Agency, pursuant to 40 CFR § 60.48c(d) (fuel oil sulfur limit reports) and 40 CFR § 60.4. Refer to Section B, General Title V Requirements, Condition #022 for EPA correspondence.

(b) The reporting period for the reports required is each six-month period. All reports shall be postmarked by the 30th day following the end of the reporting period, pursuant to 40 CFR § 60.48c(j).

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).

**SECTION E. Source Group Restrictions.**

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 1C

Group Description: Boilers Greater than 30 MMBtu/hr - RACT I

Sources included in this group

ID	Name
037	BOILER 400 (CROYDON)
039	BOILER 410 (CROYDON)

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 §129.93]****Presumptive RACT emission limitations**

The permittee shall maintain records including a certification from the fuel supplier of the type of fuel and for each shipment of distillate oils number 1 or 2, a certification that the fuel complies with ASTM D396-78 "Standard Specifications for Fuel Oils." For residual oils, minimum recordkeeping includes a certification from the fuel supplier of the nitrogen content of the fuel, and identification of the sampling method and sampling protocol, as pursuant to 25 Pa. Code § 129.93(b)(4).

002 [25 Pa. Code §129.93]**Presumptive RACT emission limitations**

The owner and operator shall record all adjustments in a permanently bound logbook or other method approved by the Department. The log shall, at the minimum, contain the following information:

- (a) The date of the tuning procedure.
- (b) The name of the service company and technicians.
- (c) The final operating rate or load.
- (d) The final CO and NOx emission rate.
- (e) The final excess oxygen rate.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.**# 003 [25 Pa. Code §129.93]****Presumptive RACT emission limitations**

The permittee shall perform an annual adjustment in accordance with the EPA document "Combustion Efficiency Optimization Manual for Operators of Oil and Gas-fired Boilers," September 1983 (EPA-340/1-83-023) or equivalent procedures approved in writing by the Department or tune-up on the boiler as per 25 Pa. Code § 129.93(b)(2). The adjustment shall include, at a minimum, the following:

- (a) The owner and operator shall inspect, adjust, clean or replace fuel burning equipment, including burners and moving parts necessary for proper operation as specified by the manufacturer.
- (b) The owner and operator shall inspect the flame pattern or characteristics and carry out adjustments to minimize

**SECTION E. Source Group Restrictions.**

emissions of NO_x and to the extent possible minimize emissions of CO.

(c) The owner and operator shall inspect the air to fuel ratio control system and carry out adjustment necessary to ensure proper calibration and operation as specified by the manufacturer.

(d) The owner and operator shall tune the boiler for low excess oxygen operation. The owner and operator shall record data for subsequent comparison and adjustment.

VII. ADDITIONAL REQUIREMENTS.

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

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 4

Group Description: RTO Control Device Conditions

Sources included in this group

ID	Name
C18	REGENERATIVE THERMAL OXIDIZER

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

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

Carbon monoxide (CO) emissions from the Regenerative Thermal Oxidizer (Source C18) and the associated sources, including fugitive emissions, shall be limited to 6.539 pounds per hour, and 28.64 tons per year, as a twelve (12) month rolling sum.

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

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

Nitrogen oxides (NOx) emissions from the Regenerative Thermal Oxidizer (Source C18) and the associated sources, including fugitive emissions, shall be limited to 1.073 pounds per hour and 4.70 tons per year, as a twelve (12) month rolling sum.

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

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

Volatile organic compounds (VOCs) emissions from the Regenerative Thermal Oxidizer (Source C18) and the associated sources, including fugitive emissions, shall be limited to 5.0 pounds per hour (based on a 24-hour average), and 5.15 tons per year, as a twelve (12) month rolling sum.

