COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

STATE ONLY NATURAL MINOR OPERATING PERMIT

Issue Date:	August 22, 2018	Effective Date:	April 10, 2023
Revision Date:	April 10, 2023	Expiration Date:	July 31, 2023
Revision Type:	Amendment		

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 unless otherwise designated.

State Only Permit No: 10-00281
Natural Minor
Federal Tax Id - Plant Code: 25-1214948-1

Owner Information

Name: COHERENT CORP
Mailing Address: 375 SAXONBURG BLVD
SAXONBURG, PA 16056-9430

Plant Information

Plant: COHERENT CORP SAXONBURG PLT
Location: 10 Butler County 10917 Clinton Township
SIC Code: 3829 Manufacturing - Measuring And Controlling Devices, Nec

Responsible Official

Name: STACEY ARMAGOST
Title: VICE PRESIDENT, IR OPTICS
Phone: (724) 352 - 4455 Email: Stacey.Armagost@coherent.com

Permit Contact Person

Name: RUDY HUSKULIAK
Title: EHS MANAGER
Phone: (724) 360 - 5837 Email: Rudy.Huskuliak@coherent.com

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

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SECTION A. Table of Contents

SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput		Fuel/Material
031	MISCELLANEOUS COMBUSTION SOURCES	13.000	MCF/HR	Natural Gas
101	BATCH VAPOR DEGREASER		N/A	
102	CHEMICAL VAPOR DEPOSITION UNITS A-H		N/A	
103	HYDROGEN SELENIDE GAS PRODUCTION #1 AND #2		N/A	
103A	H2SE TRANSFER PROCESS			
104	CHEMICAL VAPOR DEPOSITION UNITS: MPZ FURNACES "I, J, K & L"			
106	CHEMICAL VAPOR DEPOSITION UNIT: FURNACES "M"		N/A	
110	THIN FILM MATERIALS PRODUCTION (TFM)			
113A	MPZ DIESEL GENERATORS (3 UNITS)	52.000	Gal/HR	DIESEL OIL
114	MAIN GENERATORS (4 UNITS)	230.000	Gal/HR	DIESEL
114A	KATOLIGHT 12V-2000 G83 MAIN PLANT GENERATOR	52.000	Gal/HR	DIESEL
114B	ENGINE BAY 1 COOLING TOWER EMERGENCY PUMP (20 HP)	50.000	CF/HR	NATURAL GAS
116	ISOPROPYL ALCOHOL VAPOR DEGREASER-FORWARD TECH-AD-1032		N/A	
118	EQUIPMENT LEAKS			
120	HYDROGEN SELENIDE PRODUCTION (REACTOR 3)		N/A	
121	HYDROGEN SELENIDE PRODUCTION (REACTOR 4)		N/A	
122	MPZ ISOPROPANOL SPRAY BOOTH	0.600	Lbs/HR	ISOPROPANOL
123	IPA LASER OPTIC BATCH VAPOR DRYER	0.120	Lbs/HR	ISOPROPYL ALCOHOL
200	DMG KOHLER DIESEL EMERGENCY GENERATOR (2 UNITS)(1494 BHP EA)			
301	MPZ N FURNACE (CVD)	5.000	Lbs/HR	ZINC
C102A	NORTH SCRUBBER & CARBON BED SYSTEM (5, 6, 7, & 8) (C-MZ01)			
C102D	S. SCRUBBER & CARBON BED SYSTEM (1,2,3,&4)(C-MZ02 & C-MZ03)			
C103A	H2SE #1 A & B SCRUBBER & CARBON BED SYSTEM (C-MZ06)			
C103B	H2SE #2 A & B SCRUBBER & CARBON BED SYSTEM (C-MZ07)			
C103C	DH EMERGENCY SCRUBBER			
C103D	H2SE LIQUID TRANSFER SCRUBBER (C-MZ12)			
C104A	H2SE MPZ #9 & #10 SCRUBBER AND CARBON BED SYSTEM			
C104B	H2SE MPZ #11 & #12 SCRUBBER AND CARBON BED SYSTEM			
C104C	H2SE WEST SCRUBBER SYSTEM VENT CARBON BED			
C106A1	CARTRIDGE OIL MIST FILTER, SPARKS MODEL: 321-2124WK927			
C106A2	CARTRIDGE OIL MIST FILTER, SPARKS MODEL: 321-2124WK927			
C106B1	KOH PACKED TOWER SCRUBBER W/ VORTEX CONTACTOR & MIST ELIM			
C106B2	KOH PACKED TOWER SCRUBBER W/ VORTEX CONTACTOR & MIST ELIM			

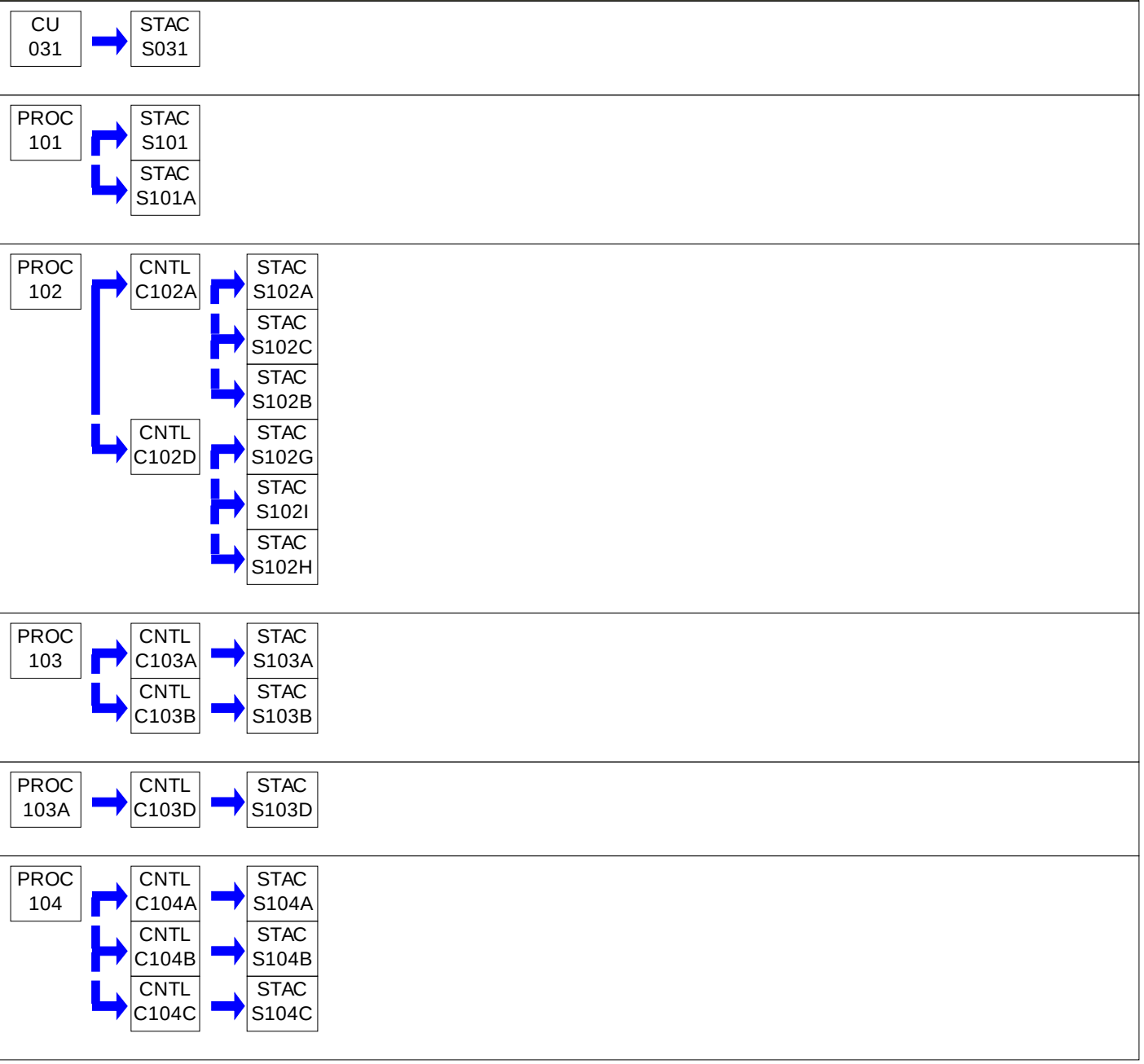
SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
C106C	CARBON BED		
C110	TFM INLINE SCRUBBER (C-TF01)		
C118	CVD EMERGENCY SCRUBBER		
C120A	H2SE #3 A & B SCRUBBER & CARBON BED SYSTEM		
C121	H2SE #4 A & B SCRUBBER & CARBON BED SYSTEM		
C301A	DUST COLLECTOR		
C301B	VENTURI VORTEX ABSORBER		
C301C	COUNTER CURRENT PACKED TOWER SCRUBBER		
C301D	PRESSURE RELIEF ABATEMENT ADSORBER		
FML03	DIESEL FUEL		
S031	MISCELLANEOUS COMBUSTION STACK		
S101	VAPOR DEGREASER STACK (S-OF01)		
S101A	VAPOR DEGREASER VENT (S-OF02)		
S102A	CVD NORTH SCRUBBER/CARBON BED STACK (5 & 6) (S-MZ01)		
S102B	CVD NORTH SCRUBBER/CARBON BED STACK (7 & 8) (S-MZ02)		
S102C	CVD NORTH SCRUBBER SYSTEM VENT (S-MZ03)		
S102G	S. SCRUBBER/CARBON BED STACK (1 & 2)		
S102H	S. SCRUBBER/CARBON BED STACK (3 & 4)		
S102I	S. SCRUBBER SYSTEM VENT		
S103A	H2SE SCRUBBER 1 A & B STACK (S-MZ07)		
S103B	H2SE SCRUBBER 2 A & B STACK (S-MZ08)		
S103C	DH EMERGENCY SCRUBBER STACK		
S103D	H2SE SCRUBBER STACK (S-MZ14)		
S104A	H2SE SCRUBBER #9 & #10 STACK		
S104B	H2SE SCRUBBER # 11 & #12 STACK		
S104C	H2SE WEST SCRUBBER SYSTEM VENT		
S106	STACK FOR CHEMICAL VAPOR DEPOSITION UNIT: FURNACES "M"		
S110	TFM INLINE FUME SCRUBBER STACK (S-TF01)		
S113A	GENERATOR STACK		
S114	STACKS FOR 4 EMERGENCY GENERATORS		
S114A	KATOLIGHT 12V-2000 G83 MAIN PLANT GENERATOR STACK		
S114B	ENGINE BAY 1 COOLING TOWER EMERGENCY ENGINE STACK		
S116	STACK (DESIGANTED AS S-CT01)		
S118	CVD EMERGENCY SCRUBBER STACK		
S120	TRAIN 3 SCRUBBER STACK		
S121	TRAIN 4 SCRUBBER STACK		
S123	IPA LASER OPTIC BATCH VAPOR DRYER EXHAUST STACK		
S200	KOHLER GENERATOR STACKS		

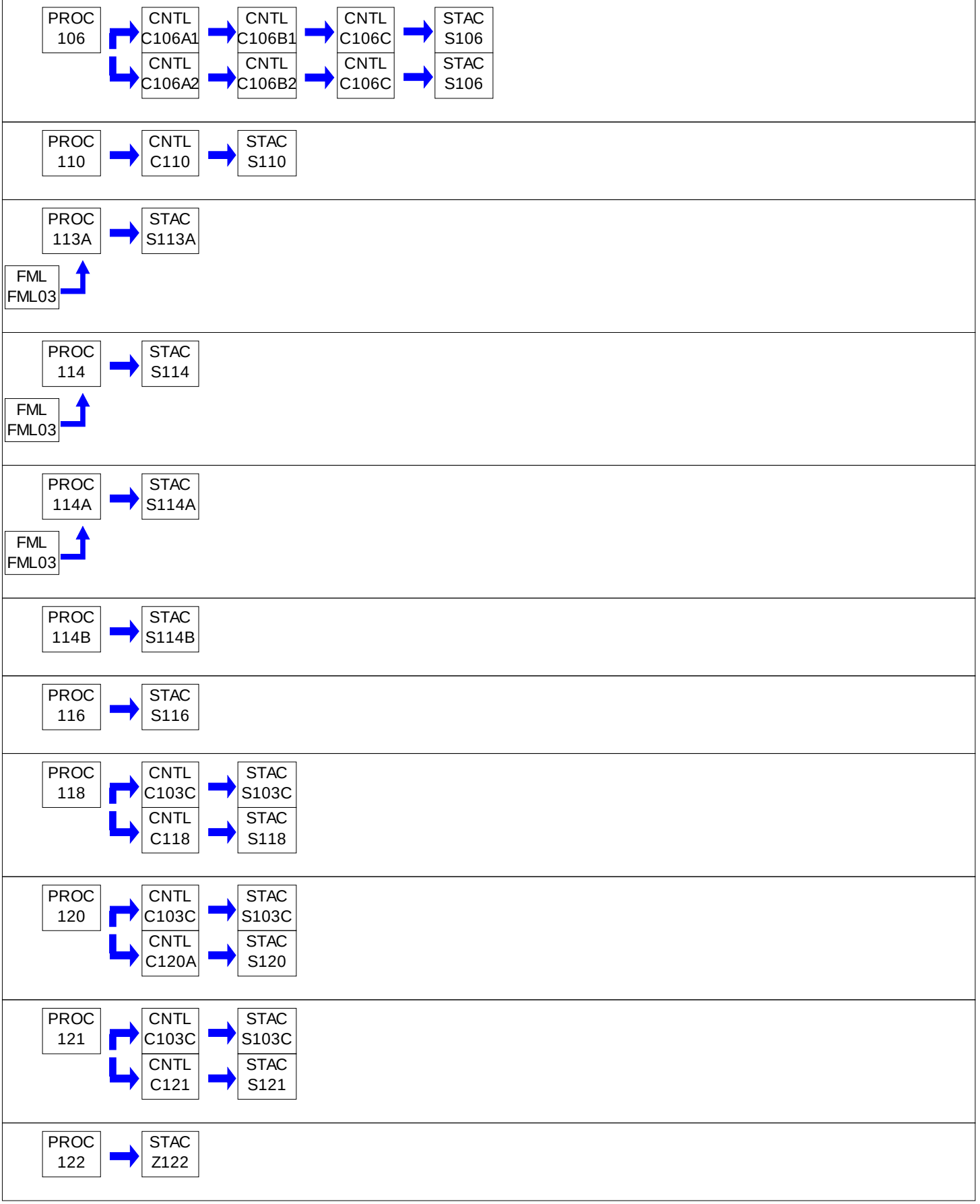
SECTION A. Site Inventory List

Source ID	Source Name	Capacity/Throughput	Fuel/Material
S301C	SCRUBBER STACK		
S301D	ADSORBER STACK		
Z122	FUGITIVE EMISSIONS FROM MPZ ISOPROPANOL SPRAY BOOTH		

PERMIT MAPS



PERMIT MAPS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CNTL C110
STAC S110
PROC 113A
STAC S113A
FML FML03
PROC 114
STAC S114
FML FML03
PROC 114A
STAC S114A
FML FML03
PROC 114B
STAC S114B
PROC 116
STAC S116
PROC 118
CNTL C103C
STAC S103C
CNTL C118
STAC S118
PROC 120
CNTL C103C
STAC S103C
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PROC 121
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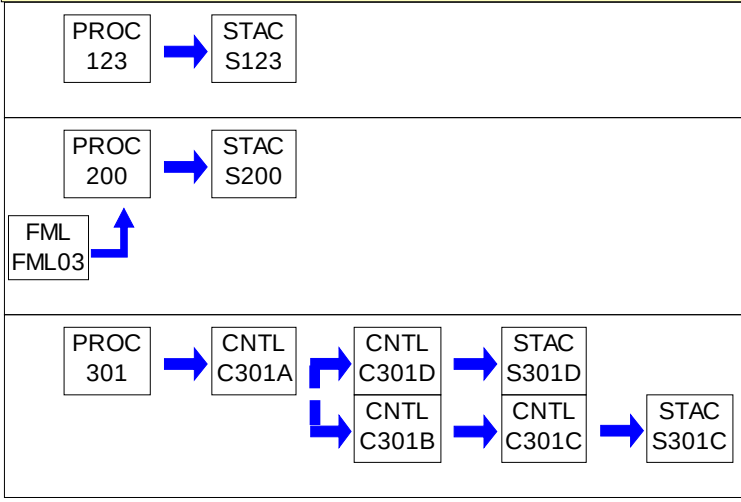
STAC S121
PROC 122
STAC Z122

PERMIT MAPS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PROC 200
STAC S200
FML FML03
PROC 301
CNTL C301A
CNTL C301D
STAC S301D
CNTL C301B
CNTL C301C
STAC S301C

SECTION B. General State Only 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 in 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 127.446]

Operating Permit Duration.

(a) 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.

(b) The terms and conditions of the expired permit shall automatically continue pending issuance of a new operating 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.

#003 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446 & 127.703(b)]

Permit Renewal.

(a) The permittee shall submit a timely and complete application for renewal of the operating permit to the appropriate Regional Air Program Manager. The application for renewal of the operating permit shall be submitted at least six (6) months and not more than 18 months before the expiration date of this permit.

(b) The application for permit renewal shall include the current permit number, a description of any permit revisions that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term. 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.

(c) The permittee shall submit with the renewal application a fee for the processing of the application as specified in 25 Pa. Code § 127.703(b). 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.

(d) 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.

(e) The application for renewal of the operating permit shall also include submission of supplemental compliance review forms in accordance with the requirements of 25 Pa. Code § 127.412(b) and § 127.412(j).

(f) 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 as necessary to address any requirements that become applicable to the source after the permittee submits a complete application, but prior to the date the Department takes action on the permit application.