II. TESTING REQUIREMENTS.

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

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

The permittee shall monitor the following parameters for the Regenerative Thermal Oxidizer (Source C18):

- (i) The VOC, NOx, and CO emissions on a monthly and twelve (12) rolling basis;
- (ii) Hours of operation on a daily basis, when operating;
- (iii) Amount of natural gas use on a monthly basis;
- (iv) Inlet temperature of the RTO on a continuous basis, when operating;
- (v) Temperature to the combustion chamber on a continuous basis, when operating;
- (vi) Outlet temperature of the RTO on a continuous basis, when operating;
- (vii) Inlet gas lower explosion limit (LEL).

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

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

**SECTION E. Source Group Restrictions.**

(a) The permittee shall maintain records of the following parameters for the Regenerative Thermal Oxidizer (Source C18):

- (i) The VOC, NO_x, and CO emissions, on a monthly and twelve (12) month rolling basis;
- (ii) Hours of operation on a daily basis, when operating;
- (iii) Amount of natural gas use on a monthly basis;
- (iv) Inlet temperature of the RTO on a continuous basis, when operating;
- (v) Temperature to the combustion chamber on a continuous basis, when operating;
- (vi) Outlet temperature of the RTO on a continuous basis, when operating;
- (vii) Inlet gas lower explosion limit (LEL).

(b) The permittee shall maintain these records electronically, or using another Department approved format, for a period of five (5) years and shall make them available upon request.

006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The permittee shall maintain records of all bypasses of the Regenerative Thermal Oxidizer (Source C18).

The permittee shall maintain these records electronically, or using another Department approved format, for a period of five (5) years and shall make them available upon request.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

The permittee shall maintain and operate the Regenerative Thermal Oxidizer (Source C18) in accordance with manufacturer's specifications and good air pollution control practice.

008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

(a) The RTO shall be equipped with a meter to record the usage of natural gas.

(b) The RTO shall be equipped with temperature recording devices. These devices shall continuously display and monitor the inlet, outlet, and combustion chamber temperatures. The RTO shall be equipped with a device to electronically record all three (3) temperatures continuously while the oxidizer is operating.

(c) The RTO shall be equipped with a device to measure the inlet gas lower explosion limit (LEL).

009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

Building 30 Spot Vents and the Volatile Organic Liquid Storage Tanks in the Polymers Area will not be operated without the Regenerative Thermal Oxidizer (Source C18) functioning within the parameters of this Title V Operating Permit.

VII. ADDITIONAL REQUIREMENTS.

010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

**SECTION E. Source Group Restrictions.**

The Regenerative Thermal Oxidizer (RTO) (Source ID: C18) shall meet the following specifications:

- (a) Manufacturer: Durr Environmental, Inc. or equivalent
- (b) Model No.: 1 R15-VI-85V or equivalent
- (c) Type: Thermal
- (d) Preheating: Regenerative
- (e) Design Volume of Gases: 15,000 scfm
- (f) Number of Burners: One (1)
- (g) Fuel: Natural Gas
- (h) Rated Capacity: 3.5 MMBtu/hr

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 5

Group Description: All Exempt Engines

Sources included in this group

ID	Name
106	EXEMPT EXISTING DIESEL ENGINES (PRE-2006)
107	EXEMPT EXISTING NATURAL GAS ENGINE (PRE-2006)
109	EXEMPT NEW DIESEL ENGINE (POST-2006)

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

001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit the aggregate NOx emissions from all exempt engines on site to less than 100 lbs/hr, 1000 lbs/day, 2.75 tons per ozone season and 6.6 tons per year on a 12-month rolling basis.

Operation Hours Restriction(s).

002 [25 Pa. Code §129.112]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.112(c)(10).]

The permittee shall limit the hours of operation (for any reason) to 500 hours per year for each engine, based on a 12-month rolling period.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain monthly records of the aggregate NOx emissions from all exempt engines on site including pounds per hour, pounds per day, ozone season (i.e., the period from May 1 through September 30 of each year) sums, and 12-month rolling sums to demonstrate compliance with the NOx emission limits applicable to this source.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

004 [25 Pa. Code §129.112]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule

[Additional authority for this permit condition is derived from 25 Pa. Code § 129.112(c)(10).]