#004 [25 Pa. Code § 127.703]

Operating Permit Fees under Subchapter I.

(a) The permittee shall pay the annual operating permit maintenance fee according to the following fee schedule in either paragraph (1) or (2) in accordance with 25 Pa. Code § 127.703(d) on or before December 31 of each year for the next calendar year.

(1) For a synthetic minor facility, a fee equal to:

(i) Four thousand dollars ($4,000) for calendar years 2021—2025.

(ii) Five thousand dollars ($5,000) for calendar years 2026—2030.

(iii) Six thousand three hundred dollars ($6,300) for the calendar years beginning with 2031.

SECTION B. General State Only Requirements

(2) For a facility that is not a synthetic minor, a fee equal to:

(i) Two thousand dollars ($2,000) for calendar years 2021—2025.

(ii) Two thousand five hundred dollars ($2,500) for calendar years 2026—2030.

(iii) Three thousand one hundred dollars ($3,100) for the calendar years beginning with 2031.

(b) 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.

#005 [25 Pa. Code §§ 127.450 (a)(4) and 127.464]

Transfer of Operating Permits.

(a) This operating permit may not be transferred to another person, except in cases of transfer-of-ownership that are documented and approved by the Department.

(b) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership of the source shall be treated as an administrative amendment if the Department determines that no other change in the permit is required and 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 a compliance review form has been submitted to, and the permit transfer has been approved by, the Department.

(c) This operating permit is valid only for those specific sources and the specific source locations described in this permit.

#006 [25 Pa. Code § 127.441 and 35 P.S. § 4008]

Inspection and Entry.

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

(1) Enter at reasonable times upon the permittee's premises where a 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, at reasonable times, any records that are kept under the conditions of this permit;

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

(4) Sample or monitor, at reasonable times, any substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the 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 or regulations adopted thereunder including denying the Department access to a source at this facility. Refusal of entry or access may constitute grounds for permit revocation and assessment of criminal and/or civil penalties.

(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.

#007 [25 Pa. Code §§ 127.441 & 127.444]

Compliance Requirements.

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

SECTION B. General State Only Requirements

(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 for the source is 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 State-Only permit. Nothing in this sub-condition shall be construed to create an independent affirmative duty upon the permittee to obtain a predetermination from the Department for physical configuration or engineering design detail changes made by the permittee.

#008 [25 Pa. Code § 127.441]

Need to Halt or Reduce Activity Not a Defense.

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

#009 [25 Pa. Code §§ 127.442(a) & 127.461]

Duty to Provide Information.

(a) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of each source at the facility.

(b) The permittee shall furnish to the Department, in writing, information that the Department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to maintain in accordance with this permit.

#010 [25 Pa. Code § 127.461]

Revising an Operating Permit for Cause.

This operating permit may be terminated, modified, suspended or revoked and reissued if one or more of the following applies:

(1) The permittee constructs or operates the source subject to the operating permit so that it is in violation of the Air Pollution Control Act, the Clean Air Act, the regulations thereunder, a plan approval, a permit or in a manner that causes air pollution.

(2) The permittee fails to properly or adequately maintain or repair an air pollution control device or equipment attached to or otherwise made a part of the source.

(3) The permittee has failed to submit a report required by the operating permit or an applicable regulation.

(4) The EPA determines that the permit is not in compliance with the Clean Air Act or the regulations thereunder.

#011 [25 Pa. Code §§ 127.450, 127.462, 127.465 & 127.703]

Operating Permit Modifications

(a) The permittee is authorized to make administrative amendments, minor operating permit modifications and significant operating permit modifications, under this permit, as outlined below:

SECTION B. General State Only Requirements

(b) Administrative Amendments. The permittee shall submit the application for administrative operating permit amendments (as defined in 25 Pa. Code § 127.450(a)), according to procedures specified in § 127.450 unless precluded by the Clean Air Act or its regulations.

(c) Minor Operating Permit Modifications. The permittee shall submit the application for minor operating permit modifications (as defined 25 Pa. Code § 121.1) in accordance with 25 Pa. Code § 127.462.

(d) Significant Operating Permit Modifications. The permittee shall submit the application for significant operating permit modifications in accordance with 25 Pa. Code § 127.465.

(e) 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.

#012 [25 Pa. Code § 127.441]

Severability Clause.

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

#013 [25 Pa. Code § 127.449]

De Minimis Emission Increases.

(a) This permit authorizes de minimis emission increases in accordance with 25 Pa. Code § 127.449 so long as the permittee provides the Department with seven (7) days prior written notice before commencing any de minimis emissions increase. 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.

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

(c) Except as provided below in (d), the permittee is authorized 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 NOx from a single source during the term of the permit and 5 tons of NOx 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, the regulations thereunder 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, the regulations thereunder or 25 Pa. Code Article III.

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

(d) In accordance with § 127.14, the permittee is authorized to install the following minor sources without the need for a plan approval or permit modification:

SECTION B. General State Only Requirements

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

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

(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility 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.

(e) 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 (c)(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 this permit, the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(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, installation of minor sources made pursuant to this permit condition and Plan Approval Exemptions under 25 Pa. Code § 127.14 (relating to exemptions), the permittee is prohibited from making 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.

#014 [25 Pa. Code § 127.3]

Operational Flexibility.

The permittee is authorized to make changes within the facility in accordance with the regulatory provisions outlined in 25 Pa. Code § 127.3 (relating to operational flexibility) to implement the operational flexibility requirements provisions authorized under Section 6.1(i) of the Air Pollution Control Act and the operational flexibility terms and conditions of this permit. The provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements include the following:

(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)

SECTION B. General State Only Requirements

(6) Section 127.462 (relating to minor operating permit modifications)

(7) Subchapter H (relating to general plan approvals and general operating permits)

#015 [25 Pa. Code § 127.11]

Reactivation

(a) The permittee may not reactivate a source that has been out of operation or production for at least one year unless the reactivation is conducted in accordance with a plan approval granted by the Department or in accordance with reactivation and maintenance plans developed and approved by the Department in accordance with 25 Pa. Code § 127.11a(a).

(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).

#016 [25 Pa. Code § 127.36]

Health Risk-based Emission Standards and Operating Practice Requirements.

(a) When needed to protect public health, welfare and the environment from emissions of hazardous air pollutants from new and existing sources, the permittee shall comply with the health risk-based emission standards or operating practice requirements imposed by the Department, except as precluded by §§ 6.6(d)(2) and (3) of the Air Pollution Control Act [35 P.S. § 4006.6(d)(2) and (3)].

(b) A person challenging a performance or emission standard established by the Department has the burden to demonstrate that performance or emission standard does not meet the requirements of Section 112 of the Clean Air Act.

#017 [25 Pa. Code § 121.9]

Circumvention.

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 25 Pa. Code Article III, except that with prior approval of the Department, the device or technique may be used for control of malodors.

#018 [25 Pa. Code §§ 127.402(d) & 127.442]

Reporting Requirements.

(a) The permittee shall comply with the applicable reporting requirements of the Clean Air Act, the regulations thereunder, the Air Pollution Control Act and 25 Pa. Code Article III including Chapters 127, 135 and 139.

(b) The permittee shall submit reports to the Department containing information the Department may prescribe relative to the operation and maintenance of any air contamination source.

(c) 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 in the permit transmittal letter, or otherwise notified)

(d) Any records or information including applications, forms, or reports submitted pursuant to this permit condition shall contain a certification by a responsible official as to truth, accuracy and completeness. The certifications submitted under this permit shall require a responsible official of the facility to certify that based on information and belief formed after reasonable inquiry, the statements and information in the documents are true, accurate and complete.

(e) Any records, reports or information submitted to the Department shall be available to the public except for such

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records, reports or information which meet the confidentiality requirements of § 4013.2 of the Air Pollution Control Act and §§ 112(d) and 114(c) of the Clean Air Act. The permittee may not request a claim of confidentiality for any emissions data generated for the facility.

#019 [25 Pa. Code §§ 127.441(c) & 135.5]

Sampling, Testing and Monitoring Procedures.

(a) The permittee shall comply with the monitoring, recordkeeping or reporting requirements of 25 Pa. Code Chapter 139 and the other applicable requirements of 25 Pa. Code Article III and additional requirements related to monitoring, reporting and recordkeeping required by the Clean Air Act and the regulations thereunder including the Compliance Assurance Monitoring requirements of 40 CFR Part 64, where applicable.

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

#020 [25 Pa. Code §§ 127.441(c) and 135.5]

Recordkeeping.

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

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

(2) The dates the analyses were performed.

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

(4) The analytical techniques or methods used.

(5) The results of the analyses.

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

(b) The permittee shall retain records of any 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.

#021 [25 Pa. Code § 127.441(a)]

Property Rights.

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

#022 [25 Pa. Code § 127.447]

Alternative Operating Scenarios.

The permittee is authorized to make changes at the facility to implement alternative operating scenarios identified in this permit in accordance with 25 Pa. Code § 127.447.

SECTION B. General State Only Requirements

#023 [25 Pa. Code §135.3]

Reporting

(a) If the facility is a Synthetic Minor Facility, 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 of a Synthetic Minor Facility 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.

#024 [25 Pa. Code §135.4]

Report Format

If applicable, the 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 §121.7]

Prohibition of air pollution.

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

 # 002 [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.

(7) Not applicable

(8) Not applicable

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

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

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

 # 003 [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.

 # 004 [25 Pa. Code §123.31]

Limitations

a) Limitations are as follows:

(1) If control of malodorous air contaminants is required under subsection (b), emissions shall be incinerated at a minimum of 1200F for at least 0.3 seconds prior to their emission into the outdoor atmosphere.

(2) Techniques other than incineration may be used to control malodorous air contaminants if such techniques are equivalent to or better than the required incineration in terms of control of the odor emissions and are approved in writing by the Department.

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

SECTION C. Site Level Requirements

c) Not applicable

 # 005 [25 Pa. Code §123.41]

Limitations

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

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

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

 # 006 [25 Pa. Code §123.42]

Exceptions

The limitations of 25 PA Code 123.41 (relating to limitations) shall not apply to a visible emission in any of the following instances:

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

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

(3) When the emission results from sources specified in 25 PA Code 123.1(a)(1) -- (9) (relating to prohibition of certain fugitive emissions).

(4) Not applicable

II. TESTING REQUIREMENTS.

 # 007 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

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

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

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Department reserves the right to require exhaust stack testing of any source(s) as necessary to verify emissions for purposes including determining the correct emission fee, malfunctions, or determining compliance with any applicable requirements.

[Plan Approval 10-281Q]

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) All logs and required records shall be maintained on site for a minimum of five years and shall be made available to the

SECTION C. Site Level Requirements

Department upon request.

[Plan Approval 10-281P]

V. REPORTING REQUIREMENTS.

 # 010 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) The owner or operator shall notify the Department by telephone within twenty-four (24) hours of the discovery of any malfunction which results in, or may possibly be resulting in, the emission of air contaminants in excess of any applicable limitation specified herein. Following the telephone notification, a written notice must also be submitted to DEP as specified below.

(1) If the owner or operator is unable to provide notification by telephone to the appropriate Regional Office within twenty-four (24) hours of discovery of a malfunction due to a weekend or holiday, the notification shall be made to the Department by no later than 4 p.m. on the first business day for the Department following the weekend or holiday.

(2) Any malfunction that poses an imminent danger to the public health, safety, welfare, or environment shall be reported by telephone to the Department and the County Emergency Management Agency immediately after the discovery of an incident. The owner or operator shall submit a written report of instances of such malfunctions to the Department within three (3) business days of the telephone report.

(3) Unless otherwise required by this plan approval, any other malfunctions shall be reported to the Department, in writing, within five (5) business days of malfunction discovery.

[Plan Approval 10-281Q]

VI. WORK PRACTICE REQUIREMENTS.

 # 011 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

A person responsible for any source specified in 25 PA Code 123.1(a)(1) -- (7) or (9) [Condition #001] shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following:

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

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

(3) Paving and maintenance of roadways.

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

VII. ADDITIONAL REQUIREMENTS.

 # 012 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) - (b) No longer applicable.

(c) If at any time the Department has reason to believe that the air contaminant emissions are, or may be, in excess of any applicable air contaminant emission limitation, the owner or operator shall conduct such stack tests or source tests requested by the Department to determine the actual air contaminant emission rate. The owner or operator shall perform any such testing in accordance with the applicable provisions of 25 Pa. Code, Chapter 139 (relating to sampling and testing) as well as in accordance with any additional requirements or conditions established by the Department at the time the owner or operator is notified, in writing, of the need to conduct testing.

SECTION C. Site Level Requirements

(d) No longer applicable.

[Plan Approval 10-281Q]

 # 013 [25 Pa. Code §127.25]

Compliance requirement.

A person may not cause or permit the operation of a source subject to 127.11 (relating to plan approval requirements), unless the source and air cleaning devices identified in the application for the plan approval and the plan approval issued to the source, are operated and maintained in accordance with specifications in the application and conditions in the plan approval issued by the Department. A person may not cause or permit the operation of an air contamination source subject to this chapter in a manner inconsistent with good operating practices.

 # 014 [25 Pa. Code §129.14]

Open burning operations

a) Air basins. Not applicable.

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

(1) The emissions are visible, at any time, at the point such emissions pass outside the property of the person on whose land the open burning is being conducted.

(2) Malodorous air contaminants from the open burning are detectable outside the property of the person on whose land the open burning is being conducted.

(3) The emissions interfere with the reasonable enjoyment of life or property.

(4) The emissions cause damage to vegetation or property.

(5) The emissions are or may be deleterious to human or animal health.

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

(1) A fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer.

(2) A fire set for the purpose of instructing personnel in fire fighting, when approved by the Department.

(3) A fire set for the prevention and control of disease or pests, when approved by the Department.

(4) Not applicable

(5) Not applicable

(6) A fire set solely for recreational or ceremonial purposes.

(7) A fire set solely for cooking food.

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

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

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

SECTION C. Site Level Requirements

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

(2) Not applicable

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

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

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

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

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

VIII. COMPLIANCE CERTIFICATION.

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

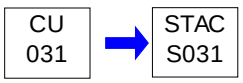
IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

SECTION D. Source Level Requirements

Source ID: 031 Source Name: MISCELLANEOUS COMBUSTION SOURCES

Source Capacity/Throughput: 13.000 MCF/HR Natural Gas



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.11]

Combustion units

a) A person may not permit the emission into the outdoor atmosphere of particulate matter from a combustion unit in excess of the following:

(1) The rate of 0.4 pound per million Btu of heat input, when the heat input to the combustion unit in millions of Btus per hour is greater than 2.5 but less than 50.

 # 002 [25 Pa. Code §123.22]

Combustion units

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

(1) General provision. No person may permit the emission into the outdoor atmosphere of sulfur oxides, expressed as SO2, from a combustion unit in excess of the rate of 4 pounds per million Btu of heat input over any 1-hour period.

Fuel Restriction(s).

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

SECTION D. Source Level Requirements

VI. WORK PRACTICE REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

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

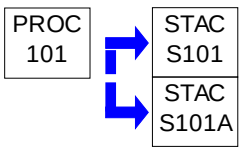
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 101 Source Name: BATCH VAPOR DEGREASER

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

b) Not applicable

c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.464]

Subpart T--National Emission Standards for Halogenated Solvent Cleaning

Alternative standards

a) As an alternative to meeting the requirements in 40 CFR 63.463, each owner or operator of a batch vapor or in-line solvent cleaning machine can elect to comply with the requirements of 40 CFR 63.464. An owner or operator of a solvent cleaning machine who elects to comply with 40 CFR 63.464 shall comply with the requirements specified in either paragraph (a)(1) or (a)(2) of this section.

(1) If the cleaning machine has a solvent/air interface, as defined in 40 CFR 63.461, the owner or operator shall comply with the requirements specified in paragraphs (a)(1)(i) and (a)(1)(ii) of this section.

(i) Maintain a log of solvent additions and deletions for each solvent cleaning machine.

(ii) Ensure that the emissions from each solvent cleaning machine are equal to or less than the applicable emission limit presented in table 5 of this subpart as determined using the procedures in 40 CFR 63.465(b) and (c).

TABLE 5
EMISSION LIMITS FOR BATCH VAPOR AND IN-LINE SOLVENT CLEANING MACHINES WITH A SOLVENT/AIR INTERFACE

Solvent cleaning machine	3-month rolling average monthly emission limit (kilograms/square meters/month)
Batch vapor solvent cleaning machines	150
Existing in-line solvent cleaning machines	153
New in-line solvent cleaning machines	99

(2) Not applicable

SECTION D. Source Level Requirements

b) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with 40 CFR 63.464(a) shall demonstrate compliance with the applicable 3-month rolling average monthly emission limit on a monthly basis as described in 40 CFR 63.465(b) and (c).

c) If the applicable 3-month rolling average emission limit is not met, an exceedance has occurred. All exceedances shall be reported as required in 40 CFR 63.468(h).

d) Not applicable

[Compliance with the requirements specified in parts (a), (b), & (c) of this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 6]

II. TESTING REQUIREMENTS.

 # 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.465]

Subpart T--National Emission Standards for Halogenated Solvent Cleaning

Test methods

a) Not applicable

b) Except as provided in paragraph (g) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with 40 CFR 63.464 shall on the first operating day of every month ensure that the solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent and used solvent that has been cleaned of soils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in paragraph (c) of this section. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

[Compliance with the requirement specified in part (b) of this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 6]

c) Except as provided in paragraphs (f) and (g) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with 40 CFR 63.464 shall, on the first operating day of the month, comply with the requirements specified in paragraphs (c)(1) through (c)(3) of this section.