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

**SECTION E. Source Group Restrictions.****VII. ADDITIONAL REQUIREMENTS.**

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

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

**SECTION E. Source Group Restrictions.**

Group Name: GROUP 5A

Group Description: Existing Engines Subpart ZZZZ (pre-2006)

Sources included in this group

ID	Name
106	EXEMPT EXISTING DIESEL ENGINES (PRE-2006)
107	EXEMPT EXISTING NATURAL GAS ENGINE (PRE-2006)

I. RESTRICTIONS.**Operation Hours Restriction(s).****# 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]****Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines****What are my monitoring, installation, operation, and maintenance requirements?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35, 40 CFR § 63.6603(a), and 40 CFR § 63.6625(h).]

The permittee shall 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.

002 [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?**

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall limit the hours of operation for each emergency engine as follows, according to 40 CFR § 63.6640(f):

(a) No more than one hundred (100) hours per year for maintenance checks and readiness testing as required by the manufacturer, insurance company, or government agency; and

(b) No more than fifty (50) hours in non-emergency situations, but these fifty must be counted toward the 100 hours for maintenance and readiness testing. These 50 hours cannot be used for peak shaving or to generate income by supplying power as part of a financial arrangement with another entity.

(c) There is no time limit while operating the emergency stationary RICE in emergency situations.

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The following recordkeeping requirements apply to each engine, according to 40 CFR § 63.6655(f)(1):

**SECTION E. Source Group Restrictions.**

(a) The permittee shall keep records of the hours of operation of each engine that is recorded through a non-resettable hour meter.

(b) The permittee shall document how many hours are spent for emergency operation (12-month rolling), including what classified the operation as emergency and how many hours are spent for non-emergency operation (12-month rolling).

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?

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

The permittee shall keep records of the maintenance conducted on each emergency generator in order to demonstrate that each engine is operated and maintained according to a maintenance plan, according to 40 CFR § 63.6655(e)(2).

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?

Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35.]

(a) The permittee shall maintain records in a form suitable and readily available for expeditious review according to 40 CFR § 63.10(b)(1).

(b) As specified in 40 CFR § 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

(c) The permittee shall 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 40 CFR § 63.10(b)(1).

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 63.6605]

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?

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

(a) The permittee shall be in compliance with the applicable requirements of 40 CFR Part 63 Subpart ZZZZ at all times.

(b) At all times the permittee shall operate and maintain the 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 the permittee 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 Department 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.

007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

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

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.35]

**SECTION E. Source Group Restrictions.**

The permittee shall operate and maintain each stationary RICE according to the manufacturer's emission-related written instructions or facility-developed 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, according to 40 CFR § 63.6625(e)(3).

VII. ADDITIONAL REQUIREMENTS.

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

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



SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this Title V facility.

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
037	BOILER 400 (CROYDON)		
Emission Limit			Pollutant
62.880	Tons/Yr	12-month rolling sum (combined)	CO
27.600	Tons/Yr	12-month rolling sum (combined)	NOX
30.000	PPMV	3% O2 (natural gas)	NOX
90.000	PPMV	3% O2 (No. 2 F.O.)	NOX
400.000	PPMV	3% O2 (CO)	NOX
86.200	Tons/Yr	12-month rolling sum (combined)	SOX
0.400	Lbs/MMBTU	particulate matter	TSP
9.980	Tons/Yr	12-month rolling sum (combined)	TSP
4.250	Tons/Yr	12-month rolling sum (combined)	VOC
039	BOILER 410 (CROYDON)		
Emission Limit			Pollutant
62.880	Tons/Yr	12-month rolling sum (combined)	CO
27.600	Tons/Yr	12-month rolling sum (combined)	NOX
30.000	PPMV	3% O2 (natural gas)	NOX
90.000	PPMV	3% O2 (No. 2 F.O.)	NOX
400.000	PPMV	3% O2 (CO)	NOX
86.200	Tons/Yr	12-month rolling sum (combined)	SOX
0.400	Lbs/MMBTU	particulate matter	TSP
9.980	Tons/Yr	12-month rolling sum (combined)	TSP
4.250	Tons/Yr	12-month rolling sum (combined)	VOC
104	BURN-OFF OVEN (CROYDON)		
Emission Limit			Pollutant
500.000	PPMV	dry basis	SOX
0.020	gr/DRY FT3		TSP
201	RHEOLOGY MODIFIERS (PQR/II/SCT) BRISTOL		
Emission Limit			Pollutant
2,000.000	Lbs/Yr	PQR/PQR II/SCT process vents	VOC
401	CRU PROCESS (CROYDON)		
Emission Limit			Pollutant
0.196	Lbs/Hr	Sources 401 and 441 combined	CO
0.860	Tons/Yr	12-month rolling sum.	CO
0.600	Lbs/Hr	Sources 401 and 441 combined	NOX
2.600	Tons/Yr	12-month rolling sum.	NOX
0.560	Lbs/Hr	Sources 401 and 441 combined	VOC
1.300	Tons/Yr	12-month rolling sum.	VOC
402	CRU VENTILATION (CROYDON)		
Emission Limit			Pollutant
7,000.000	Lbs/Yr	12-month rolling sum	VOC

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description		
441	CRUX PROCESS (CROYDON)		
Emission Limit		Pollutant	
0.196	Lbs/Hr	Sources 401 and 441 combined	CO
0.860	Tons/Yr	12-month rolling sum.	CO
0.600	Lbs/Hr	Sources 401 and 441 combined	NOX
2.600	Tons/Yr	12-month rolling sum.	NOX
0.560	Lbs/Hr	Sources 401 and 441 combined	VOC
1.300	Tons/Yr	12-month rolling sum.	VOC
442	CRUX VENTILATION (CROYDON)		
Emission Limit		Pollutant	
2,400.000	Lbs/Yr	12-month rolling sum	VOC
517	BLDG 30 PROCESS EMISSIONS		
Emission Limit		Pollutant	
18,867.000	Lbs/Yr	12-month rolling sum	VOC
518	POLYMERS AREAS SOURCES		
Emission Limit		Pollutant	
300.000	Lbs/Yr	12-month rolling sum	VOC
743A	WASTEWATER TREATMENT PLANT		
Emission Limit		Pollutant	
5,000.000	Lbs/Yr	WWTP Tanks	VOC
744B	VOL STORAGE TANKS (BRISTOL AND CROYDON)		
Emission Limit		Pollutant	
458.000	Lbs/Yr	Storage Tank and Tank Truck Farm Loading	VOC
4,500.000	Lbs/Yr	Tank Farm (Emulsion Area)	VOC
7,249.000	Lbs/Yr	Storage Tank Vents (POL)	VOC
744C	STORAGE TANKS FUGITIVES (BRISTOL AND CROYDON)		
Emission Limit		Pollutant	
6,280.000	Lbs/Yr	12-month rolling sum	VOC
C03A	WWTP CARBON ADSORPTION SYSTEM		
Emission Limit		Pollutant	
20.000	PPMV	Hazardous Air Pollutants	
C18	REGENERATIVE THERMAL OXIDIZER		
Emission Limit		Pollutant	
6.539	Lbs/Hr	CO	
28.640	Tons/Yr	12-month rolling sum	CO
1.073	Lbs/Hr	NOX	
4.700	Tons/Yr	12-month rolling sum (RTO).	NOX

**SECTION G. Emission Restriction Summary.**

Source Id	Source Description	
5.000	Lbs/Hr	VOC
5.150	Tons/Yr	12-month rolling sum (RTO). VOC

Site Emission Restriction Summary

Emission Limit		Pollutant
49.990 Tons/Yr	Based on a 12-month rolling sum	NOX
9.900 Tons/Yr	Individual HAP for any 12-month period	Hazardous Air Pollutants
24.990 Tons/Yr	Aggregate HAPs for any 12-month period	Hazardous Air Pollutants