(1) Using the records of all solvent additions and deletions for the previous monthly reporting period required under 40 CFR 63.464(a), determine solvent emissions (Ei) using equation 2, defined in 40 CFR 63.465(c)(1), for cleaning machines with a solvent/air interface and equation 3, defined in 40 CFR 63.465(c)(1), for cleaning machines without a solvent/air interface:

(2) Determine SSRi using the method specified in paragraph (c)(2)(i) or (c)(2)(ii) of this section.

(i) From tests conducted using EPA reference method 25d.

(ii) By engineering calculations included in the compliance report.

(3) Determine the monthly rolling average, EA, for the 3-month period ending with the most recent reporting period using equation 4, defined in 40 CFR 63.465(c)(3), for cleaning machines with a solvent/air interface or equation 5, defined in 40 CFR 63.465(c)(3), for cleaning machines without a solvent/air interface:

[Compliance with the requirement specified in part (c) of this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 6]

d) Not applicable

e) An owner or operator of a source shall determine their potential to emit from all solvent cleaning operations, using the procedures described in paragraphs (e)(1) through (e)(3) of this section. A facility's total potential to emit is the sum of the

SECTION D. Source Level Requirements

HAP emissions from all solvent cleaning operations, plus all HAP emissions from other sources within the facility.

(1) Determine the potential to emit for each individual solvent cleaning using equation 6, defined in 40 CFR 63.465(e)(1).

(2) Not applicable

(3) Sum the PTEi for all solvent cleaning operations to obtain the total potential to emit for solvent cleaning operations at the facility.

[Compliance with the requirement specified in part (e) of this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 6]

f) Not applicable

g) Not applicable

h) Not applicable

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.467]

Subpart T--National Emission Standards for Halogenated Solvent Cleaning

Recordkeeping requirements

a) Not applicable

b) Not applicable

c) Except as provided in paragraph (e) of this section for continuous web cleaning machines, each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of 40 CFR 63.464 shall maintain records specified in paragraphs (c)(1) through (c)(3) of this section either in electronic or written form for a period of 5 years.

(1) The dates and amounts of solvent that are added to the solvent cleaning machine.

(2) The solvent composition of wastes removed from cleaning machines as determined using the procedure described in 40 CFR 63.465(c)(2).

(3) Calculation sheets showing how monthly emissions and the rolling 3-month average emissions from the solvent cleaning machine were determined, and the results of all calculations.

[Compliance with the requirement specified in part (c) of this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 6 & 7]

d) Not applicable

e) Not applicable

V. REPORTING REQUIREMENTS.

 # 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.468]

Subpart T--National Emission Standards for Halogenated Solvent Cleaning

Reporting requirements

SECTION D. Source Level Requirements

a) Each owner or operator of an existing solvent cleaning machine subject to the provisions of this subpart shall submit an initial notification report to the Administrator no later than August 29, 1995. This report shall include the information specified in paragraphs (a)(1) through (a)(6) of this section.

(1) The name and address of the owner or operator.

(2) The address (i.e., physical location) of the solvent cleaning machine(s).

(3) A brief description of each solvent cleaning machine including machine type (batch vapor, batch cold, vapor in-line or cold in-line), solvent/air interface area, and existing controls.

(4) The date of installation for each solvent cleaning machine or a letter certifying that the solvent cleaning machine was installed prior to, or after, November 29, 1993.

(5) The anticipated compliance approach for each solvent cleaning machine.

(6) An estimate of annual halogenated HAP solvent consumption for each solvent cleaning machine.

b) Each owner or operator of a new solvent cleaning machine subject to the provisions of this subpart shall submit an initial notification report to the Administrator. New sources for which construction or reconstruction had commenced and initial startup had not occurred before December 2, 1994, shall submit this report as soon as practicable before startup but no later than January 31, 1995. New sources for which the construction or reconstruction commenced after December 2, 1994, shall submit this report as soon as practicable before the construction or reconstruction is planned to commence. This report shall include all of the information required in 40 CFR 63.5(d)(1) of subpart A (General Provisions), with the revisions and additions in paragraphs (b)(1) through (b)(3) of this section.

(1) The report shall include a brief description of each solvent cleaning machine including machine type (batch vapor, batch cold, vapor in-line, or cold-line), solvent/air interface area, and existing controls.

(2) The report shall include the anticipated compliance approach for each solvent cleaning machine.

(3) In lieu of 40 CFR 63.5(d)(1)(ii)(H) of subpart A of this part, the owner or operator must report an estimate of annual halogenated HAP solvent consumption for each solvent cleaning machine.

c) Each owner or operator of a batch cold solvent cleaning machine subject to the provisions of this subpart shall submit a compliance report to the Administrator. For existing sources, this report shall be submitted to the Administrator no later than 150 days after the compliance date specified in 40 CFR 63.460(d). For new sources, this report shall be submitted to the Administrator no later than 150 days after startup or May 1, 1995, whichever is later. This report shall include the requirements specified in paragraphs (c)(1) through (c)(4) of this section.

(1) The name and address of the owner or operator.

(2) The address (i.e., physical location) of the solvent cleaning machine(s).

(3) A statement, signed by the owner or operator of the solvent cleaning machine, stating that the solvent cleaning machine for which the report is being submitted is in compliance with the provisions of this subpart.

(4) The compliance approach for each solvent cleaning machine.

d) Not applicable

e) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of 40 CFR 63.464 shall submit to the Administrator an initial statement of compliance for each solvent cleaning machine. For existing sources, this report shall be submitted to the Administrator no later than 150 days after the compliance date specified in 40 CFR 63.460(d). For new sources, this report shall be submitted to the Administrator no later than 150 days after startup or May 1, 1995, whichever is later. The statement shall include the information specified in paragraphs (e)(1) through (e)(4) of

this section.

(1) The name and address of the solvent cleaning machine owner or operator.

(2) The address of the solvent cleaning machine(s).

(3) The solvent/air interface area for each solvent cleaning machine or, for cleaning machines without a solvent/air interface, a description of the method used to determine the cleaning capacity and the results.

(4) The results of the first 3-month average emissions calculation.

[Compliance with the requirement specified in part (e) of this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 8]

f) Not applicable

g) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with the provisions of 40 CFR 63.464 shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in paragraphs (g)(1) through (g)(4) of this section.

(1) The size and type of each unit subject to this subpart (solvent/air interface area or cleaning capacity).

(2) The average monthly solvent consumption for the solvent cleaning machine in kilograms per month.

(3) The 3-month monthly rolling average solvent emission estimates calculated each month using the method as described in 40 CFR 63.465(c).

(4) The reports required under paragraphs (f) and (g) of this section can be combined into a single report for each facility.

[Compliance with the requirement specified in part (g) of this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 9]

h) Each owner or operator of a batch vapor or in-line solvent cleaning machine shall submit an exceedance report to the Administrator semiannually except when, the Administrator determines on a case-by-case basis that more frequent reporting is necessary to accurately assess the compliance status of the source or, an exceedance occurs. Once an exceedance has occurred the owner or operator shall follow a quarterly reporting format until a request to reduce reporting frequency under paragraph (i) of this section is approved. Exceedance reports shall be delivered or postmarked by the 30th day following the end of each calendar half or quarter, as appropriate. The exceedance report shall include the applicable information in paragraphs (h)(1) through (3) of this section.

(1) Information on the actions taken to comply with 40 CFR 63.463(e) and (f). This information shall include records of written or verbal orders for replacement parts, a description of the repairs made, and additional monitoring conducted to demonstrate that monitored parameters have returned to accepted levels.

(2) If an exceedance has occurred, the reason for the exceedance and a description of the actions taken.

(3) If no exceedances of a parameter have occurred, or a piece of equipment has not been inoperative, out of control, repaired, or adjusted, such information shall be stated in the report.

[Compliance with the requirement specified in part (h) of this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 10]

i) An owner or operator who is required to submit an exceedance report on a quarterly (or more frequent) basis may reduce the frequency of reporting to semiannual if the conditions in paragraphs (i)(1) through (i)(3) of this section are met.

(1) The source has demonstrated a full year of compliance without an exceedance.

SECTION D. Source Level Requirements

(2) The owner or operator continues to comply with all relevant recordkeeping and monitoring requirements specified subpart A (General Provisions) and in this subpart.

(3) The Administrator does not object to a reduced frequency of reporting for the affected source as provided in paragraph (e)(3)(iii) of subpart A (General Provisions).

[Compliance with the requirement specified in part (i) of this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 11]

j) [Reserved]

k) Each owner or operator of a solvent cleaning machine requesting an equivalency determination, as described in 40 CFR 63.469 shall submit an equivalency request report to the Administrator. For existing sources, this report must be submitted to the Administrator no later than June 3, 1996. For new sources, this report must be submitted and approved by the Administrator prior to startup.

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) The source shall have a cover that can be opened or closed easily without disturbing the vapor zone. [PA: PA-10-281A Condition 13]

b) The source shall have a safety switch which shuts off the sump heat if condenser coolant is either not circulating or too warm-condenser flow switch and thermostat. [PA: PA-10-281A Condition 14]

c) The source shall have a permanent, conspicuous label summarizing the following operating requirements:

1. Keep cover closed at all times except when processing work loads through the degreaser.

2. Minimize solvent carry-out by: racking all parts to allow full drainage; moving parts in and out of the degreaser at less than 11 feet per minute; degreasing the workload in the vapor zone at least 30 seconds or until condensation ceases; tipping out any pools of solvent on the cleaned parts before removal; and allowing parts to dry within the degreaser for at least 15 seconds or until visually dry.

3. Do not degrease porous or absorbent materials, such as cloth, leather, wood or rope.

4. Work loads should not occupy more than half of the open top area of the degreaser.

5. Never spray above the vapor level.

6. Repair solvent leaks immediately or shutdown the degreaser.

7. Do not dispose of waste solvent or transfer it to another party such that greater than 20% of the waste by weight will evaporate into the atmosphere: store waste solvent only in closed containers.

8. Exhaust ventilation should not exceed 65 cfm/ft2 of degreaser open area, unless necessary to meet OSHA requirements; ventilation fans should not be used near the degreaser opening.

9. Water should not be visually detectable in solvent exiting the water separator.

[PA: PA-10-281A Condition 16]

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The source shall be maintained and operated in accordance with the manufacturer's specifications and in accordance with

SECTION D. Source Level Requirements

good air pollution control practices.

 # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.469]

Subpart T--National Emission Standards for Halogenated Solvent Cleaning

Equivalent methods of control

Upon written application, the Administrator may approve the use of equipment or procedures after they have been satisfactorily demonstrated to be equivalent, in terms of reducing emissions of methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride or chloroform to the atmosphere, to those prescribed for compliance within a specified paragraph of this subpart. The application must contain a complete description of the equipment or procedure and the proposed equivalency testing procedure and the date, time, and location scheduled for the equivalency demonstration.

VII. ADDITIONAL REQUIREMENTS.

 # 009 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) This source shall comply with 40 CFR 63 Subpart T, "National Emission Standards for Halogenated Solvent Cleaning", conditions including, but not limited to the following:

1. The company shall on the first operating day of each month ensure that the machine system includes only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and solvent that has been cleaned of oils. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions.

[PA: PA-10-281A Condition 6]

b) All requests, reports, applications, submittals, and other communications required to be submitted to both EPA and the Department shall have EPA copies forwarded to:

Director
Air, Toxics and Radiation Division
US EPA, Region III
1650 Arch Street
Philadelphia, Pa. 19103

[PA: PA-10-281A Condition 19]

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall comply with Appendix B (General Provisions Applicability to Subpart T) of 40 CFR 63 Subpart T.

 # 011 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.460]

Subpart T--National Emission Standards for Halogenated Solvent Cleaning

Applicability and designation of source

a) The provisions of this subpart apply to each individual batch vapor, in-line vapor, in-line cold, and batch cold solvent cleaning machine that uses any solvent containing methylene chloride (CAS No. 75-09-2), perchloroethylene (CAS No. 127-18-4), trichloroethylene (CAS No. 79-01-6), 1,1,1-trichloroethane (CAS No. 71-55-6), carbon tetrachloride (CAS No. 56-23-5) or chloroform (CAS No. 67-66-3), or any combination of these halogenated HAP solvents, in a total concentration greater than 5 percent by weight, as a cleaning and/or drying agent. The concentration of these solvents may be determined using EPA test method 18, material safety data sheets, or engineering calculations. Wipe cleaning activities, such as using a rag containing halogenated solvent or a spray cleaner containing halogenated solvent are not covered under the provisions of this subpart.

b) Except as noted in appendix C (General Provisions Applicability to Subpart T) of this subpart, the provisions of subpart A

of this part (General Provisions) apply to owners or operators of any solvent cleaning machine meeting the applicability criteria of paragraph (a) of this section.

c) Except as provided in paragraph (g) of this section, each solvent cleaning machine subject to this subpart that commences construction or reconstruction after November 29, 1993, shall achieve compliance with the provisions of this subpart, except §63.471, immediately upon startup or by December 2, 1994, whichever is later.

d) Except as provided in paragraph (g) of this section, each solvent cleaning machine subject to this subpart that commenced construction or reconstruction on or before November 29, 1993, shall achieve compliance with the provisions of this subpart, except for §63.471, no later than December 2, 1997.

e) In delegating implementation and enforcement authority to a State under section 112(d) of the Act, the authority contained in paragraph (f) of this section shall be retained by the Administrator and not transferred to a State.

f) The authority conferred in 40 CFR 63.463(d)(9) and 40 CFR 63.469 will not be delegated to any State.

g) Not applicable

h) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 71, provided you are not required to obtain a permit under 40 CFR 70.3(a) or 71.3(a) for a reason other than your status as an area source under this subpart. Not withstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

[Compliance with the requirement specified in this streamlined permit condition assures compliance with the provisions in plan approval: PA-10-281A Condition 6]

i) The compliance date for requirements in §63.471 depends on the date that construction or reconstruction of the affected facility commences. For purposes of this paragraph, affected facility means all solvent cleaning machines, except solvent cleaning machines used in the manufacture and maintenance of aerospace products, solvent cleaning machines used in the manufacture of narrow tubing, and continuous web cleaning machines, located at a major source that are subject to the facility-wide limits in Table 1 of §63.471(b)(2), and for area sources, affected facility means all solvent cleaning machines, except cold batch cleaning machines, located at an area source that are subject to the facility-wide limits in Table 1 of §63.471(b)(2).

1) Each affected facility that was constructed or reconstructed on or before August 17, 2006, shall be in compliance with the provisions of this subpart no later than May 3, 2010.

2) Each affected facility that was constructed or reconstructed on or after August 17, 2006, shall be in compliance with the provisions of this subpart on May 3, 2007 or immediately upon startup, whichever is later.

 # 012 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.471]

Subpart T--National Emission Standards for Halogenated Solvent Cleaning

Facility-wide standards.

[§63.471 added at 72 FR 25158, May 3, 2007]

(a) Each owner or operator of an affected facility shall comply with the requirements specified in this section. For purposes of this section, affected facility means all solvent cleaning machines, except solvent cleaning machines used in the manufacture and maintenance of aerospace products, solvent cleaning machines used in the manufacture of narrow tubing, and continuous web cleaning machines, located at a major source that are subject to the facility-wide limits in paragraph (b)(2) of this section, and for area sources, affected facility means all solvent cleaning machines, except cold batch cleaning machines, located at an area source that are subject to the facility-wide limits in paragraph (b)(2) of this section.

(b) (1) Each owner or operator of an affected facility must maintain a log of solvent additions and deletions for each solvent cleaning machine.

SECTION D. Source Level Requirements

(2) Each owner or operator of an affected facility must ensure that the total emissions of perchloroethylene (PCE), trichloroethylene (TCE) and methylene chloride (MC) used at the affected facility are equal to or less than the applicable facility-wide 12-month rolling total emission limit presented in Table 1 of this section as determined using the procedures in paragraph (c) of this section.

Table 1.--Facility-wide Emission Limits for Facilities With Solvent Cleaning Machines

Solvents emitted	Facility-wide annual emission limits in kg--for general population degreasing machines	Facility-wide annual emission limit in kg for military depot maintenance facilities
PCE onlya	4,800	8,000
TCE only	14,100	23,500
MC only	60,000	100,000
Multiple solvents--Calculate the MC-weighted emissions using equation 1	60,000	100,000

aPCE emission limit calculated using CalEPA URE.

Note: In the equation, the facility emissions of PCE and TCE are weighted according to their carcinogenic potency relative to that of MC. The value of A is 12.5. The value for B is 4.25.

"Math equation"

(Formula omitted...refer to regulation for exact formula notation).

Where:
WE = Weighted 12-month rolling total emissions in kg (lbs).
PCE = 12-month rolling total PCE emissions from all solvent cleaning machines at the facility in kg (lbs).
TCE = 12-month rolling total TCE emission from all solvent cleaning machines at the facility in kg (lbs).
MC = 12-month rolling total MC emissions from all solvent cleaning machines at the facility in kg (lbs).

(c) Each owner or operator of an affected facility shall on the first operating day of every month, demonstrate compliance with the applicable facility-wide emission limit on a 12-month rolling total basis using the procedures in paragraphs (c)(1) through (5) of this section. For purposes of this paragraph, "each solvent cleaning machine" means each solvent cleaning machine that is part of an affected facility regulated by this section.

(1) Each owner or operator of an affected facility shall, on the first operating day of every month, ensure that each solvent cleaning machine system contains only clean liquid solvent. This includes, but is not limited to, fresh unused solvent, recycled solvent, and used solvent that has been cleaned of soiled materials. A fill line must be indicated during the first month the measurements are made. The solvent level within the machine must be returned to the same fill-line each month, immediately prior to calculating monthly emissions as specified in paragraphs (c)(2) and (3) of this section. The solvent cleaning machine does not have to be emptied and filled with fresh unused solvent prior to the calculations.

SECTION D. Source Level Requirements

(2) Each owner or operator of an affected facility shall, on the first operating day of the month, using the records of all solvent additions and deletions for the previous month, determine solvent emissions (Eunit) from each solvent cleaning machine using equation 10:

"Math equation"

(Formula omitted...refer to regulation for exact formula notation).