**SECTION H. Miscellaneous.**

NOVEMBER 2001 INITIAL PERMIT

(a) The Department has determined that the emissions from the following activities, excluding those indicated as site level requirements, in Section C, of this permit, do not require additional limitations, monitoring or recordkeeping:

- (1) Research Extruder Laboratory
- (2) Hot Water Boilers (4)
- (3) Analytical Research Laboratory
- (4) Plastics Technology Center
- (5) Research Laboratory
- (6) Analytical Research Laboratory
- (7) Plastics Applications Hall
- (8) Safety Relief Testing Laboratory
- (9) Industrial Hygiene Laboratory
- (10) Research Laboratory
- (11) Bldg.134, AG, Formulations Pilot Plant
- (12) Modifier Bulk Bag Unloading System
- (13) Butyl Carbitol Storage Tank
- (14) Groundwater Remediation Pilot Unit
- (15) Small Fire Extinguisher Training Pad
- (16) Storeroom Operations Chemical Handling Bldg.
- (17) New aboveground storage tanks: PM Acetate, Toluene, MEK
- (18) SCT Process
- (19) SCT Process (New Product)
- (20) Landfill - Inactive/Undergoing Closure
- (21) NRM Extruder (Line 6)
- (22) SCT Process
- (23) Building 114 Red Labe Room Spot Ventilation
- (24) PQR II (New Product)
- (25) Bldg. 34 Cyclone Exhaust System
- (26) Drum Cleaning Hood
- (27) Quality Assurance Lab Hood
- (28) MA Storage Tank
- (29) No. 7 Kettle Filter Pot Spot Ventilation
- (30) No. 10 Kettle Filter Pot Spot Ventilation
- (31) SCT Process
- (32) Butyl Methacrylate (BMA) Storage Tank
- (33) SCT Process
- (34) PM Lab Hood (Spot Ventilation System)
- (35) 39A Storage Tank
- (36) VA Storage Tank
- (37) Research Adhesives Coating Line
- (38) FLP Process
- (39) Storage Tanks (2) - RFD 09-A01-403
- (40) 2-GMAA Aboveground Storage Tanks: Closed-Loop Transport System
- (41) PQR II
- (42) Research Adhesives Coating Line
- (43) Flash Dryer and Cyclone
- (44) Carbowax Storage Tank
- (45) 2-Ethyl Hexyl Acrylate (EA) Storage Tanks
- (46) Waste Water Collection Tank
- (47) Modifier Sizer Exhaust
- (48) Young Industries Baghouse
- (49) Diesel Emergency Generator for Chemical Pumping Station 1 (PS-1)/Sewer Pump in Building 54 (166 BHP) ** This unit is now listed in Section A and D as Source ID 106 **
- (50) Diesel Fire Pump at Bldg. 101 (316 BHP) ** This unit is now listed in Section A and D as Source ID 106 **
- (51) Diesel Air Compressor for Powerhouse ** This unit has been removed **

**SECTION H. Miscellaneous.**

- (52) Bldg. 64C Generator (Natural Gas) ** This unit has been removed **
- (53) Bldg. 34 Onan Generator ** This unit has been shutdown and decommissioned **
- (54) Inkjet Process
- (55) Croydon Finished Product Storage Tanks
- (56) Croydon Whitewater Pits
- (57) Croydon Sand Beds
- (58) No. 6 Fuel Oil Tank
- (59) Wastewater Treatment Plant
- (60) Sludge-dewatering centrifuge for the wastewater treatment plant (WWTP)
- (61) Thermal Oxidizer (RP-B137) Bristol Research Park (Bldg. 137)
- (62) Storage Tank (POL-744-MEK)
- (63) Storage Tanks (POL-744-30FARM)
- (64) No. 10 Kettle Condensor Replacement (POL 516)
- (65) Titanium Dioxide (CRUX Blending)
- (66) Replacement Storage Tank (POL-STOP-625)
- (67) Storage Tank (POL-STOP-MLAM)
- (68) RP-non-VOC Throughput Limit (Bldg. 137)
- (69) Washdown water discharge (CRU Railcars)
- (70) Storage Tank of QM-1458 Monomer
- (71) Digital Imaging - Inkjet Blending Operations (Bldg. 147)
- (72) Dust collector & Bag Slitter (Bldg. 88)
- (73) 3-Safety Kleen Parts Washers (Polymers Area)
- (74) PQR/SCT Product Storage Tanks (RFD A01-09-1093)
- (75) 514 RTO Connection (RFD 63)
- (76) GMAA Station (RFD 219)
- (77) HDI Storage Tank (RFD 543)
- (78) 2EHA Storage Tank (RFD 544)
- (79) Carbowax Tank (RFD 546)
- (80) Isobutyl Acrylate Tank (RFD 684)
- (81) Low-volume Heur Reactor and associated sources (similar to Source ID 201), consisting of 75-gallon reactor (exhausting to RTO C-18), 660-gallon dilution tank, product drum packing station, and additive tank (RFD 1382)
- (82) Portable and temporary 175 kW diesel John Deere EGEN to be located at the main building – no longer on site (RFD 2138)
- (83) Portable and temporary 230 kW diesel EGEN to be located at Wastewater Treatment Plant – no longer on site (RFD 2139)
- (84) Extruder to be located at 310 George Patterson Boulevard; the equipment is owned and operated by Rohm & Haas; however, the property is owned by a sister company of Dow Chemical Company, of which Rohm & Haas is a wholly owned subsidiary (RFD 2239)
- (85) Soil Remediation project located at the Ethyl Acrylate and Butyl Acrylate Storage Tanks – no longer on site (RFD 3355).

(b) The RACT Operating Permit No. 09-0015 serves as a basis for certain terms and conditions in the initial Title V Operating Permit.

(c) For the purpose of this permit and in accordance with 25 Pa. Code § 123.1(a)(9), the Department has determined that fugitive emissions associated with operations at the Facility for which the Department has issued air quality plan approvals or operating permits, or has granted requests for determination of insignificance, are of minor significance with respect to causing air pollution and do not prevent or interfere with the attainment or maintenance of any ambient air quality standard.

(d) The capacity data and fuel material information listed in Section A. Site Inventory List and the source descriptions in Section D, are for descriptive purpose(s) and are not considered as maximum source capacities or design limitations or enforceable conditions. Source limits are indicated in the text conditions of Section D and are summarized in Section G of this Title V Operating Permit.

(e) The current monitoring frequency for perimeter monitoring of facility-wide visible and fugitive emissions and odors is weekly.

MAY 2003 MINOR MODIFICATION

(f) TVOP-09-00015 (Auth ID: 477316, APS ID: 371611) has been modified to add the following three (3) waste chemicals into the Waste Derived Liquid Fuel (WDLF) list in Section D, Sources 032 and 033 (Boilers No. 7 and 8), Condition #012(e): (i) Hexane, (ii)

**SECTION H. Miscellaneous.**

Heptane, (iii) Ethyl Acetate.

FEBRUARY 2004 ADMINISTRATIVE AMENDMENTS

(g) TVOP-09-00015 (Auth ID: 512545, APS ID: 371611) has been amended to incorporate conditions from Plan Approval No. 09-0015D for the operation of a catalytic oxidizer (Source ID: C09) as a control on the CRU and CRUX Processes (Sources 401 and 441, respectively) and to install a closed loop vent system on the methyl methacrylate (MMA) tank No. 35.

(h) TVOP-09-00015 (Auth ID: 513049, APS ID: 371611) has been amended to incorporate conditions from Plan Approval No. 09-0015C for the operation of a Regenerative Thermal Oxidizer (Source ID: C18) to control emissions from the following sources:

- (1) No. 10 Kettle Acryloid Coatings Batch Production Process and Building 30 Spot Vents
- (2) No. 7 Kettle Acryloid Coating Batch Production Process
- (3) Volatile Organic Liquid Storage Tanks in Polymer Area.