Where:
Eunit = the total halogenated HAP solvent emissions from the solvent cleaning machine during the most recent month i, (kilograms of solvent per month).
SAi = the total amount of halogenated HAP liquid solvent added to the solvent cleaning machine during the most recent month i, (kilograms of solvent per month).
LSRi = the total amount of halogenated HAP liquid solvent removed from the solvent cleaning machine during the most recent month i, (kilograms of solvent per month).
SSRi = the total amount of halogenated HAP solvent removed from the solvent cleaning machine in solid waste, obtained as described in paragraph (c)(3) of this section, during the most recent month i, (kilograms of solvent per month).

(3) Each owner or operator of an affected facility shall, on the first operating day of the month, determine SSRi using the method specified in paragraph (c)(3)(i) or (c)(3)(ii) of this section.

(i) From tests conducted using EPA reference method 25d.

(ii) By engineering calculations included in the compliance report.

(4) Each owner or operator of an affected facility shall on the first operating day of the month, after 12 months of emissions data are available, determine the 12-month rolling total emissions, ETunit, for the 12-month period ending with the most recent month using equation 11:

"Math equation"

(Formula omitted...refer to regulation for exact formula notation).

Where:
ETunit = the total halogenated HAP solvent emissions over the preceding 12 months, (kilograms of solvent emissions per 12-month period).
Eunit = halogenated HAP solvent emissions for each month (j) for the most recent 12 months (kilograms of solvent per month).

(5) Each owner or operator of an affected facility shall on the first operating day of the month, after 12 months of emissions data are available, determine the 12-month rolling total emissions, ETfacility, for the 12-month period ending with the most recent month using equation 12:

"Math equation"

(Formula omitted...refer to regulation for exact formula notation).

Where:
ETfacility = the total halogenated HAP solvent emissions over the preceding 12 months for all cleaning machines at the facility, (kilograms of solvent emissions per 12-month period).
ETunit = the total halogenated HAP solvent emissions over the preceding 12 months for each unit j, where i equals the total number of units at the facility (kilograms of solvent emissions per 12-month period).

(d) If the applicable facility-wide emission limit presented in Table 1 of paragraph (b)(2) is not met, an exceedance has occurred. All exceedances shall be reported as required in §63.468(h).

SECTION D. Source Level Requirements

(e) Each owner or operator of an affected facility shall maintain records specified in paragraphs (e)(1) through (3) of this section either in electronic or written form for a period of 5 years. For purposes of this paragraph, "each solvent cleaning machine" means each solvent cleaning machine that is part of an affected facility regulated by this section.

(1) The dates and amounts of solvent that are added to each solvent cleaning machine.

(2) The solvent composition of wastes removed from each solvent cleaning machines as determined using the procedure described in paragraph (c)(3) of this section.

(3) Calculation sheets showing how monthly emissions and the 12-month rolling total emissions from each solvent cleaning machine were determined, and the results of all calculations.

(f) Each owner or operator of an affected facility shall submit an initial notification report to the Administrator no later than May 3, 2010. This report shall include the information specified in paragraphs (f)(1) through (5) of this section.

(1) The name and address of the owner or operator of the affected facility.

(2) The address (i.e., physical location) of the solvent cleaning machine(s) that is part of an affected facility regulated by this section.

(3) A brief description of each solvent cleaning machine at the affected facility including machine type (batch vapor, batch cold, vapor in-line or cold in-line), solvent/air interface area, and existing controls.

(4) The date of installation for each solvent cleaning machine.

(5) An estimate of annual halogenated HAP solvent consumption for each solvent cleaning machine.

(g) Each owner or operator of an affected facility shall submit to the Administrator an initial statement of compliance on or before May 3, 2010. The statement shall include the information specified in paragraphs (g)(1) through (g)(3) of this section.

(1) The name and address of the owner or operator of the affected facility.

(2) The address (i.e., physical location) of each solvent cleaning machine that is part of an affected facility regulated by this section.

(3) The results of the first 12-month rolling total emissions calculation.

(h) Each owner or operator of an affected facility shall submit a solvent emission report every year. This solvent emission report shall contain the requirements specified in paragraphs (h)(1) through (h)(3) of this section.

(1) The average monthly solvent consumption for the affected facility in kilograms per month.

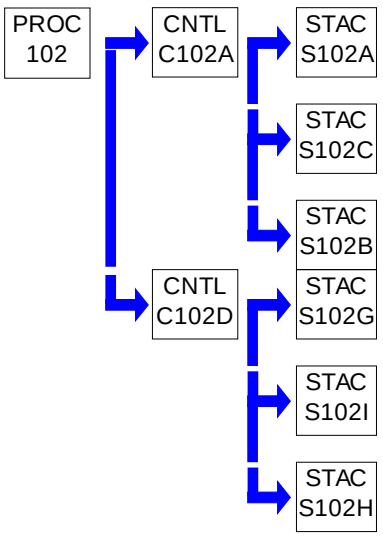
(2) The 12-month rolling total solvent emission estimates calculated each month using the method as described in paragraph (c) of this section.

(3) This report can be combined with the annual report required in §63.468(f) and (g) into a single report for each facility.

SECTION D. Source Level Requirements

Source ID: 102 Source Name: CHEMICAL VAPOR DEPOSITION UNITS A-H

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

b) Not applicable

c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The air pollution control device is designed to reduce process outlet concentrations to atmospheric emissions of 25 ppb or less of hydrogen selenide or 1 ppm hydrogen sulfide. The source shall be operated under the conditions stated in the application. All deviations of operations shall be documented and records kept by the facility for at least two years and forwarded to the Department upon request. [PA: Revised 10-313-050 Condition 5]

[Compliance with the requirement specified in this streamlined permit condition assures compliance with the provisions in PA: 10-313-036 Condition 2 & 10-313-038 Condition 2]

SECTION D. Source Level Requirements

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall monitor the pH for the scrubber solution and the pressure drop across each of the scrubbers on a weekly basis (at a minimum). [PA: 10-281D Condition 7]

[Compliance with the requirement specified in this streamlined permit condition assures compliance with the provisions in NM: 10-00281 Condition 004 for this source]

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The company shall monitor and record on a quarterly basis, the concentration of Hydrogen Selenide in the stack exhaust gases. A Hydrogen Selenide length of stain detector tube (Type S direct reading type or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 0.500 ppm (500 ppb). This represents the best available monitoring technology for the wet stack analysis of hydrogen selenide known to date. The actual detector tubes shall be kept by the facility for at least two years and made available to representatives of the Department upon request. Results in excess of the minimum sensing limit shall be reported to the Department on a quarterly basis. The report shall include the date of the excess emissions and the reason for the excess emissions. [PA: 10-281D Condition 8]

[Compliance with the requirement specified in this streamlined permit condition assures compliance with the provisions in NM: 10-00281 Condition 003 for this source]

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

a) The company shall maintain a log of all preventative maintenance inspections of the sources and control devices. The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, and the steps taken to correct them.

b) The company shall maintain a log of the following, at a minimum, from the operational inspections:

1. Pressure drop across each of the scrubbers
2. pH for each of the scrubbers

[Compliance with the requirement specified in this streamlined permit condition assures compliance with the provisions in PA: 10-281D Condition 10]

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

a) The permittee shall perform a weekly operational inspection of the control devices.

b) The permittee shall permanently install and maintain a magnehelic gauge or equivalent at a conveniently readable location to indicate pressure drop across the scrubbers.

SECTION D. Source Level Requirements

c) The permittee shall operate the control device(s) at all times that the source is in operation.

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

[Compliance with the requirement in this streamlined permit condition assures compliance with the provisions in PA: 10-281D Conditions 6 & 9]

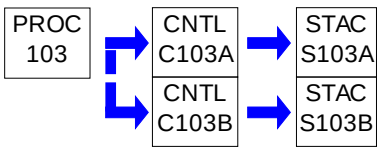
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 103 Source Name: HYDROGEN SELENIDE GAS PRODUCTION #1 AND #2

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

b) Not applicable

c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The air pollution control devices used are designed to reduce process outlet concentrations to atmospheric emissions of 25 ppb or less of hydrogen selenide. The source shall be operated under the conditions stated in the application. All deviations of operations shall be documented and records kept by the facility for at least two years and forwarded to the Department upon request. [PA: 10-281B Condition 5]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) The facility shall monitor the pH for the scrubber solution and the pressure drop across each of the scrubbers on a weekly basis (at a minimum). [PA: 10-281B Condition 7]

b) The company shall monitor and record on a quarterly basis, the concentration of Hydrogen Selenide in the stack exhaust gases while the sources are operating at maximum rated capacity as stated in the application. A Hydrogen Selenide length of stain detector tube (Type S direct reading type or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 0.500 ppm (500 ppb). This represents the best available monitoring technology for the wet stack analysis of hydrogen selenide known to date. The actual detector tubes shall be kept by the facility for at least two years and made available to representatives of the Department upon request. Results in excess of the minimum sensing limit shall be reported to the Department on a quarterly basis. The report shall include the date of the excess

SECTION D. Source Level Requirements

emissions and the reason for the excess emissions. [PA: 10-281B Condition 8]

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The company shall maintain a log of all preventative maintenance inspections of the sources and control devices. The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, the steps taken to correct them, and the measured pressure drop and pH for each of the scrubbers. [PA: 10-281B Condition 10]

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The company shall maintain a log of the following, at a minimum, from the operational inspections:

1. Pressure drop across the scrubbers
2. pH of the scrubber solution

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) A magnehelic gauge or equivalent shall be permanently installed and maintained at a conveniently readable location to indicate the pressure drop across the scrubbers. [PA: 10-281B Condition 6]

b) The company shall maintain and operate the sources and control devices in accordance with the manufacturer's specifications and in accordance with good air pollution control practices. [PA: 10-281B Condition 9]

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

a) The permittee shall perform a weekly operational inspection of the control devices.

b) The permittee shall operate the control device(s) at all times that the source is in operation.

VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 103A Source Name: H2SE TRANSFER PROCESS

Source Capacity/Throughput:

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

(a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

(b) Not applicable.

(c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) .04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

H2Se concentration in the exhaust gases from the scrubber shall not exceed 500 ppb. [OP:10-313-050 Condition 6].

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The company shall monitor and record on a quarterly basis, the concentration of Hydrogen Selenide in the stack exhaust gases while the sources are operating at maximum rated capacity as stated in the application. A Hydrogen Selenide length of stain detector tube (Type S direct reading type or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 0.500 ppm (500 ppb). This represents the best available monitoring technology for the wet stack analysis of hydrogen selenide known to date. The actual detector tubes shall be kept by the facility for at least two years and made available to representatives of the Department upon request. Results in excess of the minimum sensing limit shall be reported to the Department on a quarterly basis. The report shall include the date of the excess emissions and the reason for the excess emissions.

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

a) The company shall maintain a log of all preventative maintenance inspections of the sources and control device. The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, and the steps taken to correct them.

SECTION D. Source Level Requirements

b) The company shall maintain a log of the following, at a minimum, from the operational inspections:

1. Pressure drop across the scrubber
2. pH of the scrubber solution

V. REPORTING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The Company shall report on a quarterly basis all incidents where the Hydrogen Selenide concentration in the exhaust gases exceed 500 ppb. Such report shall contain the date, time, duration, and reasons of excess emissions, and becomes due within 30 days of the end of the calendar quarter. [PA: 10-313-039 Condition 5 & 10-313-039A Condition 5 & 10-313-050 Condition 6]

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

a) The permittee shall perform a weekly operational inspection of the control device.

b) The permittee shall operate the control device at all times that the source is in operation.

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

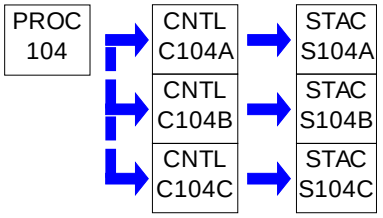
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 104 Source Name: CHEMICAL VAPOR DEPOSITION UNITS: MPZ FURNACES "I, J, K & L"

Source Capacity/Throughput:



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

b) Not applicable

c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[From Plan Approval 10-281J & K]

The maximum emission rate for each furnace is:

Pollutant	Pounds per Hour	Pounds per Year
Particulate Matter (Oil mist)	0.005	40.0
Hydrogen Selenide	0.0000192	0.143
Hydrogen Sulfide	0.0000192	0.143

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[From Plan Approval 10-281J & K]

a) The facility shall monitor the pH for the scrubber solution daily.

b) The facility shall monitor the pressure drop across each of the scrubbers on an average of every two hours and continuously monitor the inlet pressure with a high alarm.

SECTION D. Source Level Requirements

c) The scrubber solution KOH content shall be measured after any solution replacement.

d) The company shall monitor on a quarterly basis, the concentration of Hydrogen Selenide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application or at any time the stack alarm that senses a concentration higher than 25ppbV is activated. A Hydrogen Selenide length of stain detector tube (Type S direct reading type or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 0.500 ppm (500 ppb). If a more accurate monitoring technology with a lower minimum sensing limit becomes available, it shall be used to monitor the concentration of Hydrogen Selenide.

e) The company shall monitor on a annual basis, the concentration of Hydrogen Sulfide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application or at any time the stack alarm that senses a concentration higher than 25ppbV is activated. A Hydrogen Sulfide length of stain detector tube (Draeger Tube or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 0.200 ppm (200 ppb). If a more accurate monitoring technology with a lower minimum sensing limit becomes available, it shall be used to monitor the concentration of Hydrogen Sulfide.

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[From Plan Approval 10-281J & K]

(a) The daily log of the pH of each scrubber solution shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

(b) A two hour log of the pressure drop across each scrubber shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

(c) A log of KOH solution replacement to each scrubber and the KOH after replacement shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

d) The company shall record on a quarterly basis and maintain a log of the concentration of Hydrogen Selenide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application. The log and actual detector tubes shall be kept by the facility for at least five years and made available to representatives of the Department upon request.

e) The company shall record on an annual basis and maintain a log of the concentration of Hydrogen Sulfide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application. The log and actual detector tubes shall be kept by the facility for at least five years and made available to representatives of the Department upon request.

(f) The company shall maintain a log of all preventative maintenance inspections of the sources and control devices. The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, the steps taken to correct them. The log shall be kept on file for a minimum of 5 years and made available to the Department upon request.

V. REPORTING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[From Plan Approval 10-281J & K]

Results in excess of the minimum sensing limit of the concentration of Hydrogen Selenide in the stack exhaust gases shall be reported to the Department on a quarterly basis. The report shall include the date of the excess emissions and the reason for the excess emissions.

SECTION D. Source Level Requirements

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Condition (a) From Plan Approval 10-281J & K]

(a) The operating range for pressure drop, pH and concentration of KOH of the scrubbers shall be determined within 30 days of startup of the control device and shall be indicated to the Department in writing. The pressure drop, pH and KOH concentration ranges shall be made part of the facility operating permit.

(b) The following normal operating parameters have been identifed for the scrubbers by the facility. The facility shall comply with these parameters during all times that the source and control device are operated.

Pressure drop range - The maximum pressure drop range for each scrubber shall be 4 inches of water.

PH - The pH of the scrubber solution shall be 12-15

KOH concentration - The KOH concentration shall be 7-10%

VI. WORK PRACTICE REQUIREMENTS.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[From Plan Approval 10-281J & K]

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

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[From Plan Approval 10-281J & K]

(a) The permittee shall perform a weekly preventive maintenance inspection of the control devices.
(b) The permittee shall operate the control devices at all times this source is in operation.
(c) The Permittee shall maintain and operate this source and the control devices in accordance with the manufacturer's specifications. The facility shall maintain a copy of the manufacturer's specifications on-site.

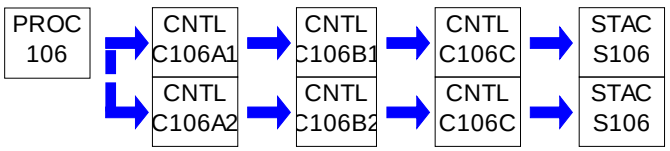
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 106 Source Name: CHEMICAL VAPOR DEPOSITION UNIT: FURNACES "M"

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

b) Not applicable

c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) Concentrations of HSe and H2S gas in the source's exhaust shall not exceed 25 ppbV.

b) Emissions from Source 106 shall not exceed the following:
H2S: 1.6 x 10-6 lbs/hr, 5.8x10-6 tpy (in any consecutive 12 month period)
HSe: 3.7 x 10-6 lbs/hr, 1.38x10-5 tpy (in any consecutive 12 month period)

[From Plan Approval 10-281P]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) The facility shall monitor the pH for the scrubber solution daily.

b) The facility shall monitor the pressure drop across each of the scrubbers on an average of every two hours and continuously monitor the inlet pressure with a high alarm.

c) The scrubber solution KOH content shall be measured after any solution replacement.

SECTION D. Source Level Requirements

d) The company shall monitor on a quarterly basis, the concentration of Hydrogen Selenide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application or at any time the stack alarm that senses a concentration higher than 25ppbV is activated. A Hydrogen Selenide length of stain detector tube (Type S direct reading type or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 0.500 ppm (500 ppbV). If a more accurate monitoring technology with a lower minimum sensing limit becomes available, it shall be used to monitor the concentration of Hydrogen Selenide.

e) The company shall monitor on an annual basis, the concentration of Hydrogen Sulfide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application or at any time the stack alarm that senses a concentration higher than 25ppbV is activated. A Hydrogen Sulfide length of stain detector tube (Draeger Tube or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 0.200 ppm (200 ppbV). If a more accurate monitoring technology with a lower minimum sensing limit becomes available, it shall be used to monitor the concentration of Hydrogen Sulfide.

f) The permittee shall log all hours of this source's operation. Every 400 hours of operation, the permittee shall include in the log confirmation of the scrubber's circulation fluid being changed. The log shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

g) The permittee shall install, maintain, and operate an automated pressure monitoring system which alarms if the furnace's internal pressure exceeds 2.0 psig.

h) The permittee shall install, maintain, and operate an automated flow monitoring system which alarms if the circulation fluid's flow rate drops below an acceptable level.

i) The permittee shall install, maintain, and operate an automated circulation fluid reservoir monitoring system which alarms if the reservoir's level drops below an acceptable level.

j) The permittee shall install, maintain, and operate a HSe/H2S alarm system adjacent to the stack exhaust which alarms if levels exceeding 25 ppbV are detected.