(i) TVOP-09-00015 (Auth ID: 513189, APS ID: 371611) has been amended to incorporate conditions from Plan Approval No. 09-0015E for the modification of a 1.7 MW Emergency Diesel Generator, Model 3516, manufactured by Caterpillar. The Plan Approval amends the hours of operation and the hourly emissions of the source and supercedes Plan Approval No. 09-0015A. ** This unit has been removed from the facility **

OCTOBER 2004 MINOR MODIFICATION

(j) TVOP-09-00015 (Auth ID: 531446, APS ID: 371611) has been modified to establish an enforceable emission cap on Hazardous Air Pollutants (HAPs) of 10 tons for individual and 25 tons for aggregate HAPs to meet the criteria of a minor source of HAP emissions.

DECEMBER 2004 MINOR MODIFICATION

(k) TVOP-09-00015 (Auth ID: 562873, APS ID: 371611) has been modified to include an insignificant source (sludge-dewater centrifuge for the WWTP) in the list of activities that are exempted from plan approval requirements of monitoring, recordkeeping and reporting in Section G (Miscellaneous.)

APRIL 2005 MINOR MODIFICATION

(l) TVOP-09-00015 (Auth ID: 568265, APS ID: 371611) has been modified to revise a condition related to the operation of the headwater scrubber at the waste-water treatment plant (WWTP), while an emergency spill tank (T-4) is receiving wastewater (Source 743A, Condition #006(ii)). The deviation and compliance certification reporting requirements of Section C have also been revised in accordance with DEP standards.

JULY 2007 RENEWAL and AMENDMENT

(m) TVOP-09-00015 (Auth ID: 640279, APS ID: 371611) has been renewed and administratively amended to incorporate conditions from Plan Approval No. PA-09-0015F (Four (4) Boilers). See review memos for a complete summary of revisions.

OCTOBER 2007 ADMINISTRATIVE AMENDMENT

(n) AUTH ID: 691972 - Administrative Amendment to revise the following:

**SECTION H. Miscellaneous.**

(1) Title/Cover page: The name of the facility in Owner Information section of the title/cover page has been changed from Rohm & Haas Chemicals, LLC to Rohm & Haas Company.

(2) The name of the Responsible Official has been changed.

MAY 2009 ADMINISTRATIVE AMENDMENT

(o) AUTH 784972 - Administrative Amendment to incorporate Plan Approval(s) 09-0015G and 09-0015H.

JUNE 2010 ADMINISTRATIVE AMENDMENT

(p) AUTH ID: 834682, APS ID: 371611 - Administrative Amendment to incorporate General Plan Approvals/Operating Permits 09-329-004GP (Diesel Fuel-fired Internal Combustion Engine) and 09-323-007GP (Burn-off Oven).

MARCH 2012 MINOR MODIFICATION

(q) AUTH ID 910343 - Minor Modification to increase the inlet temperature of the Catalytic Oxidizer (Source ID C09).

APRIL 2013 RENEWAL

(r) AUTH ID 910980 - Title V Renewal Permit.

APRIL 2018 RENEWAL

(s) AUTH ID 1193828 - Title V Renewal Permit. The following has been addressed with this renewal permit:

(1) The responsible official has been updated from Brian Albright to Claire Quinn. The email address for Mr. Lloyd Davis has been updated.

(2) Source ID 035: Boiler 111 has been decommissioned and is removed from the permit.

(3) Source ID 201: The PQR line has been removed.

(4) Source ID 514: The source was destroyed in a storage tank fire and the source has been removed.

(5) Source ID 744B: Tank 119 (butyl acrylate) and Tank 120 (ethyl acrylate) have been completely removed. Tank 250 has been taken out of service. Tank 645 converted to butyl acrylate storage.

(6) Source ID 106 Exempt Diesel Engines has been added to the permit to incorporate requirements applicable to compression ignition (CI) internal combustion engines. The source includes the following diesel fired engines: Croydon Fire Pump #1 rated at 115 BHP, Building 54 Emergency Generator for Sewer lift rated at 166 BHP, Building 101 Fire Pump rated at 316 BHP.

(7) Source ID 107 Exempt Natural Gas Engines has been added to the permit to incorporate requirements applicable to spark ignition (SI) internal combustion engines. The source includes Croydon LPG Emergency Generator for Lighting rated at 42 BHP.

(8) Source ID 108 Remote Reservoir Parts Washer has been created to include regulatory requirements from 25 Pa. Code § 129.63 applicable to the remote reservoir parts washers.

(9) Section B (General Requirements) and Section C (Site Level Requirements) have been updated to most current templates used by Central Office and Southeast Regional Office. Some revisions are for clarification, correction of errors, or enforceability of conditions. The Asbestos Regulation has been removed from Section C because the regulation is a stand-alone requirement and is not incorporated into facility-wide permits in the Southeast Region. References to specific condition numbers have been replaced with the actual regulatory requirement in order to reduce error.

(10) The information contained in Section H has been revised for clarity, consistency, and accuracy. The purpose of including information in Section G is to document historical permitting actions and summarize the main regulatory updates and revisions.

(11) The following is a summary of RFDs reviewed since the last permit action (2013):

**SECTION H. Miscellaneous.**

- RFD No. 4648 (09/05/2014): Installation of two (2) 500-gallon gasoline tanks for vehicles.
RFD No. 4649 (09/05/2014): Installation of two (2) 500-gallon diesel fuel oil tanks for vehicles.
RFD No. 5680 (04/25/2016): Installation of 164-gallon tank to hold polymeric diisocyanate.
RFD No. 5688 (04/25/2016): Tank 744B converted service from Isobutyl Methacrylate to Butyl Acrylate.
RFD No. 6307 (05/12/2017): Modification of the SCT reactor operating as part of Source ID 201.

JANUARY 2019 AMENDMENT

- (t) AUTH ID 1249294: Administrative Amendment to incorporate Plan Approval No. 09-0015(l) which is for the modification of (lb/hr) VOC emission limits for Source ID 401 and 441. Also, testing conditions revised to SERO template.

MAY 2023 RENEWAL

- (u) AUTH ID 1405827: Renewal permit includes the following updates:

- (1) Remove Source ID 105A - 985-hp Emergency Generator
- (2) Add remote reservoir cold cleaning machine to Source ID 108 (RFD No. 7932)
- (3) Add emergency stationary SI engine (RFD No. 9240)
- (4) Remove Source ID 300 - Polymers Area Tank Truck Loading
- (5) Remove Source ID 516 - No. 10 Kettle
- (6) Remove Source ID 735A - No. 7 Kettle
- (7) Remove Source ID 736 - No. 7 Kettle Process Vessels
- (8) The Paraloid Operation (part of the Polymers Area on the Bristol side) is no longer active; however, Rheology Modifier Operations remain active (also a part of Polymers Area on the Bristol side). Associated conditions have been revised to reflect this update.
- (9) Update responsible official to Mr. Patrick Pedrotti; update permit contact and inspection contact to Mr. Brandon Shimp.

SEPTEMBER 2025 MINOR MODIFICATION

- (v) AUTH ID 1536172: Minor modification to:

- (1) restrict facility-wide potential to emit less than 50 tons per year, as allowable pursuant to 25 Pa. Code § 129.115(d)(2)
- (2) include the federal requirements applicable to the wastewater treatment plant (Source ID 743A) and control system (C03A), which includes:
 - (i) 40 CFR Part 63 Subpart G - National Emission Standards for Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
 - (ii) 40 CFR Part 63 Subpart SS - National Emission Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process
 - (iii) 40 CFR Part 63 Subpart FFFF - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.



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