[From Plan Approval 10-281P]

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) The daily log of the pH of each scrubber solution shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

b) A two hour log of the pressure drop across each scrubber shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

c) A log of KOH solution replacement and the KOH concentration after replacement shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

d) The company shall record on a quarterly basis and maintain a log of the concentration of Hydrogen Selenide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application. The log and actual detector tubes shall be kept by the facility for at least five years and made available to representatives of the Department upon request.

e) The company shall record on an annual basis and maintain a log of the concentration of Hydrogen Sulfide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application. The log and actual detector tubes shall be kept by the facility for at least five years and made available to representatives of the Department upon request.

SECTION D. Source Level Requirements

f) The company shall maintain a log of all preventative maintenance inspections of the sources and control devices. The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, the steps taken to correct them. The log shall be kept on file for a minimum of 5 years and made available to the Department upon request.

[From Plan Approval 10-281P]

V. REPORTING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) Results in excess of the minimum sensing limit of the concentration of Hydrogen Selenide in the stack exhaust gases shall be reported to the Department on a quarterly basis. The report shall include the date of the excess emissions and the reason for the excess emissions.

[From Plan Approval 10-281P]

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

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

b) The operating range for scrubber pressure drop and pH shall be determined within 30 days of startup of the control device and shall be indicated to the Department in writing. The pressure drop and pH concentration ranges shall be made part of the facility operating permit.

c) The following normal operating parameters have been identified for the scrubbers by the facility. The facility shall comply with these parameters during all times that the source and control device are operated.

KOH concentration - The KOH concentration shall be equal to or greater than 8%

d) The permittee shall perform a weekly preventive maintenance inspection of the control devices.

e) The permittee shall operate the control devices at all times this source is in operation.

f) The Permittee shall maintain and operate this source and the control devices in accordance with the manufacturer's specifications. The facility shall maintain a copy of the manufacturer's specifications on-site.

g) The scrubber’s circulation fluid shall be changed at least every 400 hours of source operation.

[From Plan Approval 10-281P]

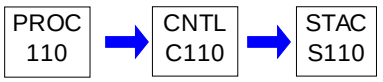
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 110 Source Name: THIN FILM MATERIALS PRODUCTION (TFM)

Source Capacity/Throughput:



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

b) Not applicable

c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) The facility shall monitor the pH for the scrubber solution, the flow rate, and the pressure drop across the TFM Inline scrubber on a continuous basis during each furnace run as indicated in the plan approval application. [PA: 10-281C Condition 6]

b) The company shall monitor and record on a quarterly basis, the concentration of Hydrogen Fluoride in the stack exhaust gases. The company may use a Draeger Tube (or equivalent) for the monitoring. The actual detector tubes shall be kept by the facility for at least two years and made available to representatives of the Department upon request. Results in excess of 2 ppmv shall be reported to the Department on a quarterly basis. The report shall include the date of the excess emissions, and the reason for the excess emissions. [PA: 10-281C Condition 8]

IV. RECORDKEEPING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The company shall maintain a log of all preventative maintenance inspections of the sources and control device. The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, the steps taken to correct them, the results of the quarterly stack exhaust monitoring, and the calibration of the pH sensor and the HF sensor (in the room and cabinet). [PA: 10-281C Condition 9]

SECTION D. Source Level Requirements

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The company shall maintain a log of the following, at a minimum, from the operational inspections:

1. Pressure drop across the inline scrubber
2. pH of the post-scrubber solution
3. Scrubber solution flow rate

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) A magnehelic gauge (or equivalent) and a rotameter (or equivalent) shall be permanently installed and maintained at a conveniently readable location to indicate the pressure drop and flow rate for the TFM Inline scrubber. [PA: 10-281C Condition 5]

b) The company shall maintain and operate the sources and control device in accordance with the manufacturer's specifications and in accordance with good air pollution control practices. [PA: 10-281C Condition 7]

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

a) The permittee shall perform a weekly operational inspection of the control device.

b) The permittee shall operate the control device at all times that the source is in operation.

VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 113A Source Name: MPZ DIESEL GENERATORS (3 UNITS)

Source Capacity/Throughput: 52.000 Gal/HR DIESEL OIL

Conditions for this source occur in the following groups: 1) GENERATORS
2) RICE ENGINE MACT

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The engines shall, at a minimum, comply with a Total Hydrocarbon (Reported as methane) emission standard of 1.0 gm/bhp-hr.

(b) The NOx emissions from the each engine shall not exceed 6.9 gms/hp-hr

(c) The carbon monoxide emissions from each engine shall not exceed two (2) gms/bhp-hr

(d) The particulate matter emissions from each engine shall not exceed 0.4 gms/bhp-hr

(e) Visible emissions from the diesel engine(s) stack shall not exceed the following limitations

(i) Equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one (1) hour; and
(ii) Equal to or greater than 30% at any time.

(f) The emission limitations specified above shall apply at all times except during periods of start-up and shut-down, provided, however that the duration of start-up and shut-down do not exceed one hour per occurrence.

[Compliance with condition (d) assures compliance with 25 Pa. Code §123.13. Also compliance with condition (e) assures compliance with 25 Pa. Code §123.41]

II. TESTING REQUIREMENTS.

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

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 (State Only 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 (State Only 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 (State Only General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Requirements

Source ID: 114 Source Name: MAIN GENERATORS (4 UNITS)

Source Capacity/Throughput: 230.000 Gal/HR DIESEL

Conditions for this source occur in the following groups: 1) GENERATORS
2) RICE ENGINE MACT

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Air pollutant emissions from each of the Diesel Engines (Katolight, Model No. DD800KW) shall not exceed the following limitations:

(a) PM: 0.047 Grams/bhp-hr

(b) CO: 0.340 Grams/bhp-hr

(c) NOX: 6.50 Grams/bhp-hr

(d) Total Hydrocarbons (Reported as methane): 0.205 Grams/bhp-hr

(e) Visible emissions from the diesel engine(s) stack shall not exceed the following limitations

(i) Equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one (1) hour; and
(ii) Equal to or greater than 30% at any time.

(f) The emission limitations specified above shall apply at all times except during periods of start-up and shut-down, provided, however that the duration of start-up and shut-down do not exceed one hour per occurrence.

[Compliance with condition (a), assures compliance with 25 Pa. Code §123.13. Also compliance with condition (e) assures compliance with 25 Pa. Code §123.41]

II. TESTING REQUIREMENTS.

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

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 (State Only General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain and operate these sources in accordance with the manufacturer's specifications. The facility shall maintain a copy of the manufacturer's specifications on site.

[From Plan Approval 10-281F, Condition #008]

VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 114A Source Name: KATOLIGHT 12V-2000 G83 MAIN PLANT GENERATOR

Source Capacity/Throughput: 52.000 Gal/HR DIESEL

Conditions for this source occur in the following groups: 1) GENERATORS
2) RICE ENGINE MACT

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The engines shall, at a minimum, comply with a Total Hydrocarbon (Reported as methane) emission standard of 1.0 gm/bhp-hr.

(b) The NOx emissions from the each engine shall not exceed 6.9 gms/hp-hr

(c) The carbon monoxide emissions from each engine shall not exceed two (2) gms/bhp-hr

(d) The particulate matter emissions from each engine shall not exceed 0.4 gms/bhp-hr

(e) Visible emissions from the diesel engine(s) stack shall not exceed the following limitations

(i) Equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one (1) hour; and
(ii) Equal to or greater than 30% at any time.

(f) The emission limitations specified above shall apply at all times except during periods of start-up and shut-down, provided, however that the duration of start-up and shut-down do not exceed one hour per occurrence.

[Compliance with condition (d) assures compliance with 25 Pa. Code §123.13. Also compliance with condition (e) assures compliance with 25 Pa. Code §123.41]

II. TESTING REQUIREMENTS.

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

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 (State Only 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 (State Only General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

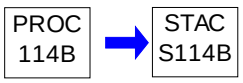
No additional requirements exist except as provided in other sections of this permit including Section B (State Only General Requirements) and/or Section E (Source Group Restrictions).

SECTION D. Source Level Requirements

Source ID: 114B Source Name: ENGINE BAY 1 COOLING TOWER EMERGENCY PUMP (20 HP)

Source Capacity/Throughput: 50.000 CF/HR NATURAL GAS

Conditions for this source occur in the following groups: 2) RICE ENGINE MACT



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from this process in a manner that the concentration of particulate matter in the effluent gas exceeds .04 grains per dry standard cubic foot.

 # 002 [25 Pa. Code §123.21]

General

No person may permit the emission into the outdoor atmosphere of sulfur oxides from 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.

II. TESTING REQUIREMENTS.

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

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 116 Source Name: ISOPROPYL ALCOHOL VAPOR DEGREASER-FORWARD TECH-AD-1032

Source Capacity/Throughput: N/A

PROC 116 → STAC S116

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The emission limit for the batch vapor solvent cleaning machine with a solvent /air interface shall be 30.7 pounds of VOC per square foot per month determined as a 3-month rolling average.

[From Plan Appeoval 10-281E, Section D, Condition #001]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The facility shall maintain a copy of the manufacturer's specifications on site.

(b) The operator shall maintain records sufficient to demonstrate compliance. The records shall include, at a minimum:

1) The quantity of solvent in the boil sump measured and recorded on the first and last day of the month

2) The quantity of solvent in the condensate tank measured and recorded on the first and last day of the month

3) The quantity of solvent added to the solvent cleaning machine recorded on the dates of the addition

4) The quantity of waste solvent removed from the solvent cleaning machine recorded on the dates of the removal

(c) The records and shall be maintained for at least 5 years and be available to Department personnel.

[From Plan Approval 10-281E, Section D, Conditions #002 & #003]

V. REPORTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

If the 3-month rolling average emission limit is not met, an exceedance has occurred. Exceedances shall be reported to the Department within 30 days of the determination of the exceedance.

SECTION D. Source Level Requirements

[From Plan Approval 10-281E, Section D, Condition #004]

VI. WORK PRACTICE REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall maintain and operate this source in accordance with the manufacturer's specifications.

[From Plan Approval 10-281E, Condition #005]

 # 005 [25 Pa. Code §129.63]

Degreasing operations

(a) Not Applicable

(b) Batch vapor cleaning machines. Except for those subject to the Federal NESHAP for halogenated solvent cleaners under 40 CFR Part 63, this subsection applies to batch vapor cleaning machines that use solvent containing greater than 5% VOC by weight for the cleaning of metal parts.

(1) Batch vapor cleaning machines shall be equipped with:

(i) Either a fully enclosed design or a working and downtime mode cover that completely covers the cleaning machine openings when in place, is free of cracks, holes and other defects, and can be readily opened or closed without disturbing the vapor zone. If the solvent cleaning machine opening is greater than 10 square feet, the cover shall be powered. If a lip exhaust is used, the closed cover shall be below the level of the lip exhaust.

(ii) Sides which result in a freeboard ratio greater than or equal to 0.75.

(iii) A safety switch (thermostat and condenser flow switch) which shuts off the sump heat if the coolant is not circulating.

(iv) A vapor up control switch which shuts off the spray pump if vapor is not present. A vapor up control switch is not required if the vapor cleaning machine is not equipped with a spray pump.

(v) An automated parts handling system which moves the parts or parts baskets at a speed of 11 feet (3.4 meters) per minute or less when the parts or parts are entering or exiting the vapor zone. If the parts basket being cleaned occupy more than 50% of the solvent/air interface area, the speed of the parts or parts basket may not exceed 3 feet per minute.

(vi) A device that shuts off the sump heat if the sump liquid solvent level drops to the sump heater coils.

(vii) A vapor level control device that shuts off the sump heat if the vapor level in the vapor cleaning machine rises above the height of the primary condenser.

(viii) A permanent, conspicuous label summarizing the operating requirements in paragraph (4).

(2) In addition to the requirements of paragraph (1), the operator of a batch vapor cleaning machine with a solvent/air interface area of 13 square feet or less shall implement the following option:

(i) A working mode cover, freeboard ratio of 1.0, and superheated vapor.

(ii) - (x) Not applicable

(3) Not Applicable

(4) Batch vapor cleaning machines shall be operated in accordance with the following procedures:

SECTION D. Source Level Requirements

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

(ii) Cleaned parts shall 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. A superheated vapor system shall be an acceptable alternate technology.

(iii) Parts or parts baskets may not be removed from the batch vapor cleaning machine until dripping has ceased.

(iv) Not Applicable

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

(vi) Spills during solvent transfer and use of the batch vapor cleaning machine shall be cleaned up immediately.

(vii) Work area fans shall be located and positioned so that they do not blow across the opening of the batch vapor cleaning machine.

(viii) During startup of the batch vapor cleaning machine, the primary condenser shall be turned on before the sump heater.

(ix) During shutdown of the batch vapor cleaning machine, the sump heater shall be turned off and the solvent vapor layer allowed to collapse before the primary condenser is turned off.

(x) When solvent is added to or drained from the batch vapor cleaning machine, the solvent shall be transferred using threaded or other leakproof couplings and the end of the pipe in the solvent sump shall be located beneath the liquid solvent surface.

(xi) The working and downtime covers shall be closed at all times except during parts entry and exit from the machine, during maintenance of the machine when the solvent has been removed and during addition of solvent to the machine.

(c) Not Applicable

(d) Not Applicable

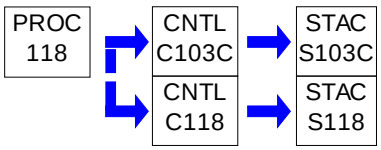
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 118 Source Name: EQUIPMENT LEAKS

Source Capacity/Throughput:



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

b) Not applicable

c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Plan Approval 10-281 I & L]
(a) Subject to 25 Pa Code Sections 123.1, 123.31, and 123.41 for Fugitive Matter, Odor, and Visible Emissions.

[Plan Approval 10-281L]
(b) The emergency vent scrubber shall be designed to reduce outlet concentrations to atmospheric emissions of 500 ppb or less of hydrogen selenide. The source shall be operated under the conditions stated in the application. All deviations of operations shall be documented and records kept by the facility for at least two years and forwarded to the Department upon request.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Plan Approval 10-281L]

The facility shall monitor the pH for the scrubber solution and the pressure drop across the scrubber, daily, whenever it is in operation.

SECTION D. Source Level Requirements

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281I]
(a) The permittee shall maintain a record of all preventative maintenance inspections of the control device. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, and any routine maintenance performed.

[Plan Approval 10-281I]
(b) The permittee shall maintain a record of the following from the operational inspections:

1. Scrubber gas flow rate
2. Liquid pressure or flow rate
3. Scrubbing liquid pH
4. Pressure drop
5. Outlet gas temperature

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Plan Approval 10-281L]
a) · The permittee shall maintain a record of all preventative maintenance inspections of the control device. These records shall, at a minimum, contain the dates of the inspections, any problems or defects, the actions taken to correct the problem or defects, and any routine maintenance performed.

[Plan Approval 10-281L]
b) The company shall maintain a log of the following, at a minimum, from the operational inspections:

1. Pressure drop across the scrubber
2. pH of the scrubber solution

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281I]
(a) The permittee shall perform a daily operational inspection of the control device when in operation.

[Plan Approval 10-281I]
(b) A magnehelic gauge or equivalent shall be permanently installed and maintained at a convenient location to indicate the pressure drop across the control device.

[Plan Approval 10-281I]
(c) All gauges employed (scrubber gas flow rate, liquid pressure or flow rate, scrubbing liquid pH, pressure drop, and outlet gas temperature) shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

[Plan Approval 10-281I]
(d) The permittee shall operate the control device (C118) whenever there is a leak of hydrogen selenide or hydrogen sulfide from cylinders and/or manifolds within the delivery vault and whenever there is a leak within the furnace flow panels.

[Plan Approval 10-281I]

SECTION D. Source Level Requirements

(e) The permittee shall maintain and operate the source and control device in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Plan Approval 10-281L]
a) The control device (C103C) shall be automatically activated upon detection of hydrogen selenide gas leak inside the hoods enclosing the existing DH process trains (Hoods #1, #2, and #3), the proposed DH process train (Hood #4), the existing Cold Vault Storage room (Hood #6), and the existing Gas Transfer Process (Hood #5).

[Plan Approval 10-281L]
b) The permittee shall perform a daily operational inspection of the control device when it is being used for emergency venting purposes.

[Plan Approval 10-281L]
c) A magnehelic gauge or equivalent shall be permanently installed and maintained at a conveniently readable location to indicate the pressure drop across the scrubber.

[Plan Approval 10-281L]
d) The company shall maintain and operate the sources and control device in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

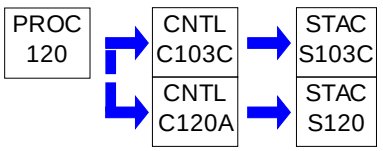
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 120 Source Name: HYDROGEN SELENIDE PRODUCTION (REACTOR 3)

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

b) Not applicable

c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281M]

The air pollution control devices (C120A) used shall be designed to reduce process outlet concentrations to atmospheric emissions of 25 ppb or less of hydrogen selenide. The emergency vent scrubber (C103C) shall be designed to reduce process outlet concentrations to atmospheric emissions of 500 ppb or less of hydrogen selenide. The source shall be operated under the conditions stated in the application. All deviations of operations shall be documented and records kept by the facility for at least two years and forwarded to the Department upon request.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281M]
(a) The facility shall monitor the pH for the scrubber solution and the pressure drop across each of the scrubbers on a weekly basis (at a minimum). This condition refers to the H2SE #3 A & B SCRUBBER & CARBON BED SYSTEM (C120A).

[Plan Approval 10-281L]
(b) The facility shall monitor the pH for the scrubber solution and the pressure drop across the scrubber, daily, whenever it is in operation. This condition refers to the emergency vent scrubber (C103C).

SECTION D. Source Level Requirements

[Plan Approval 10-281M]
(c) The company shall monitor and record on a quarterly basis, the concentration of Hydrogen Selenide in the stack exhaust gases while the sources are operating at maximum rated capacity as stated in the application. A Hydrogen Selenide length of stain detector tube (Type S direct reading type or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 0.500 ppm (500 ppb). This represents the best available monitoring technology for the wet stack analysis of hydrogen selenide known to date. The actual detector tubes shall be kept by the facility for at least two years and made available to representatives of the Department upon request. Results in excess of the minimum sensing limit shall be reported to the Department on a quarterly basis. The report shall include the date of the excess emissions and the reason for the excess emissions.

IV. RECORDKEEPING REQUIREMENTS.

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

[Plan Approval 10-281M]
(a) The company shall maintain a log of all preventative maintenance inspections of the sources and control devices. The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, and the steps taken to correct them.

[Plan Approval 10-281M]
(b) The company shall maintain a log of the following, at a minimum, from the operational inspections:

1. Pressure drop across the scrubbers
2. pH of the scrubber solution

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

[Plan Approval 10-281M]
(a) The permittee shall perform a weekly operational inspection of the control devices (C120A).

[Plan Approval 10-281L]
(b) The permittee shall perform a daily operational inspection of the control device (C103C) when it is being used for emergency venting purposes.

[Plan Approval 10-281L]
(c) The control device (C103C) shall be automatically activated upon detection of hydrogen selenide gas leak inside the hoods enclosing the existing DH process trains (Hoods #1 and #2 and #3), the proposed DH process trains (Hoods #4), the existing Cold Vault Storage room (Hood #6), and the existing Gas Transfer Process (Hood #5).

[Plan Approval 10-281M]
(d) A magnehelic gauge or equivalent shall be permanently installed and maintained at a conveniently readable location to indicate the pressure drop across the scrubbers.

[Plan Approval 10-021M]
(e) Control device operating parameters, including pressure drop and pH, shall be operated in a range defined by the manufacturer or in a range developed during compliant stack testing. The operating range for the pressure drop across the control device and the pH shall be determined within 90 days after startup of the control device and shall be indicated to the Department in writing prior to administratively amending into the facility operating permit. Control device pressure drop range and pH range shall be made part of the facility operating permit.

SECTION D. Source Level Requirements

[The approved pressure drop range for C120A is 1-5 inches of water per column and the approved pH range is 12 or greater].

[Plan Approval 10-281M]
(f) The permittee shall operate the control device(s) at all times that the source is in operation.

[Plan Approval 10-281M]
(g) The company shall maintain and operate the sources and control devices in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

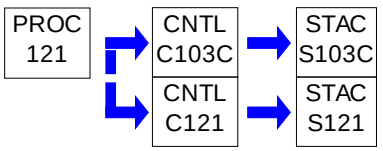
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 121 Source Name: HYDROGEN SELENIDE PRODUCTION (REACTOR 4)

Source Capacity/Throughput: N/A



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

(a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

(b) Not applicable

(c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

(ii) Not applicable

(iii) Not applicable

(2) Allowable emissions. Allowable emissions under this subsection are graphically indicated in Appendix C.

(d) Not applicable

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281O]

The air pollution control devices (C121) used shall be designed to reduce process outlet concentrations to atmospheric emissions of 25 ppb or less of hydrogen selenide. The emergency vent scrubber (C103C) shall be designed to reduce process outlet concentrations to atmospheric emissions of 500 ppb or less of hydrogen selenide. The source shall be operated under the conditions stated in the application. All deviations of operations shall be documented and records kept by the facility for at least two years and forwarded to the Department upon request.

II. TESTING REQUIREMENTS.

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

SECTION D. Source Level Requirements

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281O]
(a) The facility shall monitor the pH for the scrubber solution and the pressure drop across each of the scrubbers on a weekly basis (at a minimum). This condition refers to the H2SE #4 A & B Scrubber & Carbon Bed System (C121).

[Plan Approval 10-281L]
(b) The facility shall monitor the pH for the scrubber solution and the pressure drop across the scrubber, daily, whenever it is in operation. This condition refers to the emergency vent scrubber (C103C).

[Plan Approval 10-281O]
(c) The company shall monitor and record on a quarterly basis, the concentration of Hydrogen Selenide in the stack exhaust gases while the sources are operating at maximum rated capacity as stated in the application. A Hydrogen Selenide length of stain detector tube (Type S direct reading type or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 0.500 ppm (500 ppb). This represents the best available monitoring technology for the wet stack analysis of hydrogen selenide known to date. The actual detector tubes shall be kept by the facility for at least two years and made available to representatives of the Department upon request. Results in excess of the minimum sensing limit shall be reported to the Department on a quarterly basis. The report shall include the date of the excess emissions and the reason for the excess emissions.

IV. RECORDKEEPING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281O]
(a) All recordkeeping shall commence upon startup of the source/control device. All records shall be kept for a period of five (5) years and shall be made available to the Department upon request.

[Plan Approval 10-281O]
(b) The company shall maintain a log of all preventative maintenance inspections of the sources and control devices. The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, and the steps taken to correct them.

[Plan Approval 10-281O]
(c) The company shall maintain a log of the following, at a minimum, from the operational inspections:

1. Pressure drop across the scrubbers
2. pH of the scrubber solution

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281O]
(a) The permittee shall perform a weekly operational inspection of the control devices (C121).

[Plan Approval 10-281L]
(b) The permittee shall perform a daily operational inspection of the control device (C103C) when it is being used for emergency venting purposes.

SECTION D. Source Level Requirements

[Plan Approval 10-281L]
(c) The control device (C103C) shall be automatically activated upon detection of hydrogen selenide gas leak inside the hoods enclosing the existing DH process trains (Hoods #1 and #2 and #3), the proposed DH process trains (Hoods #4), the existing Cold Vault Storage room (Hood #6), and the existing Gas Transfer Process (Hood #5).

[Plan Approval 10-281O]
(d) A magnehelic gauge or equivalent shall be maintained and operated to monitor the pressure differential across the scrubbers. All gauges employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (+/- 2%) of full scale reading.

[Plan Approval 10-021O]
(e) The permittee shall adhere to the approved indicator range for the scrubber so that operation within the range shall provide reasonable assurance of compliance. A departure from the specified indicator range over a specified averaging period shall be defined as an excursion. The approved indicator range shall be determined by the manufacturer specifications, or developed during the initial ninety (90) day shakedown period, or developed during the initial performance test and any subsequently approved performance tests. The initial indicator range will be the following:

1. Pressure drop: 1.0 to 5.0 inches water
2. pH: 12 or greater

The permittee may submit an amended indictor range with an explanation of how it was determined for inclusion into the operating permit, in writing, prior to administratively amending into the facility operating permit. The permittee, with prior Departmental approval, may conduct additional performance tests to determine a new indicator range.

Within 24-hours of discovery of a reading outside of the prescribed range, the permittee shall perform a maintenance inspection on the control device and take corrective action. Records of all maintenance inspections on the control device, and corrective actions taken, shall be maintained on site for a minimum period of five years. In the event of more than one documented excursion outside the prescribed range in any calendar quarter the permittee shall submit a corrective measure plan to the Department. Corrective measures may include an increase of the frequency of required preventative maintenance inspections of the control device, a modification of the prescribed range, or other appropriate action as approved by the Department. Upon receipt of a corrective measure plan the Department shall determine the appropriate corrective measure on a case-by case basis.

[Plan Approval 10-281O]
(f) The permittee shall operate the control device(s) at all times that the source is in operation.

[Plan Approval 10-281O]
(g) The company shall maintain and operate the sources and control devices in accordance with the manufacturer's specifications and in accordance with good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 122 Source Name: MPZ ISOPROPANOL SPRAY BOOTH

Source Capacity/Throughput: 0.600 Lbs/HR ISOPROPANOL

PROC 122 → STAC Z122

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The VOC emissions from this source shall not exceed 2.7 TPY.

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The facility shall keep records of the VOC emissions from this source based on the gallons of Isopropanol used, the density provided in the RFD (6.59 lbs/gallon), and the weight percent IPA (90%).

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 123 Source Name: IPA LASER OPTIC BATCH VAPOR DRYER

Source Capacity/Throughput: 0.120 Lbs/HR ISOPROPYL ALCOHOL

PROC 123 → STAC S123

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The VOCs from this source shall not exceed 0.66 TPY based on the information provided with the RFD that was approved by the Department on March 24, 2011 and the revised dimensions that indicated the air-solvent interface is 3.6 square feet.

 # 002 [25 Pa. Code §129.63]

Degreasing operations

(a) -(d) Not applicable

(e) Alternative provisions for solvent cleaning machines. This section applies to all solvent cleaning machines used to process metal parts that use solvents containing greater than 5% VOC by weight. As an alternative to complying with subsections (b)-(d), the operator of a solvent cleaning machine may demonstrate compliance with paragraph (1) or (2). The operator shall maintain records sufficient to demonstrate compliance. The records shall include, at a minimum, the quantity of solvent added to and removed from the solvent cleaning machine, the dates of the addition and removal and shall be maintained for at least 2 years.

(1) If the solvent cleaning machine has a solvent/air interface, the owner or operator shall:

(i) Maintain a log of solvent additions and deletions for each solvent cleaning machine.

(ii) Ensure that the emissions from each solvent cleaning machine are equal to or less than the applicable emission limit presented in Table 1:

Table 1

Emission Limits for
Solvent Cleaning Machines
with a Solvent/Air Interface

Solvent cleaning machine	3-month rolling average monthly emission limit (kg/m2/month)	lb/ft2/month
Batch vapor solvent cleaning machines	150	30.7

(2) - (4) Not applicable.

(5) Each owner or operator of a batch vapor or in-line solvent cleaning machine complying with this subsection shall demonstrate compliance with the applicable 3-month rolling average monthly emission limit on a monthly basis. If the applicable 3-month rolling average emission limit is not met, an exceedance has occurred. Exceedances shall be reported to the Department within 30 days of the determination of the exceedance.

SECTION D. Source Level Requirements

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

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

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

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

VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 200 Source Name: DMG KOHLER DIESEL EMERGENCY GENERATOR (2 UNITS)(1494 BHP EA)

Source Capacity/Throughput:

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Any diesel engine for which construction commenced on or after July 1, 1972 and best available technology requirements have not been previously established:

i. If the diesel-fired internal combustion engine has an engine rating greater than 100 brake horsepower, the engine shall, at a minimum, comply with a Total Hydrocarbon (THC) emission standard of 1.0 gm/bhp-hr.

ii. If the diesel-fired internal combustion engine is equal to or greater than 200 brake horsepower and number of hours of operation of engine are equal to or greater than 1,100 hours per year (GP 9, page 4, Facilities Located in "Moderate" (or lower classified) Ozone Non-Attainment Areas), then the engine shall be installed with a NOx control device with a minimum of 80% NOx control efficiency. All other diesel engines shall at a minimum comply with the NOx emission standard of 6.9 gms/hp-hr.

iii. If the diesel-fired engine is equal to or greater than 100 brake horsepower and number of hours of operation of engine are equal to or greater than 700 hours per year (1,000 bhp to 1,500 bhp), then the engine shall be installed with CO Oxidation Catalyst control device with a minimum of 90% control efficiency. All other diesel engines shall at a minimum comply with CO emission standard of 2.0 gms/bhp-hr.

iv. The sulfur content in diesel fuel shall not, at any time exceed 0.3 percent (by weight).

v. The particulate matter emissions from each engine shall not exceed 0.4 gms/bhp-hr.

vi. Visible emissions from diesel engine(s) stacks shall not exceed the following limitations:
A. Equal to or greater than 10% for a period or periods aggregating more than three (3) minutes in any one (1) hour; and
B. Equal to or greater than 30% at any time.

vii. Odor emissions in such a manner that the malodors are detectable outside the property of the permittee as specified in 25 Pa. Code §123.31

II. TESTING REQUIREMENTS.

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a). For a new internal combustion engine installed, which has a rated capacity greater than 500 brake horsepower, within 180 days of receiving authority to construct under this general permit, the permittee shall perform stack testing in accordance with 25 Pa. Code Chapter 139.

b) In addition to the stack testing required by this condition, within 12 months after the initial stack testing, and annually thereafter, the permittee shall perform NOx emissions tests upon each of the respective engines subjected to the BAT herein using a portable analyzer approved by the Department. The Department may alter the frequency of annual portable analyzer tests based on the results. The Department may also waive all or parts of this requirement if the permittee demonstrates compliance, in lieu of testing, through alternate means satisfactory to the Department.

SECTION D. Source Level Requirements

c) The Department reserves the right to require stack tests in accordance with EPA reference methods should the data from the portable analyzer warrant such tests. The purpose of this testing is to demonstrate compliance with the emission limitations required for new engines.

d) The Department may accept the vendor guarantees or recent on-site test data on similar engines, or any other means approved by the Department as a verification of NOx emission if the NOx emissions from a diesel engine located in severe non-attainment area for ozone are less than 2.5 tons per year or 10 tons per year if a diesel engine is located in areas other than severe non-attainment for ozone.

e) If performance stack tests are required for the demonstration of compliance with applicable emissions limits, the owner or operator of the affected facility shall comply with the following requirements:

i) Within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but no later than one hundred eighty (180) days after the initial startup of the source and the owner or operator shall demonstrate compliance with the applicable emission limits.

ii) At least sixty (60) 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.

iii) At least thirty (30) days prior to the test, the Department shall be informed of the date and time of the test.

iv) Within sixty (60) days after the source test(s), two copies of the complete test report, including all operating conditions, shall be submitted to the Department.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

a) The permittee shall maintain accurate records, which, at a minimum, shall include:
i) The number of hours per calendar year that each engine or piece of equipment operated using non-resettable hour meter.
ii) The amount of fuel used per calendar year in each engine or piece of equipment.

b. When a new diesel-fired internal combustion engine is installed and is required to conduct a performance test, the permittee shall maintain records or report the following:
i) Records including a description of testing methods, results, all engine operating data collected during the tests and a copy of the calculations performed to determine compliance with emission standards.
ii) Copies of the report that demonstrates that the engines were operating at rated brake horsepower and rated speed conditions during performance testing.
iii) Submittal of reports in accordance with the requirements and schedules outlined in source requirements.

c) These records shall be retained for a minimum of five (5) years and shall be made available to the Department upon request. The Department reserves the right to expand the list contained in this condition as it may reasonably prescribe pursuant to the provisions of Section 4 of the Pennsylvania Air Pollution Control Act (35 P. S. §§4004), and as it may deem necessary to determine compliance with any condition contained herein.

SECTION D. Source Level Requirements

V. REPORTING REQUIREMENTS.

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee shall notify the Department, in writing, within 24 hours of the discovery of any malfunction during a business day or by 5:00 p.m. on the first business day after a weekend or holiday, of any malfunction of the diesel-fired internal combustion engine(s) which results in, or may result in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code, Subpart C, Article III (relating to air resources).

VI. WORK PRACTICE REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Any applicant authorized to operate a diesel-fired internal combustion engine(s) must comply with the following terms and conditions. The diesel-fired internal combustion engine(s) shall be:

a. operated in such a manner as not to cause air pollution, as defined in 25 Pa. Code §121.1;

b. operated and maintained in a manner consistent with good operating and maintenance practices; and
c. operated and maintained in accordance with the manufacturer's specifications and the applicable terms and conditions of this General Permit.

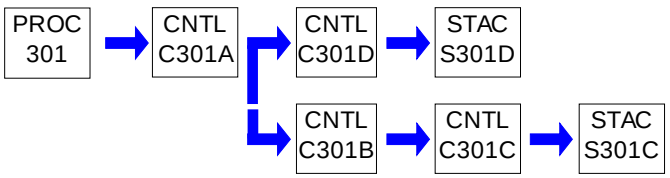
VII. ADDITIONAL REQUIREMENTS.

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

SECTION D. Source Level Requirements

Source ID: 301 Source Name: MPZ N FURNACE (CVD)

Source Capacity/Throughput: 5.000 Lbs/HR ZINC



I. RESTRICTIONS.

Emission Restriction(s).

[25 Pa. Code §123.13]

Processes

a) Subsections (b) and (c) apply to all processes except combustion units, incinerators and pulp mill smelt dissolving tanks.

b) Not applicable

c) For processes not listed in subsection (b)(1), including but not limited to, coke oven battery waste heat stacks and autogeneous zinc coker waste heat stacks, the following shall apply:

(1) Prohibited emissions. No person may permit the emission into the outdoor atmosphere of particulate matter from any process not listed in subsection (b)(1) in a manner that the concentration of particulate matter in the effluent gas exceeds any of the following:

(i) 0.04 grain per dry standard cubic foot, when the effluent gas volume is less than 150,000 dry standard cubic feet per minute.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281Q]
The maximum emission rate for Source 301 is:

Pollutant	Hourly Limit	Tons per Year (12 month rolling total)
Particulate Matter (Oil mist)	0.0001851 lb/hr	0.0008
Hydrogen Sulfide	0.000010 lbs/hr	0.0001

When the Pressure Relief valve has been activated the H2 S limits are 0.0001915 lb/hr and 0.0000003 tpy.

[from the confidential plan approval application page 14, Section F(1) (estimated atmospheric emissions)]

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281Q]
a) The facility shall monitor the pH for the scrubber solution daily, when the source and control device are in operation.

b) The facility shall monitor the pressure drop across the scrubber every three (3) hours and continuously monitor the inlet

SECTION D. Source Level Requirements

pressure with a high alarm, when the source and control device are in operation.

c) The scrubber solution KOH content, as a percentage, shall be measured after any solution replacement.

d) The company shall monitor on a quarterly basis, the concentration of Hydrogen Sulfide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application or at any time the stack alarm that senses a concentration higher than 10ppmV is activated. A Hydrogen Sulfide length of stain detector tube (Type SD direct reading type or equivalent) shall be utilized to monitor the emission concentrations. The minimum sensing limit for this method is 1 ppm. If a more accurate monitoring technology with a lower minimum sensing limit becomes available, it shall be used to monitor the concentration of Hydrogen Sulfide.

e) The facility shall monitor the scrubber flow rate on a daily basis, when the source and control device are in operation.

IV. RECORDKEEPING REQUIREMENTS.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281Q]

(a) The daily log of the pH of the scrubber solution shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

(b) The daily log of flow to the scrubbers shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon requiest.

(c) A three (3) hour log of the pressure drop across the scrubber shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

(d) A log of KOH solution replacement to the scrubbers and the KOH after replacement shall be maintained and kept on file for a minimum of 5 years and made available to the Department upon request.

(e) The company shall record on a quarterly basis and maintain a log of the concentration of Hydrogen Sulfide in the stack exhaust gases while the sources are operating at normal rated capacity as stated in the application. The log and actual detector tubes shall be kept by the facility for at least five years and made available to representatives of the Department upon request.

(f) The company shall record on an quarterly basis a twelve (12) month rolling total for Hydrogen Sulfide emissions for source 301. This will be done using results from the current quarter combined with those from the previous three (3) quarters.

(g) The company shall maintain a log of all preventative maintenance inspections of the sources and control devices. The inspection logs, at a minimum, shall contain the dates of the inspections, any potential problems or defects that were encountered, the steps taken to correct them. The log shall be kept on file for a minimum of 5 years and made available to the Department upon request.

V. REPORTING REQUIREMENTS.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281Q]

a) Detector Tube readings above 1.75 ppm for the concentration of Hydrogen Sulfide in the stack exhaust gases shall be reported to the Department on a quarterly basis. The report shall include the date of the excess emissions and the reason for the excess emissions.

SECTION D. Source Level Requirements

b) Hydrogen Sulfide exceedances of the permitted emission limits shall be reported to the Air Quality Program Manager, at the Northwest Regional Office (230 Chestnut Street, Meadville, PA 16335) via telephone within twenty-four (24) hours of discovery and in writing within seventy-two hours of discovery.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281Q]

(a) The operating range for pressure drop, pH and concentration percentage of KOH of the scrubber fluid shall be determined within 30 days of startup of the control device and shall be indicated to the Department in writing. The pressure drop, pH and KOH concentration ranges shall be made part of the facility operating permit.

(b) The following normal operating parameters have been identifed for the scrubbers by the facility. The facility shall comply with these parameters during all times that the source and control device are operated.

Pressure drop range - The maximum pressure drop range for the scrubber shall be provided after start up.

Scrubber flow range - The range of the flow to the scrubbers shall be provided after start up.

PH - The pH of the scrubber solution shall be provided after start up.

KOH concentration percentage of the scrubber fluid - The KOH concentration operating range shall be provided after start up.

VI. WORK PRACTICE REQUIREMENTS.

[25 Pa. Code §127.12b]

Plan approval terms and conditions.

[Plan Approval 10-281Q]
(a) A magnehelic gauge or equivalent shall be permanently installed and maintained at a conveniently readable location to indicate the pressure drop across the scrubber.

(b) The permittee shall perform a weekly preventive maintenance inspection of the control devices.

(c) The permittee shall operate the control devices at all times this source is in operation.

(d) The Permittee shall maintain and operate this source and the control devices in accordance with the manufacturer's specifications. The facility shall maintain a copy of the manufacturer's specifications on-site.

(e) The permittee shall install, maintain, and operate an automated flow monitoring system which alarms if the circulation fluid flow rate drops below 20 gallons per minute (gpm) for C301C (Counter Current Packed Tower Scrubber) and 14 gpm for control device C301B (Venturi Vortex Absorber).

(f) The permittee shall install, maintain, and operate an automated circulation fluid reservoir monitoring system which alarms if the reservoir's level drops below twelve (12) inches from the bottom of the tank.

(g) The permittee shall install, maintain, and operate a H2S alarm system adjacent to the stack exhaust which alarms if levels exceeding 10 ppmV are detected.

(h) The permittee shall maintain the scrubber solution between 2 and 8% KOH after the startup period. The target pH is 12 and KOH solution content is 8%. [from the confidential plan approval application Section C (6).] [Operating range from Section C(9), page 8.]

SECTION D. Source Level Requirements

VII. ADDITIONAL REQUIREMENTS.

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

SECTION E. Source Group Restrictions.

Group Name: 1) GENERATORS

Group Description:

Sources included in this group

ID	Name
113A	MPZ DIESEL GENERATORS (3 UNITS)
114	MAIN GENERATORS (4 UNITS)
114A	KATOLIGHT 12V-2000 G83 MAIN PLANT GENERATOR

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Emissions from the four MPZ and four Main Plant Generators shall not exceed:

(a) Total Hydrocarbon (THC): 1.81 tons per year based on a 12-month rolling total.

(b) NOx: 20.52 tons per year based on a 12-month rolling total.

(c) CO: 3.50 tons per year based on a 12-month rolling total.

(d) Particulate matter (PM) 0.67 tons per year based on a 12-month rolling total.

Fuel Restriction(s).

 # 002 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The sulfur content in the diesel fuel shall not, at any time exceed 0.3 percent (by weight). Compliance shall be demonstrated by maintaining fuel supplier receipts, which certify that the oil meets the definition of distillate oil as defined by the American Society of Testing and Materials in ASTM D396-78, Standard specification for Fuel Oils.

(This condition assures compliance with 25 Pa Code 123.21)

Operation Hours Restriction(s).

 # 003 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Each of the diesel engine generators shall not exceed 300 hours of operation for any reason in any 12 month rolling period.

The following conditions have been streamlined from the permit based on a USEPA Momorandum dated April 15, 2016 titled "Guidance on Vacatur of RICE NESHAP and NSPS Provisions for Emergency Engines":

(* Each of the eight diesel engine generators are part of the Pennsylvania-New Jersey-Maryland Interconnection LLC (PJM) Emergency Load Response Program (ELRP) located in Butler County.)

(* Each of the diesel engine generators shall not exceed 60 hours of operation under the PJM program.)

 # 004 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

The permittee will limit the combined NOx emissions from the generators to less than 2.75 tons during the ozone season (period beginning May 1 of each year and ending on September 30 of the same year) while operating under the PJM program.

II. TESTING REQUIREMENTS.

 # 005 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

Within 12 months after the initial stack testing, and annually thereafter, the permittee shall perform NOx and CO emission

SECTION E. Source Group Restrictions.

tests upon each of the respective engines using a portable analyzer approved by the Department to show compliance with the NOx and CO emission limits. The Department reserves the right to alter the frequency of the annual portable analyzer tests based on the results. The Department may also waive all or parts of this requirement if the permittee demonstrates compliance, in lieu of testing, through alternate means satisfactory to the Department. The Company may request in writing to the Department, a waiver of stack testing. The Department in its sole discretion may grant such a waiver on a case by case basis.

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 006 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The permittee shall maintain accurate records, which, at a minimum, shall include:

(i) The number of hours per calendar year that each engine operated using non-reset table hour meter.

(ii) The amount of fuel used per calendar year in each engine or piece equipment.

(iii) The reason why each engine was operated.

(iv) Fuel supplier receipts, showing the sulfur content of the #2 Diesel Fuel Oil.

(b) The permittee shall retain these records for a minimum of five (5) years and shall be made available to the Department upon request.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

In order to show compliance with the Operation Hours Restrictions containing the reference to the ozone season, the permittee shall calculate the total NOx emissions for all engines included in this source group for the ozone season, which runs from May 1 until September 30 of each year.

V. REPORTING REQUIREMENTS.

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

VI. WORK PRACTICE REQUIREMENTS.

 # 008 [25 Pa. Code §127.12b]

Plan approval terms and conditions.

(a) The permittee shall operate and maintained the source(s) in accordance with the manufacturer's specifications and good air pollution control practices. A copy of the manufacturer's specifications shall be kept on site and made available to the Department upon request.

(b) The permittee shall notify the Department, in writing within 24-hours of the discovery of any malfunction during a business day or by 5:00 p.m. on the first business day after a weekend or holiday of any malfunction of the diesel-fired internal combustion engine(s) which results in , or may result in, the emission of air contaminants in excess of the limitations specified in, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code, Subpart C, Article III (relating to air resources)

VII. ADDITIONAL REQUIREMENTS.

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

SECTION E. Source Group Restrictions.

Group Name: 2) RICE ENGINE MACT

Group Description: 40 CFR 63 Subpart ZZZZ Requirements

Sources included in this group

ID	Name
113A	MPZ DIESEL GENERATORS (3 UNITS)
114	MAIN GENERATORS (4 UNITS)
114A	KATOLIGHT 12V-2000 G83 MAIN PLANT GENERATOR
114B	ENGINE BAY 1 COOLING TOWER EMERGENCY PUMP (20 HP)

I. RESTRICTIONS.

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

II. TESTING REQUIREMENTS.

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

III. MONITORING REQUIREMENTS.

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

IV. RECORDKEEPING REQUIREMENTS.

 # 001 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6655]

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

What records must I keep?

(a) If you must comply with the emission and operating limitations, you must keep the records described in paragraphs (a)(1) through (a)(5), (b)(1) through (b)(3) and (c) of this section.

(1) Not Applicable

(2) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

(3) Not Applicable

(4) Records of all required maintenance performed on the air pollution control and monitoring equipment.

(5) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

(b) - (d) Not Applicable

(e) You must keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan if you own or operate any of the following stationary RICE;

(1) Not Applicable

(2) An existing stationary emergency RICE.

(3) An existing stationary RICE located at an area source of HAP emissions subject to management practices as shown in Table 2d to this subpart.

SECTION E. Source Group Restrictions.

(f) If you own or operate any of the stationary RICE in paragraphs (f)(1) through (2) of this section, you must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engine is used for the purposes specified in § 63.6640(f)(2)(ii) or (iii) or § 63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes.

(1) Not Applicable.

(2) An existing emergency stationary RICE located at an area source of HAP emissions that does not meet the standards applicable to non-emergency engines.

 # 002 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6660]

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

In what form and how long must I keep my records?

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

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

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

V. REPORTING REQUIREMENTS.

 # 003 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6650]

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

What reports must I submit and when?

(h) If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in § 63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

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

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in § 63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in § 63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in § 63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

SECTION E. Source Group Restrictions.

(ix) If there were deviations from the fuel requirements in § 63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 63.13.

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 stationary RICE located at an area source of HAP emissions?

(a) If you own or operate an existing stationary RICE located at an area source of HAP emissions, you must comply with the requirements in Table 2d to this subpart and the operating limitations in Table 2b to this subpart that apply to you.

[Excerpt from Table 2d - Item 4]

Emergency stationary CI RICE shall:
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.

[Excerpt from Table 2d - Item 5]

Emergency stationary SI RICE shall:
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.

Footnotes to Table 2d -
1. Sources have the option to utilize an oil analysis program as described in §63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.
2.If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of this subpart, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

(b) - (f) Not Applicable.

 # 005 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6605]

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

What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to you at all times.

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

SECTION E. Source Group Restrictions.

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

 # 006 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6625]

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

What are my monitoring, installation, operation, and maintenance requirements?

(a) - (d) Not applicable

(e) If you own or operate any of the following stationary RICE, you must operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions:

(1-2) Not applicable

(3) An existing emergency or black start stationary RICE located at an area source of HAP emissions;

(4-10) Not applicable.

(f) If you own or operate an existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP located at a major source of HAP emissions or an existing emergency stationary RICE located at an area source of HAP emissions, you must install a non-resettable hour meter if one is not already installed.

(g) Not applicable.

(h) If you operate a new, reconstructed, or existing stationary engine, you must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Tables 1a, 2a, 2c, and 2d to this subpart apply.

(i) If you own or operate a stationary CI engine that is subject to the work, operation or management practices in items 1 or 2 of Table 2c to this subpart or in items 1 or 4 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Table s 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

(j) If you own or operate a stationary SI engine that is subject to the work, operation or management practices in items 6, 7, or 8 of Table 2c to this subpart or in items 5, 6, 7, 9, or 11 of Table 2d to this subpart, you have the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2c and 2d to this subpart. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c or 2d to this subpart. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than

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0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

 # 007 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6640]

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

How do I demonstrate continuous compliance with the emission limitations, operating limitations, and other requirements?

(a) You must demonstrate continuous compliance with each emission limitation, operating limitation, and other requirements in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to this subpart that apply to you according to methods specified in Table 6 to this subpart.

[Excerpt from Table 6 - Item 9]

9. Existing Emergency RICE an an Area Source of HAPs complying with the work or management practices must demonstrate continous compliance by:

i. Operating and maintaining the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions; or

ii. Develop and follow your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

(b) - (e) Not Applicable.

(f) If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5

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percent or greater below standard voltage or frequency.

(3) Not Applicable

(4) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraphs (f)(4)(i) and (ii) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution system.

(ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.

(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.

(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.

(D) The power is provided only to the facility itself or to support the local transmission and distribution system.

(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

VII. ADDITIONAL REQUIREMENTS.

 # 008 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6595]

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

When do I have to comply with this subpart?

(a) Affected sources. (1) If you have an existing stationary CI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013. For existing SI RICE located at an area source of HAP emissions, you must comply with the applicable emission limitations, operating limitations, and other requirements no later than October 19, 2013.

 # 009 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6665]

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

What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

 # 010 [40 CFR Part 63 NESHAPS for Source Categories §40 CFR 63.6675]

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

What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act (CAA); in 40 CFR 63.2, the General Provisions of this part; and in

SECTION E. Source Group Restrictions.

this section the definitions can be found in 40 CFR Section 63.6675.

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this State Only facility.

SECTION G. Emission Restriction Summary.

Source Id	Source Description

031 MISCELLANEOUS COMBUSTION SOURCES

Emission Limit			Pollutant
0.400	Lbs/MMBTU		PM10
4.000	Lbs/MMBTU	over any 1-hour period	SOX

101 BATCH VAPOR DEGREASER

Emission Limit			Pollutant
0.040	gr/DRY FT3		PM10
150.000	kg	per square meters per month based on a 3-month rolling average	VOC

102 CHEMICAL VAPOR DEPOSITION UNITS A-H

Emission Limit		Pollutant
25.000	ppbv	Hydrogen Selenide
1.000	PPMV	Hydrogen Sulfide
0.040	gr/DRY FT3	PM10

103 HYDROGEN SELENIDE GAS PRODUCTION #1 AND #2

Emission Limit		Pollutant
25.000	ppbv	Hydrogen Selenide
0.040	gr/DRY FT3	PM10

103A H2SE TRANSFER PROCESS

Emission Limit		Pollutant
50.000	ppbv	Hydrogen Selenide
0.040	gr/DRY FT3	TSP

104 CHEMICAL VAPOR DEPOSITION UNITS: MPZ FURNACES "I, J, K & L"

Emission Limit		Pollutant
25.000	ppbv	Hydrogen Selenide
25.000	ppbv	Hydrogen Sulfide
0.040	gr/DRY FT3	TSP

106 CHEMICAL VAPOR DEPOSITION UNIT: FURNACES "M"

Emission Limit		Pollutant
25.000	PPMV	Hydrogen Selenide
25.000	PPMV	Hydrogen Sulfide
0.040	gr/DRY FT3	TSP

110 THIN FILM MATERIALS PRODUCTION (TFM)

Emission Limit		Pollutant
2.000	PPMV	Hydrogen Fluoride
0.040	gr/DRY FT3	PM10

SECTION G. Emission Restriction Summary.

Source Id	Source Description
113A	MPZ DIESEL GENERATORS (3 UNITS)

Emission Limit			Pollutant
2.000	GRAMS/HP-Hr		CO
3.500	Tons/Yr		CO
1.000	GRAMS/HP-Hr		Hydrocarbon
6.900	GRAMS/HP-Hr		NOX
20.520	Tons/Yr		NOX
0.400	GRAMS/HP-Hr		TSP
0.670	Tons/Yr		TSP
1.810	Tons/Yr	(Total Hydrocarbons)	VOC

Source Id	Source Description
114	MAIN GENERATORS (4 UNITS)

Emission Limit			Pollutant
0.340	GRAMS/HP-Hr		CO
3.500	Tons/Yr		CO
0.205	GRAMS/HP-Hr		Hydrocarbon
6.500	GRAMS/HP-Hr		NOX
20.520	Tons/Yr		NOX
0.047	GRAMS/HP-Hr		TSP
0.670	Tons/Yr		TSP
1.810	Tons/Yr	(Total Hydrocarbons)	VOC

Source Id	Source Description
114A	KATOLIGHT 12V-2000 G83 MAIN PLANT GENERATOR

Emission Limit			Pollutant
2.000	GRAMS/HP-Hr		CO
3.500	Tons/Yr		CO
1.000	GRAMS/HP-Hr		Hydrocarbon
6.900	GRAMS/HP-Hr		NOX
20.520	Tons/Yr		NOX
0.400	GRAMS/HP-Hr		TSP
0.670	Tons/Yr		TSP
1.810	Tons/Yr	(Total Hydrocarbons)	VOC

Source Id	Source Description
114B	ENGINE BAY 1 COOLING TOWER EMERGENCY PUMP (20 HP)

Emission Limit			Pollutant
500.000	PPMV	dry basis	SOX
0.040	gr/DRY FT3		TSP

Source Id	Source Description
116	ISOPROPYL ALCOHOL VAPOR DEGREASER-FORWARD TECH-AD-1032

Emission Limit			Pollutant
30.700	Lbs/Sq Ft	Per month determined as a 3-month rolling average	VOC

SECTION G. Emission Restriction Summary.

Source Id	Source Description

118 EQUIPMENT LEAKS

Emission Limit			Pollutant
500.000	ppbv		Hydrogen Selenide
0.040	gr/DRY FT3		TSP

120 HYDROGEN SELENIDE PRODUCTION (REACTOR 3)

Emission Limit			Pollutant
25.000	ppbv	from C120A	Hydrogen Selenide
500.000	ppbv	from C103C	Hydrogen Selenide
0.040	gr/DRY FT3		TSP

121 HYDROGEN SELENIDE PRODUCTION (REACTOR 4)

Emission Limit			Pollutant
25.000	ppbv	from C121	Hydrogen Selenide
500.000	ppbv	from C103C	Hydrogen Selenide
0.040	gr/DRY FT3		TSP

123 IPA LASER OPTIC BATCH VAPOR DRYER

Emission Limit		Pollutant
0.660	Tons/Yr	VOC

301 MPZ N FURNACE (CVD)

Emission Limit			Pollutant
0.001	Lbs/Hr		Hydrogen Sulfide
0.001	Tons/Yr		Hydrogen Sulfide
0.000	Lbs/Hr	(oil mist)	PM10
0.001	Tons/Yr	(oil mist)	PM10
0.040	gr/DRY FT3		PM10

Site Emission Restriction Summary

Emission Limit	Pollutant

SECTION H. Miscellaneous.

a) The Capacity/Throughput numbers listed on Page 4 and provided in Section D of this permit for individual sources are for informational purposes only and are not to be considered enforceable limits. Enforceable emission limits are listed in the Restriction section for each source. They are also summarized for informational purposes only in Section F.

b) Source ID: Department assigned ID number for the source
Source Name: Department assigned name for the source
Capacity: The maximum capacity for the source (not a limit)
Fuel/Material: The fuel/material assigned to SCC for the source
Schematics:
FML: Fuel material location
Comb: Combustion source
Proc: Process
CD: Control device
EP: Emission point
Pollutants:
TSP: Particulate matter
A285: Hydrogen Selenide
A286: Hydrogen Sulfide
T120: Hydrogen Fluoride

c) For the purpose of this permit, Source 031 (Miscellaneous Natural Gas Combustion Sources) consists of the following:

1. Boiler #1 (Department: AMDC) Weil McLain 0.244 mmbtu/hr
2. Boiler #2 (Department: AMDC) Weil McLain 0.244 mmbtu/hr
3. #1 Boiler (Department: Diamond Turning) Parker 1.73 mmbtu/hr
4. #2 Boiler (Department: Diamond Turning) Parker 1.73 mmbtu/hr
5. #3 Boiler (Department: Diamond Turning) Parker 1.73 mmbtu/hr
6. #4 Boiler (Department: Diamond Turning) Parker 1.73 mmbtu/hr
7. Hot Water Heater (Department: Diamond Turning) State Electric, 0.040 mmbtu/hr
8. Boiler #1 (Department: West Building) Rite Engr & Mfg Corp 3 mmbtu/hr
9. Hot Water Boiler (Department: PP) Raypack
10. Hot Water Boiler (Department: WW) Parker 1.46 mmbtu/hr
11. Hot Water Boiler (Department: MPZ) Weil McLain 0.167 mmbtu/hr
12. Hot Water Boiler (Department: MPZ) Weil McLain 0.167 mmbtu/hr
13. Hot Water Boiler (Department: MPZ) Weil McLain 0.305 mmbtu/hr
14. Machine Shop ArcoAire 0.090 mmbtu/hr
15. Main Hall ArcoAire 0.103 mmbtu/hr
16. PIC East ArcoAire 0.121 mmbtu/hr
17. PIC West ArcoAire 0.135 mmbtu/hr
18. Old Sandblast Trane 0.120 mmbtu/hr
19. OF Office ArcoAire 0.060 mmbtu/hr
20. B&G McQuay 0.625 mmbtu/h
21. Old Third Floor North- ArcoAire 0.090 mmbtu/hr
22. Old Third Floor North East ArcoAire 0.060 mmbtu/hr
23. Old Third Floor South ArcoAire 0.150 mmbtu/hr
24. Old Third Floor South West ArcoAire 0.135 mmbtu/hr
25. AHU DH (Department: MPZ) Reznor 0.875 mmbtu/hr
26. AHU Bay 1 Pit (Department: MPZ) Sterling 0.500 mmbtu/hr
27. AHU MUA 1 Bay 2 (Department: MPZ) Engineered Air 6.000 mmbtu/hr
28. AHU MUA 2 Bay 2 (Department: MPZ) Engineered Air 3.500 mmbtu/hr
29. Engine Bay 2 Cooling Tower (Department: MPZ), emergency pump, Honda 24 Horse Power mmbtu/hr unknown, installed in the fall of 2007 [not subject to RICE NSPS or RICE MACT].

d) For the purpose of this permit, Source 101 (Multi-Stage Vapor Degreaser) consists of the following:

1. Methylene Chloride Vapor Degreaser (OF01)
   (a) Superheat Zone
   (b) Cold trap
   (c) Chiller

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2. A vent on the loading portion of the degreaser (OF02)

e) For the purpose of this permit, Source 102 (Chemical Vapor Deposition Units) consists of the following:

1. South CVD System
   (a) CVD Furnace A (MZ01)
      (1) Delivery System (MZ01A)
      (2) "A" Vacuum pump or "A - B" Spare Vacuum pump
      (3) Normal Operation (normally single, alternatively in series or in parallel):
         (i) Either Scrubber #1 then #2 (C-MZ02) or Scrubber #3 then #4 (C-MZ03)
         (ii) Secondary Carbon Bed
      (4) Alternative Operation #1 (single operation):
         (i) Either Scrubber #1, #2, #3, or #4
   (b) CVD Furnace B (MZ02)
      (1) Delivery System (MZ02A)
      (2) "B" Vacuum pump or "A - B" Spare Vacuum pump
      (3) Normal Operation (normally single, alternatively in series or in parallel):
         (i) Either Scrubber #1 then #2 (C-MZ02) or Scrubber #3 then #4 (C-MZ03)
      (4) Alternative Operation #1 (single operation):
         (i) Either Scrubber #1, #2, #3, or #4
   (c) CVD Furnace C (MZ03)
      (1) Delivery System (MZ03A)
      (2) "C" Vacuum pump or "B - C" Spare Vacuum pump
      (3) Normal Operation (normally single, alternatively in series or in parallel):
         (i) Either Scrubber #1 then #2 (C-MZ02) or Scrubber #3 then #4 (C-MZ03)
      (4) Alternative Operation #1 (single operation):
         (i) Either Scrubber #1, #2, #3, or #4
   (d) Auxiliary vacuum system for maintenance (purge & evacuation or breathing exhausts)
      (1) Exhaust to any combination of Scrubbers #1 - #4
   (e) CVD Furnace D (MZ04)
      (1) Delivery System (MZ04A)
      (2) "D" Vacuum pump or "B-C" Spare Vacuum pump
      (3) Normal Operation (normally single, alternatively in series, or in parallel):
         (i) Scrubber #7 and/or #8
         (ii) #7/#8 Primary and/or Secondary Carbon Bed
      (4) Alternative Operation #1 (singularly, in series, or in parallel):
         (i) Scrubber #5 and/or #6
         (ii) #5/#6 Primary and/or Secondary Carbon Bed
      (5) Alternative Operation #2:
         (i) Any combination of Scrubbers #5 - #8
         (ii) Any combination of #5/#6 & #7/#8 Primary and/or Secondary Carbon Bed
2. North CVD System
   (a) CVD Furnace E (MZ05)
      (1) Delivery System (MZ05A)
      (2) "E" Vacuum pump or "E - F" Spare Vacuum pump
      (3) Normal Operation (normally single, alternatively in series, or in parallel):
         (i) Scrubber #7 and/or #8
         (ii) #7/#8 Primary and/or Secondary Carbon Bed
      (4) Alternative Operation #1 (singularly, in series, or in parallel):
         (i) Scrubber #5 and/or #6
         (ii) #5/#6 Primary and/or Secondary Carbon Bed
      (5) Alternative Operation #2:
         (i) Any combination of Scrubbers #5 - #8
         (ii) Any combination of #5/#6 & #7/#8 Primary and/or Secondary Carbon Bed
   (b) CVD Furnace F (MZ06)
      (1) Delivery System (MZ06A)
      (2) "F" Vacuum pump or "E - F" Spare Vacuum pump
      (3) Normal Operation (normally single, alternatively in series, or in parallel):
         (i) Scrubber #7 and/or #8

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(ii) #7/#8 Primary and/or Secondary Carbon Bed
(4) Alternative Operation #1 (singularly, in series, or in parallel):
(i) Scrubber #5 and/or #6
(ii) #5/#6 Primary and/or Secondary Carbon Bed
(5) Alternative Operation #2:
(i) Any combination of Scrubbers #5 - #8
(ii) Any combination of #5/#6 & #7/#8 Primary and/or Secondary Carbon Bed
(c) CVD Furnace G (MZ07)
(1) Delivery System (MZ07A)
(2) "G" Vacuum pump or "G - H" Spare Vacuum pump
(3) Normal Operation (normally single, alternatively in series, or in parallel):
(i) Scrubber #5 and/or #6
(ii) #5/#6 Primary and/or Secondary Carbon Bed
(4) Alternative Operation #1 (singularly, in series, or in parallel):
(i) Scrubber #7 and/or #8
(ii) #7/#8 Primary and/or Secondary Carbon Bed
(5) Alternative Operation #2:
(i) Any combination of Scrubbers #5 - #8
(ii) Any combination of #5/#6 & #7/#8 Primary and/or Secondary Carbon Bed
(d) CVD Furnace H (MZ08)
(1) Delivery System (MZ08A)
(2) "H" Vacuum pump or "G - H" Spare Vacuum pump
(3) Normal Operation (normally single, alternatively in series, or in parallel):
(i) Scrubber #5 and/or #5
(ii) #5/#6 Primary and/or Secondary Carbon Bed
(4) Alternative Operation #1 (singularly, in series, or in parallel):
(i) Scrubber #7 and/or #8
(ii) #7/#8 Primary and/or Secondary Carbon Bed
(5) Alternative Operation #2:
(i) Any combination of Scrubbers #5 - #8
(ii) Any combination of #5/#6 & #7/#8 Primary and/or Secondary Carbon Bed
(e) Auxiliary vacuum system for maintenance (purge & evacuation or breathing exhausts)
(1) Exhaust to any combination of Scrubbers #5 - #8
(2) Any combination of #5/#6 & #7/#8 Primary and/or Secondary Carbon Bed

f) For the purpose of this permit, Source 103 (H2SE Process) consists of the following:

1. Hood 1 & H2SE Train #1 (MZ09) & auxiliary vacuum system for maintenance (purge & evacuation or breathing exhausts)
(a) Normal Operation (in series):
(1) Either Scrubber #1A or #1B then either Scrubber #1B or #1A
(2) Either #1 Primary or #1 Secondary Carbon Adsorber
(b) Alternative Operation #1 (single operation):
(1) Either Scrubber #1A or #1B
(2) Either #1 Primary or #1 Secondary Carbon Adsorber
(c) Alternative Operation #2 (in parallel):
(1) Scrubber #1A and #1B
(2) Either #1 Primary or #1 Secondary Carbon Adsorber or both
(d) Emergency Operations:
(1) If process concentration exceeds 50 ppb H2Se, process vents to Emergency Scrubber (C-MZ10)
2. Hood 2 & H2SE Train #2 (MZ10) & auxiliary vacuum system for maintenance (purge & evacuation or breathing exhausts)
(a) Normal Operation (in series):
(1) Either Scrubber #2A or #2B then either Scrubber #2B or #2A
(2) Either #2 Primary or #2 Secondary Carbon Adsorber
(b) Alternative Operation #1 (single operation):
(1) Either Scrubber #2A or #2B
(2) Either #2 Primary or #2 Secondary Carbon Adsorber
(c) Alternative Operation #2 (in parallel):
(1) Scrubber #2A and #2B
(2) Either #2 Primary or #2 Secondary Carbon Adsorber or both

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(d) Emergency Operations:
(1) If process concentration exceeds 50 ppb H2Se, process vents to Emergency Scrubber (C-MZ10)

g) For the purpose of this permit, Source 103A (H2Se Transfer Process) consists of the following:

1. H2SE Liquid Transfer Scrubber (Main Reserve Scrubber)

h) For the purpose of this permit, Source 110 (Thin Film Materials Production - TFM) consists of the following:

1. Three Rare Earth Process Reactors (TF01, TF02, TF03)
2. TFM Acid Hood (Rare Earth Conversion) (TF04)
3. TFM Drying Box (Rare Earth Drying Process) (TF05)
4. HF cylinder storage cabinet
5. Normal Operation:
(a) All sources are directed to the InLine Scrubber

i) For the purpose of this permit, Source 113A (MPZ Emergency Diesel Generators) consists of the following:

1. Emergency Diesel Generator (3 Units-MPZ Generators @ 1120 HP Each- Manufactured by Katolight Corporation, Model #: 12V-2000 G83 (Typical operations is 300 hrs per year)

j) The following sources have minor emissions and no applicable emission, testing, monitoring, recordkeeping or reporting requirements:

1. IPA Dryer in Coating Department (approximate 1 gallon usage per day)
2. MPZ Spray Booth for spraying Dri-Glide (graphite coating carried in isopropyl alcohol (approximate 1 gallon per day)
3. HVAC equipment
4. Pressure vessels (non VOC containing)
5. Space heaters
6. MPZ area electric furnace for vacuum pre-casting of zinc
7. Gas Transfer Gas Purification System
8. Up to 26 DMG Furnaces

k) This Operating Permit No. NM 10-00281 was originally issued on February 19, 2003, effective on February 19, 2003, and expires on January 31, 2008.

l) The original Operating Permit No. NM 10-00281 (issued February 19, 2003) has been Administratively Amended to incorporate the applicable requirements of Plan Approval No. 10-281D. The plan approval was for the upgrade of two exisisting twin scrubber units (indentified in the original Operating Permit as Sources C102B and C102C). For purposes of this Administrative Amendment, Source C102D represents a scrubber unit created from the combination of the upgraded C102B and C102C.

(m) The possible operating scenarios of Source 102 described in the attached Appendix A, indicate the scenarios authorized under this Administrative Amendment.

(n) For the purpose of this permit, Source 114 (Emergency Generators) consist of four (4) identical 1,200 Hp computer -controlled emergency diesel generators.

(o) This Operating Permit No. 10-00281 was administratevely amended on April 4, 2006 for the second time. It was for the incorporation of the newly applicable conditions from plan approval 10-281E (For Source 116), 10-281F (For Source 114) and GP-9 (For Source 113A).

(p) This Operating Permit was administratively amended on August 17, 2007. The purpose was to incorporate the sources and conditions associated with Plan Approval #10-281H (Source 117) into the permit.

(q) For the purpose of this permit, Source 118 (Equipment Leaks) consists of leaks of hydrogen selenide from cylinders or lines located inside the hydrogen selenide process hoods, the Cold Vault Storage (CVS), the hydrogen selenide Gas Transfer Process (GTP), the Bay 2 Flow Panel Room, the Bay 1 Flow Panels, and the Gas Delivery Vault.

(r) This permit has been reissued on July 25, 2008. All requirements from Plan Approvals 10-281H, 10-281I and 10-281L have

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been included in this permit.

(s) This permit was administratively amended on September 4, 2008 to incorporate the plan approval conditions from 10-281J (Source 104) and 10-281K (Source 104A).

(t) This permit was amended on June 23, 2009 to amend the conditions for the 4 MPZ generators and 4 Main Plant generators because they have been enrolled in the PJM emergency load response program.

(u) This permit was amended on January 27, 2010 to exclude Source ID #117: Batch Methylene Chloride Vapor Degreaser Unit from the permit. The Degreaser sold to Endicott Interconnect Technologies, Inc.

(v) This permit was amended on July 7, 2010 to incorporate the requirements of plan approval 10-281M.

(w) For the purpose of this permit, Source 120 (Hydrogen Selenide Production -Reactor 3) consists of the following:

1. Closed Reactor 3
2. Reactor Header
3. Collection System

(x) For the purpose of this permit, Control 120A (H2SE #3 A & B Scrubber & Carbon Bed System) consists of the following:

1. Carbon Bed System
2. Scrubbers A & B

(y) The DH emergency scrubber (C103C) covers the DH train hoods, the cold storage vault, and the transfer area room. The CVD emergency scrubber (C118) covers the Bay 2 flow panel room, the Bay 1 flow panels, and the gas delivery vault.

(z) This permit was renewed on June 27, 2013 with an effective date of July 1, 2013 and an expiration of June 30, 2018.

(aa) This permit was renewed on August 22, 2018. The expiration date is July 31, 2023.

(ab) This permit was administratively amended on May 18, 2021 to incorporate the requirements of Plan Approval 10-281P.

(ac) This permit was administratively amended on April 10, 2023 to incorporate the requirements of Plan Approval 10-281Q and to change the entity name to Coherent Corp. For the purpose of this permit, Source 200 (DMG Kohler Diesel Emergency Generator (2 Units)(1494 BHP Ea)) consists of the following:

1. Kohler #1-3336GGFG0003 (serial #)

2. Kohler #2-3336GGFG0002 (serial #)

****** End of Report ******